

2020/10/20

#Bikes4ERP_VVS – GROUP 17



20/10/2020

#BIKES4ERP

User Manual

Virtual Visionaries
GROUP 17

Table of Contents

1	How to get HELP and online HELP	6
2	Contact details for additional HELP	6
3	Student Screens	7
3.1	Home Screen	7
3.2	QR Scan Screen	9
3.3	Bicycle Blueprint Screen	11
3.4	Section Blueprint Screen.	14
3.5	Part Faults Screen	16
3.6	Report Job Screen	18
4	Mechanic Screens	20
4.1	Home Screen	20
4.2	QR Scan Screen	22
4.3	Mechanic Calendar Screen	24
4.4	Job Screen	26
4.5	Job List Screen	28
4	School Administrator Screens	30
4.1	Home Screen	31
4.2	Student Management Screen	33
4.3	Create Student Screen	35
4.4	View Student Screen	38
4.5	Student Mark Management Screen	42
4.6	Capture Student Mark Screen	44
4.7	Mark Type Management Screen	47
4.8	Create Mark Type Screen	49
4.9	View Mark Type Screen	51
4.10	Bicycle Management Screen	53
4.11	Create Bicycle Screen	55
4.12	View Bicycle Screen	57
4.13	Bicycle Assignment screen	59

#Bikes4ERP_VVS – GROUP 17

4.14	Assign Bicycle screen	61
4.15	Tag Assignment Screen	63
4.16	Assign Tag Screen	65
4.17	Document Management Screen	67
5	Super Administrator Screens	69
5.1	Home Screen	69
5.2	Login Screen	76
5.3	Forgot Password Screen	78
5.4	Password Reset Screen	80
5.5	User Management Screen	82
5.5.1	Create User Screen	84
5.5.2	View User Screen	86
5.6	User Type Management Screen	93
5.6.1	Create User Type Screen	95
5.6.2	View User Type Screen	97
5.7	Antenna Management Screen	99
5.7.1	Create Antenna Screen	101
5.7.2	View Antenna Screen	103
5.8	Tag Management Screen	105
5.8.1	Create Tag Screen	107
5.8.2	View Tag Screen	109
5.9	Bicycle Part Management Screen	111
5.9.1	Create Bicycle Part Screen	113
5.9.2	View Bicycle Part Screen	115
5.10	Bicycle Section Management Screen	117
5.10.1	Create Bicycle Section Screen	119
5.10.2	View Bicycle Section Screen	121
5.11	Log Entry Screen	123
5.12	Route Management Screen	125
5.12.1	Create Route Screen	127
5.12.2	View Route Screen	129

#Bikes4ERP_VVS – GROUP 17

5.13	Fault Task Management Screen	131
5.13.1	Create Fault Task Screen	133
5.13.2	View Fault Task Screen	135
5.14	Maintenance Task Management Screen	137
5.14.1	Create Maintenance Task Screen	139
5.14.2	View Maintenance Task Screen	141
5.15	School Management Screen	143
5.15.1	Create School Screen	145
5.15.2	View School Screen	147
5.16	Reports	149
5.16.1	Mechanic Schedule Report	149
5.16.2	Mechanic Schedule Requirements Report	152
5.16.3	Generate Student Report	155
5.16.4	Bicycle History Report	161
5.16.5	Log Report	164
5.16.6	Parts Used Report	167
5.17	Audit Trail Management Screen	170
5.18	Business Rule Management Screen	172
5.18.1	Create Business Rule Screen	174
5.18.2	View Business Rule Screen	176
5.19	Document Management Screen	178
5.19.1	Create Document Screen	180
5.19.2	View Document Screen	182
5.20	Bicycle Brand Management Screen	184
5.20.1	Create Bicycle Brand Screen	186
5.20.2	View Bicycle Brand Screen	188
5.21	Fault Type Management Screen	190
5.21.1	Create Fault Type Screen	192
5.21.2	View Fault Type Screen	194
5.22	Part Type Management Screen	196
5.22.1	Create Part Type Screen	198

5.22.2	View Part Type Screen	200
6	Error Messages	202
6.1	Logging in	202
6.2	Forgot Password	202
6.3	User	202
6.4	User Type	203
6.5	Bicycle Brand	204
6.6	Bicycle Part	204
6.7	Bicycle Section	205
6.8	School	205
6.9	Tag	206
6.10	Antenna	206
6.11	Fault Type	207
6.12	Maintenance Task	208
6.13	Reports	208
6.14	Student	210
6.15	Bicycle	211
6.16	Miscellaneous	212
7	System Implementation Procedure	214
7.1	Introduction	214
7.2	Pre-requisites	214
7.3	Implementation Process	214
7.3.1	Step 1	214
7.3.2	Step 2	215
7.3.3	Step 3	216
7.3.4	Step 4	216
8	Glossary	217
9	Client Sign off	220
10	Group Sign-off	221

1 How to get HELP and online HELP

The #BIKES4ERP web application has a “Help” Icon in the top right corner of the screen, next to the “Logout” button. A click of the icon will take you to the “Help” guide. Should a system user get confused at any point, this “Help Guide” gives the user further explanation on system procedures.

The “Help” icon will take you directly to the point in the guide that corresponds to the current screen you are on; this will serve as online help.

The aforementioned “Help” icon is denoted with the following icon:



2 Contact details for additional HELP

Please feel free to contact any of the Virtual Visionary group members should you require additional assistance with the system.

Tapiwarufaro Ndoro (Group Leader)

- 067 041 4551
- tapiwarufaro.ndoro2@gmail.com

Hansen Lee

- 072 416 4483
- hansentheasian@gmail.com

Byron Donald

- 083 256 1606
- byron.j.donald@gmail.com

Gareth Philips

- 073 859 4959
- garethphillips12@gmail.com

Cameron King

- 083 649 5003
- cameroncksking@gmail.com

2020/10/20

#Bikes4ERP_VVS – GROUP 17

3 Student Screens

3.1 Home Screen

Screen Description

This is the Home Screen of the #Bikes4ERP web application, available on loading the web application. It is through this page the user will be able to login by clicking the "Log in" button in the top right corner. A student will also be able to report a fault by clicking on the "Student" menu icon and then selecting the "Report Fault" menu item.



2020/10/20
#Bikes4ERP_VVS – GROUP 17

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home Screen.
2	Dropdown Menu Item– Report Fault	Redirects the User to the Report Fault page.
3	Help Button	Redirects the User to the Help Document.
4	Login Button	Redirects the User to the Log-In Screen.

3.2 QR Scan Screen

Screen Description

This is the QR Scan screen of the #Bikes4ERP web application, accessed by clicking “Report Fault” menu item on the Student menu icon. It allows a user to scan their Bicycle QR code to either check in a bicycle or report a fault for the bicycle.

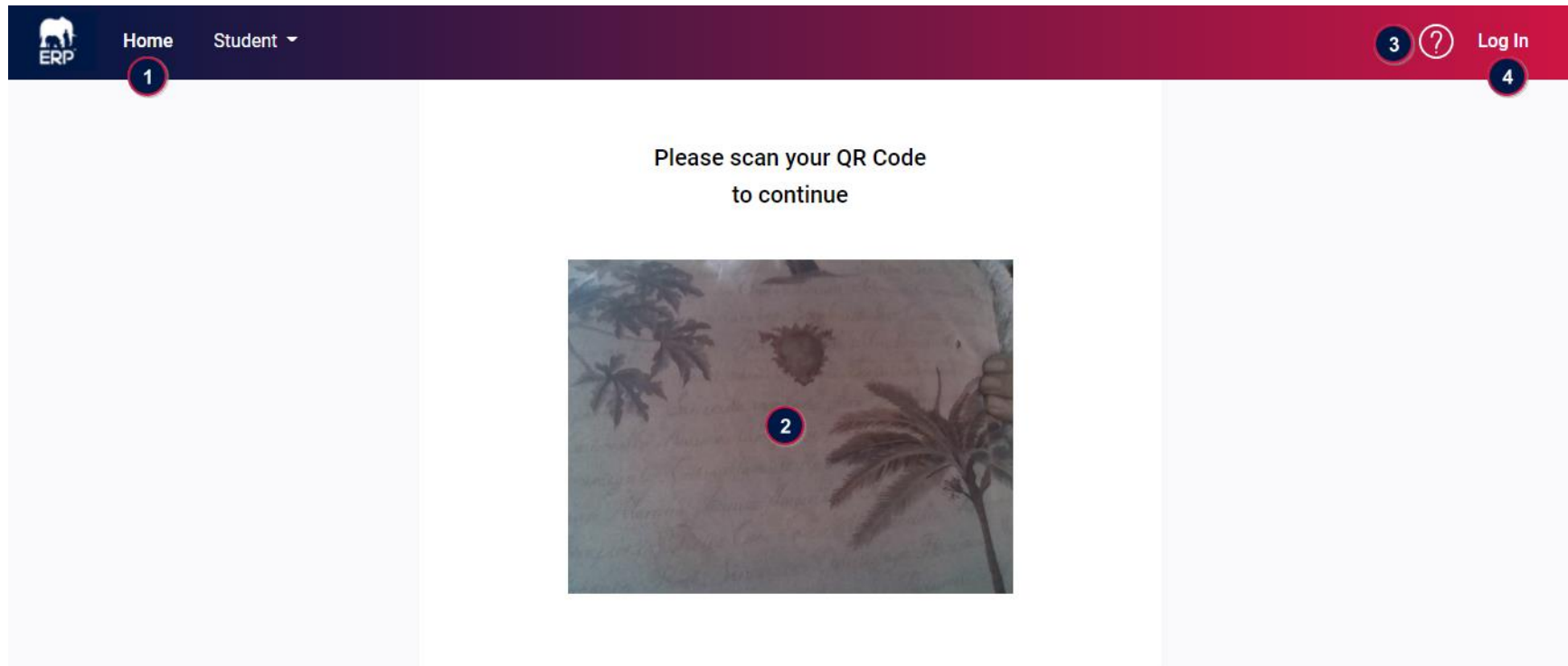


Figure 1 QR Scan Screen

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home page.
2	QR Scan Screen	Allows the user to scan their QR code by placing the code in front of the camera, If the code has a job due it will display a Checked-in dialog, if there is no Job it will redirect the user to the QR scan page
3	Help Button	If the user clicks on the Help option, Redirects User Administrator to the Help document
4	Logout Button	If the User clicks on the Logout option, then it will log the User out of the system and Redirects to the Home page

3.3 Bicycle Blueprint Screen

Screen Description

This is the Bicycle Blueprint screen of the #Bikes4ERP web application, accessed by the user scanning the bicycle QR code and clicking Report Fault button. It allows a user to select the section of the bicycle that the fault occurs on or alternatively the user can click the unknown button and write a note for the Mechanic if the User is unsure of the Section.

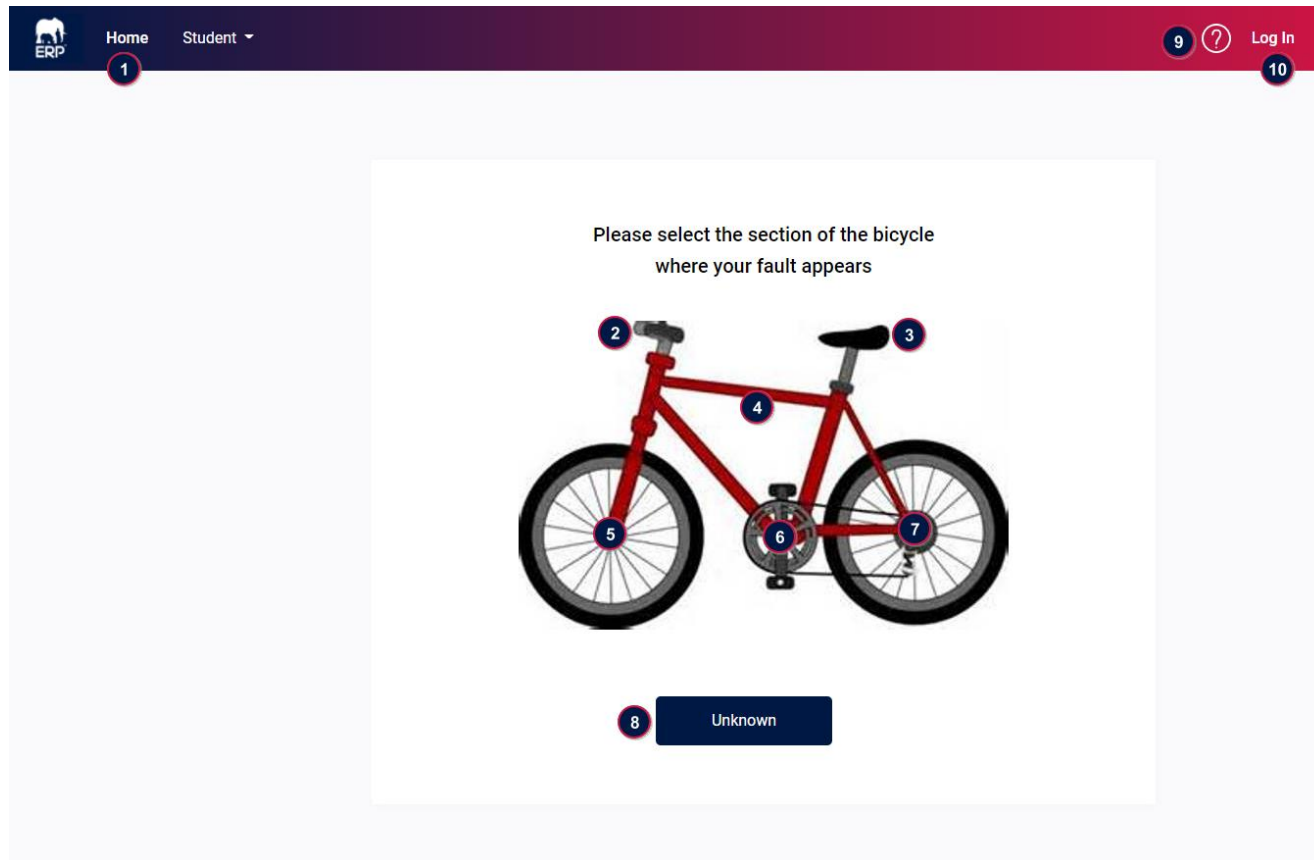


Figure 2 Bicycle Blueprint Screen

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home page.
2	Handlebar Button	Allows the user to select the Handlebar section of the bicycle on the Bicycle Blueprint by clicking on the Handlebars, it will Redirect to the Section Blueprint page

#Bikes4ERP_VVS – GROUP 17

3	Seat Button	Allows the user to select the Seat section of the bicycle on the Bicycle Blueprint by clicking on the Seat, it will Redirect to the Section Blueprint page
4	Bicycle Frame Button	Allows the user to select the Bicycle Frame section of the bicycle on the Bicycle Blueprint by clicking on the Bicycle Frame, it will Redirect to the Section Blueprint page
5	Front Wheel Button	Allows the user to select the Front Wheel section of the bicycle on the Bicycle Blueprint by clicking on the Front Wheel, it will Redirect to the Section Blueprint page
6	Break/Gear Button	Allows the user to select the Break/Gear section of the bicycle on the Bicycle Blueprint by clicking on the Break/Gear, it will Redirect to the Section Blueprint page
7	Back Wheel Button	Allows the user to select the Back Wheel section of the bicycle on the Bicycle Blueprint by clicking on the Back Wheel, it will Redirect to the Section Blueprint page
8	Unknown Button	Allows the User to enter in a note instead of selecting a section this will then Redirect the user to the Report Job page
9	Help Button	If the user clicks on the Help option, Redirects User Administrator to the Help document
10	Logout Button	If the User clicks on the Logout option, then it will log the User out of the system and Redirects to the Home page

3.4 Section Blueprint Screen.

Screen Description

This is the Section Blueprint screen of the #Bikes4ERP web application, accessed by the user selecting a specific bicycle section on the Bicycle Blueprint screen. It allows a user to select the Part of the bicycle that the fault occurs on or alternatively the user can click the unknown button and write a note for the Mechanic if the User is unsure of the Part.

Please select the Part where your fault appears	
Name	Action
 Gear switch lever	
 Chain	

Unknown

Figure 3 Section Blueprint Screen

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home page.
2	Part Table	Displays a list of Bicycle Part and picture for the selected Section
3	Plus Button	Allows the user to select the specific Part of the Bicycle
4	Unknown Button	Allows the User to enter in a note instead of selecting a Part this will then Redirect the user to the Report Job page
5	Help Button	If the user clicks on the Help option, Redirects User Administrator to the Help document
6	Logout Button	If the User clicks on the Logout option, then it will log the User out of the system and Redirects to the Home page

3.5 Part Faults Screen

Screen Description

This is the Part Fault screen of the #Bikes4ERP web application, accessed by the user selecting a specific bicycle part on the Section Blueprint screen. It allows a user to select the specific fault of the bicycle or alternatively the user can click the unknown button and write a note for the Mechanic if the User is unsure of the Fault.

1

5 ? Log In 6

Please select the fault that appears on the Rim

Name	Action
Bent Rim	3 +

4 Unknown

Figure 4 Part Faults Screen

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home page.
2	Part Table	Displays a list of Part Faults for the selected Section
3	Plus Button	Allows the user to select the specific Fault of the Part
4	Unknown Button	Allows the User to enter in a note instead of selecting a Fault this will then Redirect the user to the Report Job page
5	Help Button	If the user clicks on the Help option, Redirects User Administrator to the Help document
6	Logout Button	If the User clicks on the Logout option, then it will log the User out of the system and Redirects to the Home page

3.6 Report Job Screen

Screen Description

This is the Report Job screen of the #Bikes4ERP web application, accessed by the user selecting a specific Fault on the Part Fault screen or by the user clicking the unknown button. It allows a user to view the faults that they have selected as well as reporting the job once the user has chosen all their faults and clicks the Report Job button.

The screenshot shows the 'Report Job - Fault List' interface. At the top is a dark blue navigation bar with the ERP logo (1), 'Home' and 'Student' links, and a 'Log In' button (6) with a question mark icon (7). Below the navigation bar is the title 'Report Job - Fault List' and a '+4' button (4). To the right of the title is a 'Report Job' button (5). The main content is a table with four columns: 'Section', 'Part', 'Fault Type', and 'Action'. The first row shows 'Back Wheel' (2) under 'Section', 'Back Rim' under 'Part', 'Bent Rim' under 'Fault Type', and an 'X' icon (3) under 'Action'.

Section	Part	Fault Type	Action
Back Wheel	Back Rim	Bent Rim	X

Figure 5 Report List Screen

2020/10/20

#Bikes4ERP_VVS – GROUP 17

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home page.
2	Fault List Table	Displays a list of the Faults that the User has selected
3	X Button	Allows the user to delete the selected fault
4	Plus Button	Allows the User to add a new fault, Redirects to the Bicycle Blueprint page
5	Report Job Button	Allows the User to Report the selected Bicycle Faults, Redirects the User to the Home page
6	Help Button	If the user clicks on the Help option, Redirects User Administrator to the Help document
7	Logout Button	If the User clicks on the Logout option, then it will log the User out of the system and Redirects to the Home page

2020/10/20

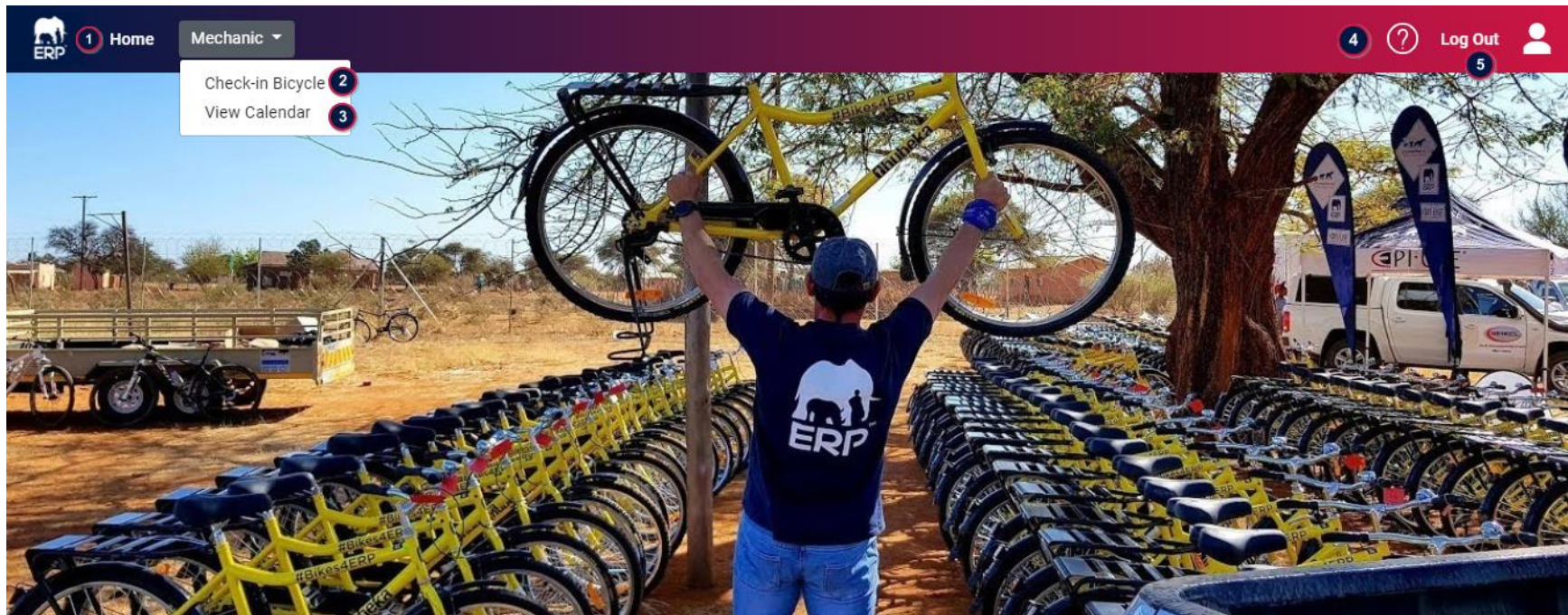
#Bikes4ERP_VVS – GROUP 17

4 Mechanic Screens

4.1 Home Screen

Screen Description

This is the Mechanic Home Screen of the #Bikes4ERP web application, available after the Mechanic has logged into the system. The mechanic will be able to Check-in a Bicycle and View their Calendar by clicking the respective menu items.



2020/10/20
#Bikes4ERP_VVS – GROUP 17

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the BikesERP Home Screen.
2	Dropdown Menu Item: Check-In Bicycle	Redirects the Mechanic to the Check-in Bicycle page
3	Dropdown Menu Item: View Calendar	Redirects the Mechanic to the View Calendar page
4	Help Button	Redirects School Administrator to the Help document
5	Logout Button	If the Mechanic clicks on the Logout option, it will then log the Mechanic out of the system and Redirect to the Home page

4.2 QR Scan Screen

Screen Description

This is the QR Scan screen of the #Bikes4ERP web application, accessed by the clicking “Check In” menu item on the “Mechanic” menu icon. It allows a user to scan their Bicycle QR code to either check in a bicycle or report a fault for the bicycle.

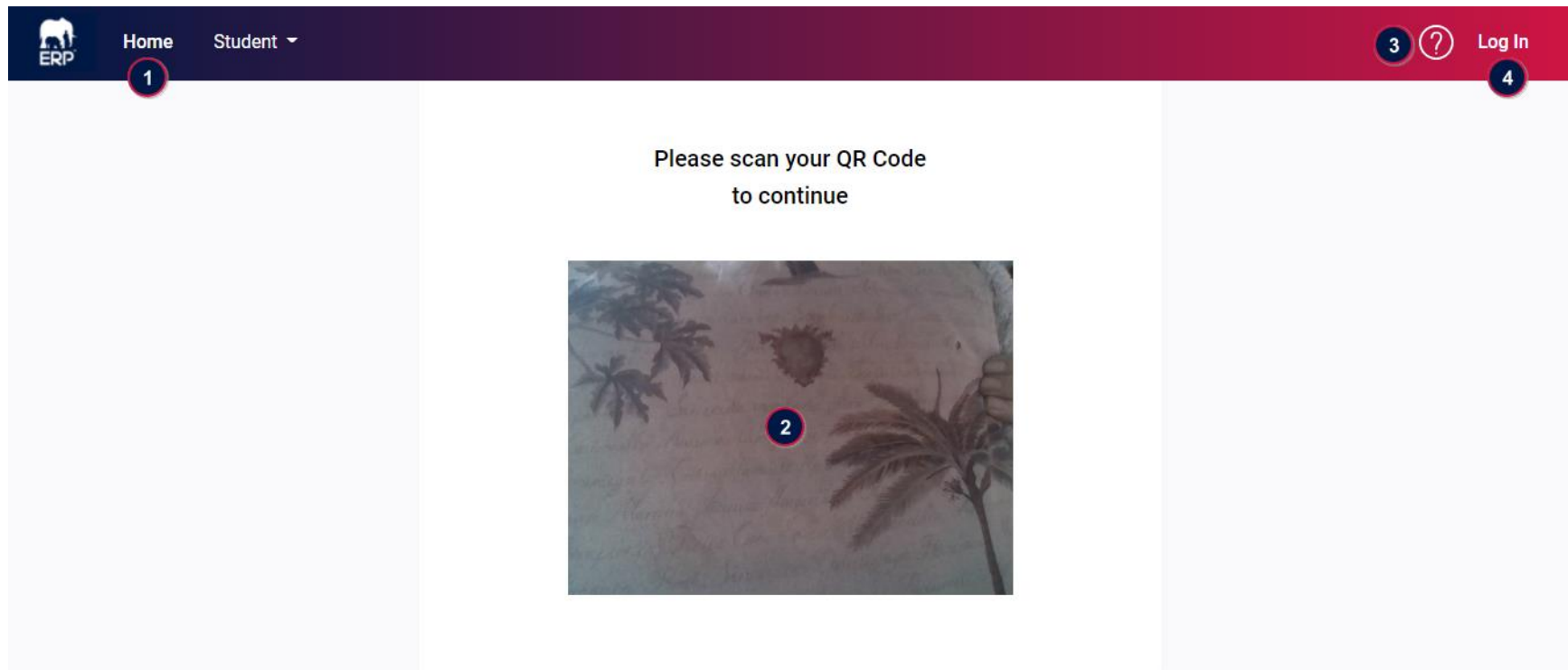


Figure 6 QR Scan Screen

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home page.
2	QR Scan Screen	Allows the user to scan their QR code by placing the code in front of the camera, If the code has a job due it will display a Checked-in dialog, if there is no Job it will redirect the user to the QR scan page
3	Help Button	If the user clicks on the Help option, Redirects User Administrator to the Help document
4	Logout Button	If the User clicks on the Logout option, then it will log the User out of the system and Redirects to the Home page

2020/10/20

#Bikes4ERP_VVS – GROUP 17

4.3 Mechanic Calendar Screen

Screen Description

This is the Mechanic Calendar screen of the #Bikes4ERP web application, accessed by the clicking “View Calendar” menu item. It allows a Mechanic to view their scheduled jobs for each day, they can view a specific day’s jobs by click on the date of the day they wish to view, this will bring up the Job screen.

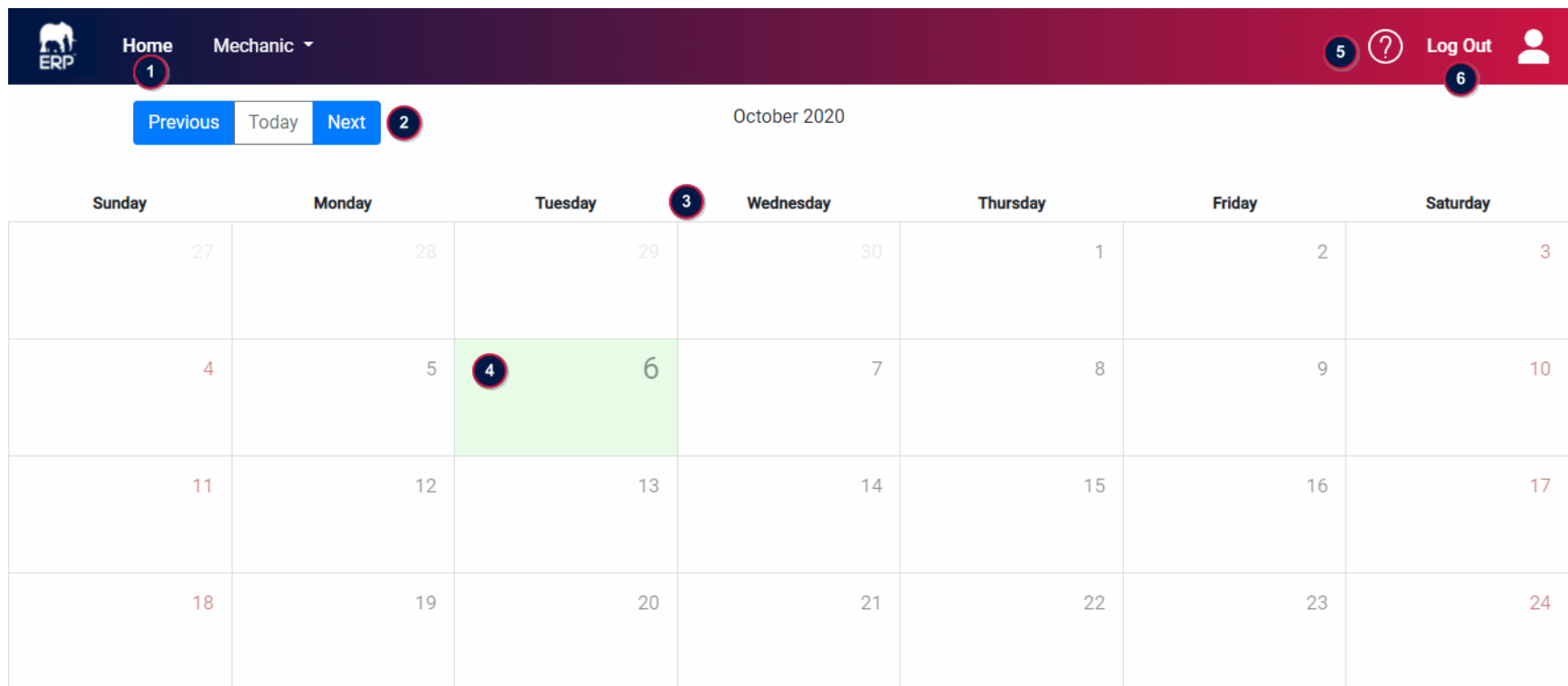


Figure 7 View Jobs Screen

2020/10/20

#Bikes4ERP_VVS – GROUP 17

Number	Item	Description
2	Calendar Navigation Button	Allows the Mechanic to navigate the different months of the calendar.
3	Mechanic Calendar	Displays the days of a month for the Mechanic to see
4	Day	When Clicked, Redirects the Mechanic to the Job List page for the selected Day
5	Help Button	If the user clicks on the Help option, Redirects Mechanic to the Help document
6	Logout Button	If the User clicks on the Logout option, then it will log the Mechanic out of the system and Redirects to the Home page

4.4 Job Screen

Screen Description

This is the Job screen of the #Bikes4ERP web application, accessed by the clicking on a specific date on the Mechanic Calendar screen. It allows a Mechanic to view their scheduled jobs for a specific day as well as check in a bicycle for a job.

Header: Home Mechanic ▾ 6 ? Log Out 7

Date: 2020/08/25 5 Check-In Bicycle

2 Fault Jobs

Bicycle Code	Repair Job Status ID	Date Reported	Date Scheduled	Assigned
250	Reported	2020/05/08	2020/08/25	true 4

3 Maintenance Jobs

ID	Bicycle ID	Job Status	Date Scheduled	Assigned
4	5	Due	2020/08/25	true 4
12	4	Due	2020/08/25	true

Figure 8 Job Screen

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home page.
2	Fault Jobs Table	Table to show all the Fault Job's in the system for the day
3	Maintenance Jobs Tab	Table to show all the Maintenance Job's in the system for the day
4	Pen Button	Displays the Fault/Maintenance List page
5	Check-In Button	Redirects the Mechanic to the QR Scan page
6	Help Button	If the user clicks on the Help option, Redirects School Administrator to the Help document
7	Logout Button	If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page

4.5 Job List Screen

Screen Description

This is the Job List screen of the #Bikes4ERP web application, accessed by the clicking “View Calendar” menu item. It allows a Mechanic to view their scheduled jobs for each day, they can view a specific day’s jobs by click on the date of the day they wish to view, this will bring up the Job screen.

Part	Notes	Repair Job ID	Job Status	Action
Brake Disk/Pad	testing 2	2	Complete	☒ 3
Gear switch lever	testing4	2	Complete	☒ 3
Brake Disk/Pad	thanks	2	Complete	☒ 3
Brake Disk/Pad	hie	2	Complete	☒ 3

Figure 9 View Job List Screen

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home page.
2	Fault List Table	Table to show all the Job's Details in the system for the Specified Job
3	Check Box	Marks that specific Repair fault as Complete
4	Complete Job Button	Completes job once all faults are checked, then displays a Success Confirmation Dialog
5	Help Button	If the user clicks on the Help option, Redirects School Administrator to the Help document
6	Logout Button	If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page

2020/10/20

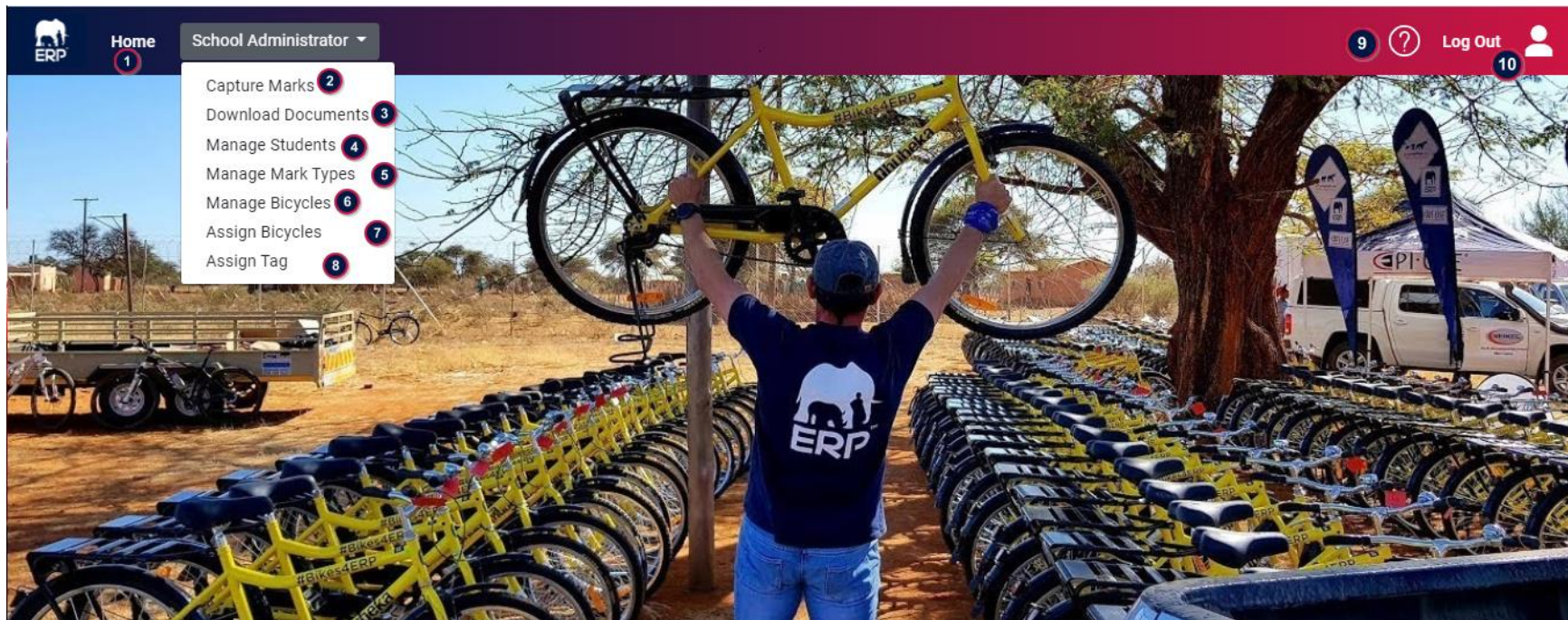
#Bikes4ERP_VVS – GROUP 17

4 School Administrator Screens

4.1 Home Screen

Screen Description

This is the School Administrator Home Screen of the #Bikes4ERP web application, available after the School Administrator has logged into the system. The school administrator will be able to perform all the functions that are in their assigned jurisdiction by clicking the "School Administrator" menu icon.



2020/10/20

#Bikes4ERP_VVS – GROUP 17

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home Screen.
2	Dropdown Menu Item: Capture Marks	Redirects the School Administrator to the Capture Marks page
3	Dropdown Menu Item: Download Documents	Redirects the School Administrator to the Download Documents page
4	Dropdown Menu Item: Manage Students	Redirects the School Administrator to the Manage Students page
5	Dropdown Menu Item: Manage Mark Types	Redirects the School Administrator to the Manage Mark Types page
6	Dropdown Menu Item: Manage Bicycles	Redirects the School Administrator to the Manage Bicycles page
7	Dropdown Menu Item: Assign Bicycles	Redirects the School Administrator to the Assign Bicycles page
8	Dropdown Menu Item: Assign Tag	Redirects the School Administrator to the Assign Bicycles page
9	Help Button	Redirects School Administrator to the Help document
10	Logout Button	If the School Administrator clicks on the Logout option, it will then log the School Administrator out of the system and Redirects to the Home page

4.2 Student Management Screen

Screen Description

This is the Student Management screen of the #Bikes4ERP web application, accessed by the clicking “Manage Students” menu item on the “School Administrator” menu icon. It allows a School Administrator to view and search all the students currently registered on the system (in their school), the user will also be able create new students as well as edit current edit student details.

The screenshot shows the Student Management interface. At the top is a dark red navigation bar with the ERP logo (1), 'Home' link, 'School Administrator' dropdown, and 'Log Out' button with a user icon (7). Below the navigation bar is a white header area with the title 'Student Management' (2) and a search bar (5) with a plus icon (4). The main content is a table with columns: Name, Surname, Bicycle Code, and Action. The table lists seven students. The first row shows 'Cameron King' with bicycle code '250' and an edit icon (3). The second row shows 'Gareth Philips' with bicycle code '404069'. The remaining five rows show 'Cheese Grater', 'Big Bobo Suping', and three entries for 'Cameron King', each with an edit icon. A red circle with the number 2 is placed over the 'Name' and 'Surname' columns.

Name	Surname	Bicycle Code	Action
Cameron	King	250	
Gareth	Philips	404069	
Cheese	Grater		
Big Bobo	Suping		
Cameron	King		
Cameron	King		
Cameron	King		
Cameron	King		

Figure

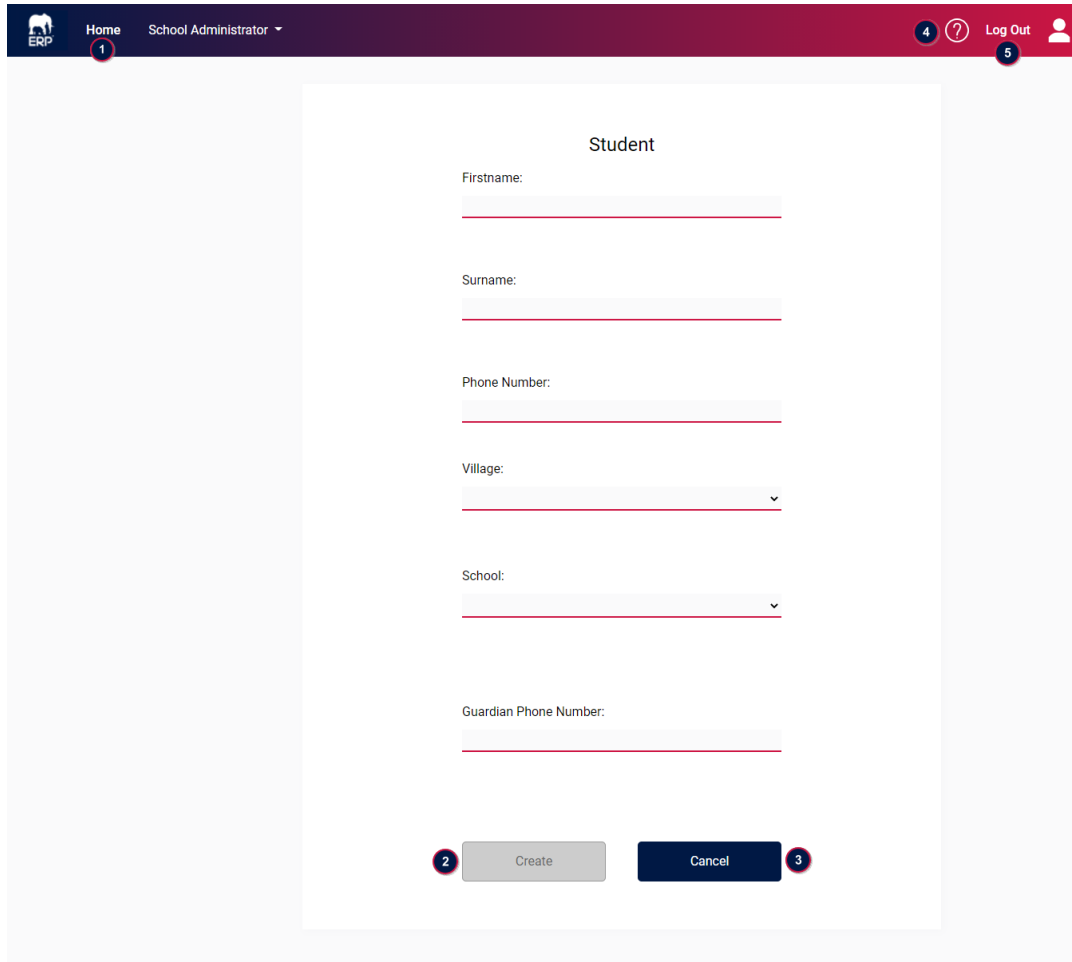
10 Student Management Screen

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the School Administrator to the Bikes4ERP Home page.
2	Student table	Displays a list of Student Name, Surname and Bicycle Code for each Student
3	Pen button	Allows the School Administrator to view a specific Student, Redirects To the View page
4	Plus Button	Redirects the School Administrator to the Create Student page
5	Search Textbox	The School Administrator can enter in the Student details to search
6	Help Button	If the user clicks on the Help option, Redirects School Administrator to the Help document
7	Logout Button	If the User clicks on the Logout option, then it will log the School Administrator out of the system and Redirects to the Home page

4.3 Create Student Screen

Screen Description

This is the Create Student screen of the #Bikes4ERP web application, accessed by the clicking “Plus” icon on the “Student Management” screen. It allows a School Administrator to create a new student. The user will enter the required details and proceed to click the “Create” button.



ERP Home School Administrator Log Out

1 4 5

Student

Firstname:

Surname:

Phone Number:

Village:

School:

Guardian Phone Number:

2 Create Cancel 3

Figure 11 Create Student Screen

2020/10/20

#Bikes4ERP_VVS – GROUP 17

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home page.
2	Create Button	Creates the new Student once all fields have been filled. And Displays Success Confirmation Dialog
3	Cancel Button	Redirects the Super Administrator to the Student Management page
4	Help Button	If the user clicks on the Help option, Redirects School Administrator to the Help document
5	Logout Button	If the User clicks on the Logout option, then it will log the School Administrator out of the system and Redirects to the Home page

4.4 View Student Screen

Screen Description

This is the View Student screen of the #Bikes4ERP web application, accessed by the clicking “Pen” icon on a student. It allows the user to either update or delete the requested students’ details.

2020/10/20
#Bikes4ERP_VVS – GROUP 17

Student

Name:

Surname:

Phone Number:

Date of Birth:

Village:

School:

Guardian Details

Guardian Name:

Guardian Email:

Guardian Phone Number:

Figure 12 View Student Screen

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home Screen.
2	Student Name Textbox	Allows the School Administrator to Update a Student's Name
3	Student Surname Textbox	Allows the School Administrator to Update a Student's Surname
4	Phone Number Textbox	Allows the School Administrator to Update a Student's Phone Number
5	Date Of birth Date-Picker Textbox	Allows the School Administrator to select and Update a Student's Date Of Birth
6	Village Dropdown Menu	Allows the School Administrator to select and Update a Student's Village
7	School Dropdown Menu	Allows the School Administrator to select and Update a Student's School
8	Guardian Name Textbox	Allows the School Administrator to Update a Student's Name
9	Guardian Email Textbox	Allows the School Administrator to Update a Guardian's Email
10	Guardian Phone Number Textbox	Allows the School Administrator to Update a Guardian's Phone Number
11	Update Button	Updates the current Student and displays a Success Confirmation Dialog
12	Delete Button	Deletes the current Student and Displays the Delete Confirmation Dialog

2020/10/20

#Bikes4ERP_VVS – GROUP 17

13	Help Button	If the user clicks on the Help option, Redirects School Administrator to the Help document
14	Logout Button	If the User clicks on the Logout option, then it will log the School Administrator out of the system and Redirects to the Home page

4.5 Student Mark Management Screen

Screen Description

This is the Student Mark Management screen of the #Bikes4ERP web application, accessed by the clicking “Capture Marks” menu item on the “School Administrator” menu icon. It allows a School Administrator search and capture marks for students in their schools.

The screenshot shows the Student Mark Management interface. At the top is a dark blue navigation bar with the ERP logo (1), 'Home' link, 'School Administrator' dropdown, a search bar (4) labeled 'Search Student Name', a help icon (5), a 'Log Out' button, and a user profile icon (6). Below the navigation bar is a table with columns: Student Name (2), Last Mark, Mark Type, Date, and Action. The table contains six rows of student data, each with a 'Capture Mark' button (3) in the Action column.

Student Name	Last Mark	Mark Type	Date	Action
Cameron King	79	1st Term	2020-02-25	Capture Mark
Gareth Philips	56	1st Term	2020-02-25	Capture Mark
Cheese Grater	90	1st Term	2020-02-26	Capture Mark
Big Bobo Suping	98	1st Term	2020-10-05	Capture Mark
Cameron King				Capture Mark
Cameron King				Capture Mark

Figure 13 Student Mark Management Screen

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the School Administrator to the Bikes4ERP Home page.
2	Student Mark table	Displays a list of Student Names, Last Mark, Mark type and Date for each Student
3	Capture Mark button	Redirects the School Administrator to the Capture Marks page
4	Search Textbox	The School Administrator can enter in the Student details to search
5	Help Button	If the user clicks on the Help option, Redirects School Administrator to the Help document
6	Logout Button	If the User clicks on the Logout option, then it will log the School Administrator out of the system and Redirects to the Home page

4.6 Capture Student Mark Screen

Screen Description

This is the Capture Student Mark screen of the #Bikes4ERP web application, accessed by the clicking the "Capture Mark" button on the "Student Mark Management" screen. It allows a School Administrator to capture a new student mark. The user will enter the required details and proceed to click the "Capture" button. It also displays the Student Mark History for the selected student.

2020/10/20
#Bikes4ERP_VVS – GROUP 17

Home
School Administrator

6
?
Log Out
7

Student Mark

Mark:

Mark Type:

1st Term

Date:

yyyy/mm/dd

2 Capture
Cancel 3

Student Mark History

4 Download in Excel

Mark	Mark Type	Date
79	1st Term	2020-02-25
95	2nd Term	2020-05-22
56	1st Term	2020-09-09
56	1st Term	2020-09-09
58	1st Term	2020-09-10
20	1st Term	2020-09-10
68	1st Term	2020-06-15
67	1st Term	2020-06-16

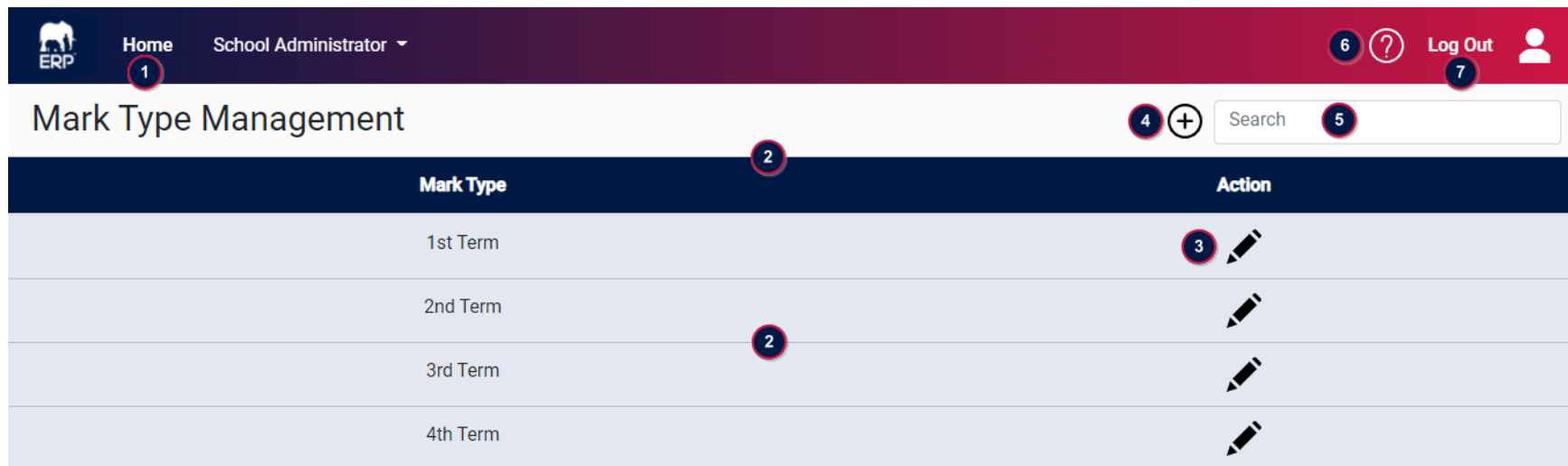
Figure 14 Capture Student Mark Screen

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the School Administrator to the Bikes4ERP Home page.
2	Capture Button	Creates a new mark if all fields are filled, Displays a Success Confirmation Dialog
3	Cancel Button	Redirects the School Administrator to the Student Mark management page
4	Download in Excel button	Allows the School Administrator to download an excel file of the Students marks
5	Student Mark history table	Displays a list of all the selected Student marks, Mark type and Date
6	Help Button	If the user clicks on the Help option, Redirects School Administrator to the Help document
7	Logout Button	If the User clicks on the Logout option, then it will log the School Administrator out of the system and Redirects to the Home page

4.7 Mark Type Management Screen

Screen Description

This is the Mark Type Management screen of the #Bikes4ERP web application, accessed by the clicking “Mark Type” menu item on the “School Administrator” menu icon. It allows a School Administrator to view and search all the mark types currently on the system, the user will also be able create new mark types as well as edit current mark type details.



The screenshot shows the Mark Type Management interface. At the top is a dark blue navigation bar with the ERP logo (1), 'Home' link, 'School Administrator' dropdown, a help icon (6), a question mark icon, 'Log Out' link, and a user profile icon (7). Below the navigation bar is a white header area with the title 'Mark Type Management' (2) and a search bar (5) with a plus icon (4) for filtering. The main content is a table with two columns: 'Mark Type' and 'Action'. The table lists four terms: '1st Term', '2nd Term', '3rd Term', and '4th Term'. Each term has an edit icon (pencil) in the 'Action' column. Callout 3 points to the first edit icon.

Mark Type	Action
1st Term	
2nd Term	
3rd Term	
4th Term	

Figure 15 Mark Type Management Screen

2020/10/20

#Bikes4ERP_VVS – GROUP 17

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the School Administrator to the Bikes4ERP Home page.
2	Student table	Displays a list of Mark Types
3	Pen button	Allows the School Administrator to view a specific Mark Type , Redirects To the View page
4	Plus Button	Redirects the School Administrator to the Create Mark Type page
5	Search Textbox	The School Administrator can enter in the Mark Type details to search
6	Help Button	If the user clicks on the Help option, Redirects School Administrator to the Help document
7	Logout Button	If the User clicks on the Logout option, then it will log the School Administrator out of the system and Redirects to the Home page

4.8 Create Mark Type Screen

Screen Description

This is the Create Mark Type screen of the #Bikes4ERP web application, accessed by the clicking “Plus” icon on the “Mark Type Management” screen. It allows a School Administrator to create a new student. The user will enter the required details and proceed to click the “Create” button.

The screenshot displays the 'Create Mark Type' interface. At the top, a dark blue navigation bar includes the ERP logo, 'Home', 'School Administrator' (with a dropdown arrow), and 'Log Out' (with a user icon). The main content area has a light gray background and is titled 'Mark Type'. It features a text input field labeled 'Mark Type:'. Below the input field are two dark blue buttons: 'Create' and 'Cancel'. Numbered callouts (1-5) highlight specific UI elements: 1 points to the 'Home' link, 2 to the 'Create' button, 3 to the 'Cancel' button, 4 to the 'Log Out' button, and 5 to the user profile icon.

Figure 16 Create Mark Type Screen

2020/10/20

#Bikes4ERP_VVS – GROUP 17

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home page.
2	Create Button	Creates the new Mark Type once all fields have been filled. And Displays Success Confirmation Dialog
3	Cancel Button	Redirects the Super Administrator to the Mark Type Management page
4	Help Button	If the user clicks on the Help option, Redirects School Administrator to the Help document
5	Logout Button	If the User clicks on the Logout option, then it will log the School Administrator out of the system and Redirects to the Home page

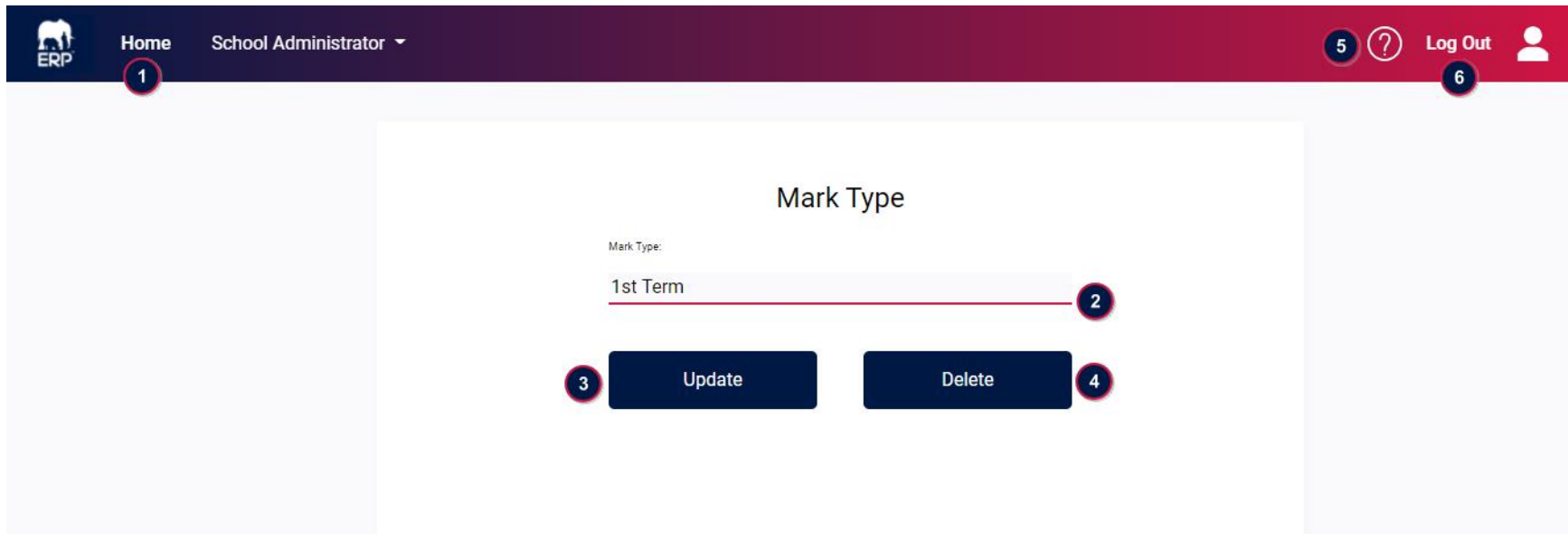
2020/10/20

#Bikes4ERP_VVS – GROUP 17

4.9 View Mark Type Screen

Screen Description

This is the View Mark Type screen of the #Bikes4ERP web application, accessed by the clicking “Pen” icon on a mark type. It allows the user to either update or delete the requested mark types details.



The screenshot displays the 'View Mark Type' interface. At the top, a dark blue header contains the 'ERP' logo, 'Home' (1), 'School Administrator' with a dropdown arrow, a help icon (5), 'Log Out', and a user profile icon (6). The main content area is titled 'Mark Type'. Below the title, there is a text input field labeled 'Mark Type:' containing '1st Term' (2). At the bottom of the form are two dark blue buttons: 'Update' (3) and 'Delete' (4).

Figure 17 View Mark Type Screen

2020/10/20

#Bikes4ERP_VVS – GROUP 17

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home page.
2	Mark Type Textbox	Allows the Super Administrator to Update a Mark Type
3	Update Button	Updates the current Mark Type and displays a Success Confirmation Dialog
4	Delete Button	Deletes the current Mark Type and Displays the Delete Confirmation Dialog
5	Help Button	If the user clicks on the Help option, Redirects School Administrator to the Help document
6	Logout Button	If the User clicks on the Logout option, then it will log the School Administrator out of the system and Redirects to the Home page

2020/10/20

#Bikes4ERP_VVS – GROUP 17

4.10 Bicycle Management Screen

Screen Description

This is the Bicycle Management screen of the #Bikes4ERP web application, accessed by the clicking "Manage Bicycles" menu item on the "School Administrator" menu icon. It allows a School Administrator to view and search all the bicycles currently on the system, the user will also be able create new bicycles as well as edit bicycle details.

Bicycle Management

Bicycle Code	Bicycle Make	Bicycle Status	Action
250	Totem	Assigned	
404069	Totem	Assigned	
1234	Totem	Assigned	
980724	Totem	Assigned	
5654654	Totem	Assigned	
9898	Totem	Available	
9899	Qhubeka	Available	
6969	Totem	Available	

Figure 18 Bicycle Management screen

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the School Administrator to the Bikes4ERP Home page.
2	Bicycle table	Displays a list of Bicycle Code, Bicycle Make and Bicycle Status for each Bicycle
3	Pen button	Allows the School Administrator to view a specific Bicycle, Redirects To the View page
4	Plus Button	Redirects the School Administrator to the Create Bicycle page
5	Search Textbox	The School Administrator can enter in the Bicycle details to search
6	Help Button	If the user clicks on the Help option, Redirects School Administrator to the Help document
7	Logout Button	If the User clicks on the Logout option, then it will log the School Administrator out of the system and Redirects to the Home page

2020/10/20

#Bikes4ERP_VVS – GROUP 17

4.11 Create Bicycle Screen

Screen Description

This is the Create Bicycle screen of the #Bikes4ERP web application, accessed by the clicking “Plus” icon on the “Bicycle Management” screen. It allows a School Administrator to create a new bicycle. The user will enter the required details and proceed to click the “Create” button.

The screenshot displays the 'Create Bicycle' interface. The header bar is dark blue and contains the ERP logo on the left, followed by 'Home' and 'School Administrator' with a dropdown arrow. On the right side of the header are a help icon (question mark), 'Log Out', and a user profile icon. The main content area has a light gray background and is titled 'Bicycle'. It contains two form fields: 'Bicycle Code' with a text input field, and 'Bicycle Brand' with a dropdown menu. At the bottom of the form are two buttons: a light blue 'Create' button and a dark blue 'Cancel' button. Numbered callouts are present: 1 points to the 'Home' link, 2 points to the 'Create' button, 3 points to the 'Cancel' button, 4 points to the help icon, and 5 points to the 'Log Out' button.

Figure 19 Create Bicycle screen

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home page.
2	Create Button	Creates the new Bicycle once all fields have been filled. And Displays Success Confirmation Dialog
3	Cancel Button	Redirects the Super Administrator to the Bicycle Management page
4	Help Button	If the user clicks on the Help option, Redirects School Administrator to the Help document
5	Logout Button	If the User clicks on the Logout option, then it will log the School Administrator out of the system and Redirects to the Home page

2020/10/20

#Bikes4ERP_VVS – GROUP 17

4.12 View Bicycle Screen

Screen Description

This is the View Bicycle screen of the #Bikes4ERP web application, accessed by the clicking “Pen” icon on a bicycle. It allows the user to either update or delete the requested bicycle details.

Bicycle

Bicycle Code:
250

Bicycle Brand:
Totem

Bicycle Status:
Assigned

Date Added:
2016/02/13

Download QR Code

Update Delete

Figure 20 View Bicycle screen

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home page.
2	Bicycle Code Textbox	Allows the School Administrator to Update a Bicycle's Code
3	Bicycle Brand Dropdown Menu	Allows the School Administrator to select and Update a Bicycle's Brand
4	Bicycle Status Dropdown Menu	Allows the School Administrator to select and Update a Bicycle's Status
5	Date Added Date-Picker	Allows the School Administrator to select and Update a Bicycle's Date Added
6	Download QR Code	Allows the School Administrator to download the QR code for the selected Bicycle
7	Update Button	Updates the current Bicycle and displays a Success Confirmation Dialog
8	Delete Button	Deletes the current Bicycle and Displays the Delete Confirmation Dialog
9	Help Button	If the user clicks on the Help option, Redirects School Administrator to the Help document
10	Logout Button	If the User clicks on the Logout option, then it will log the School Administrator out of the system and Redirects to the Home page

4.13 Bicycle Assignment screen

Screen Description

This is the Bicycle Assignment screen of the #Bikes4ERP web application, accessed by clicking “Assign Bicycles” menu item on the “School Administrator” menu icon. It allows a School Administrator to search all the bicycles currently on the system, the user will also be able to assign and unassign bicycles for students in their school.

Bicycle Assignment

Bicycle Code	Student Name	Student Surname	Date Assigned	Bicycle Status	Action
250	Gareth	Philips	2020-09-10	Assigned	Unassign
404069	Cameron	King	2020-09-10	Assigned	Unassign
1234	Luka	Durham	2020-09-21	Assigned	Unassign
980724	Hansen	Li	2020-09-21	Assigned	Unassign
5654654	Derek	Works	2020-09-21	Assigned	Unassign
9898				Available	Assign
9899				Available	Assign

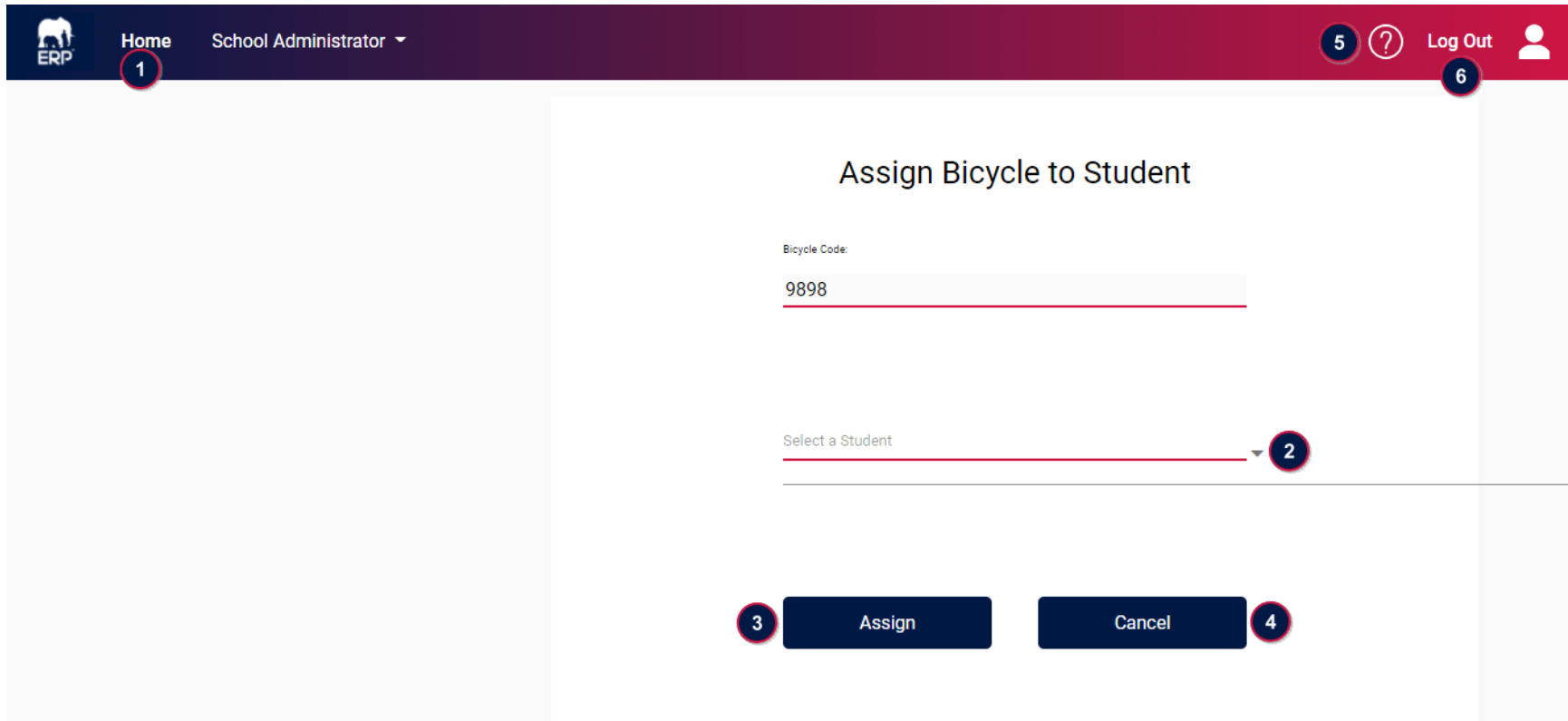
Figure 21 Assign Bicycle to Student screen

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the School Administrator to the Bikes4ERP Home page.
2	Assign Bicycle table	Displays a list of Bicycle Code, Student Name and Surname, Date assigned and Bicycle Status for each Bicycle
3	Assign/Unassign button	Allows the School Administrator to assign/unassign a specific Bicycle to/from a Student
4	Search Textbox	The School Administrator can enter in the Bicycle details to search
5	Help Button	If the user clicks on the Help option, Redirects School Administrator to the Help document
6	Logout Button	If the User clicks on the Logout option, then it will log the School Administrator out of the system and Redirects to the Home page

4.14 Assign Bicycle screen

Screen Description

This is the Assign Bicycle to Student screen of the #Bikes4ERP web application, accessed by the clicking “Assign” button on a bicycle, it allows the user to assign the specific bicycle to a student in their school by search the students name in the dropdown.



The screenshot shows the 'Assign Bicycle to Student' screen. At the top is a dark blue header with the ERP logo, 'Home' (with a circled 1), 'School Administrator' with a dropdown arrow, and navigation links '5', '?', 'Log Out', and a user icon (with a circled 6). The main content area has the title 'Assign Bicycle to Student'. Below it is a 'Bicycle Code:' label followed by a text input field containing '9898'. Below that is a 'Select a Student' label followed by a dropdown menu (with a circled 2). At the bottom are two buttons: 'Assign' (with a circled 3) and 'Cancel' (with a circled 4).

Figure 22 Assign Bicycle screen

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home page.
2	Assign Student Dropdown Menu	Allows the School Administrator to select and Assign a Bicycle to the Selected Student. The user can search for a student in the dropdown menu.
3	Assign Button	Assigns the Bicycle to the Student once all fields have been filled. And Displays Success Confirmation Dialog
4	Cancel Button	Redirects the Super Administrator to the Bicycle Assignment page
5	Help Button	If the user clicks on the Help option, Redirects School Administrator to the Help document
6	Logout Button	If the User clicks on the Logout option, then it will log the School Administrator out of the system and Redirects to the Home page

4.15 Tag Assignment Screen

Screen Description

This is the Tag Assignment screen of the #Bikes4ERP web application, accessed by the clicking “Assign Tags” menu item on the “School Administrator” menu icon. It allows a School Administrator to search all the tags currently on the system, the user will also be able assign and unassign tags.

 Home School Administrator ▾ 5 ? Log Out 6				
1 Tag Assignment		4 Search		
Tag Serial Number	Bicycle Code	Tag Status	Action	
F9 B3 CF A2	404069	Assigned	3	Unassign
C9 EB A0 B2	250	Assigned		Unassign
C9 EB A0 B4	516146	Assigned		Unassign
F9 B3 CF A10	2500	Assigned		Unassign
F9 B3 CF A223	0	Available	3	Assign

Figure 23 Tag Assignment Management screen

2020/10/20

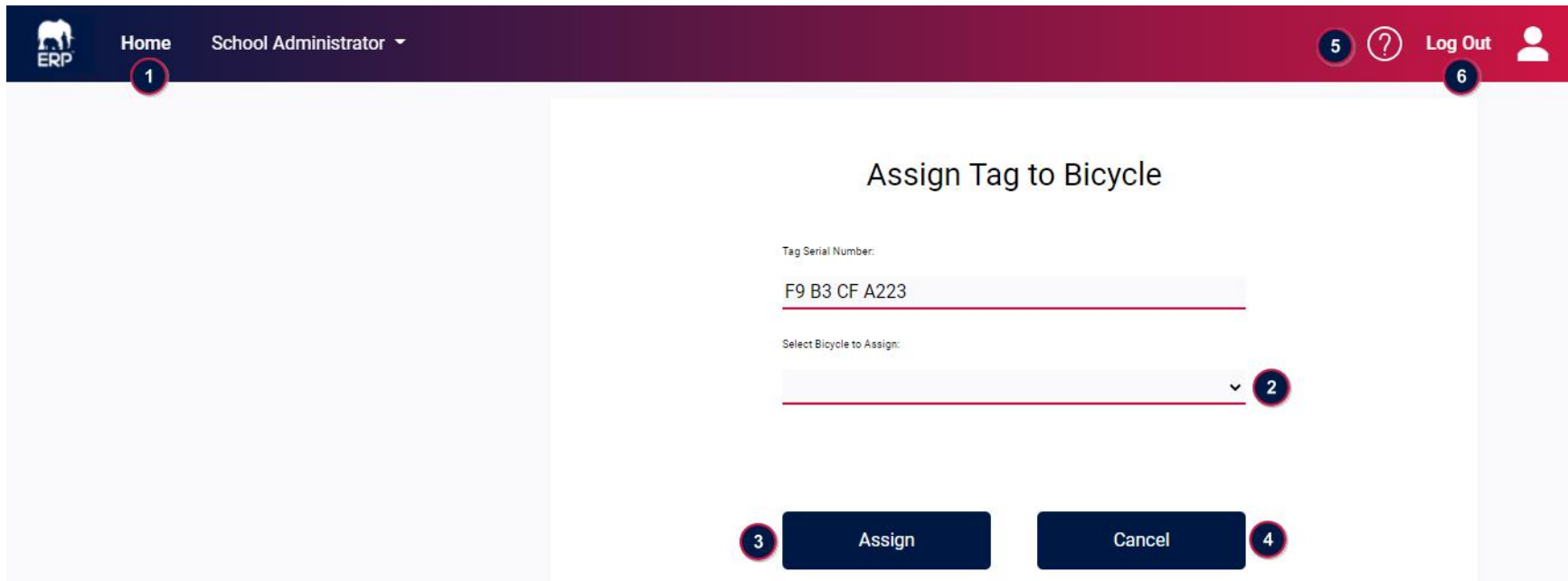
#Bikes4ERP_VVS – GROUP 17

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the School Administrator to the Bikes4ERP Home page.
2	Assign Bicycle table	Displays a list of Tag Serial number, Bicycle Code and Tag Status for each Tag
3	Assign/Unassign button	Allows the School Administrator to assign/unassign a specific Tag to/from a Bicycle
4	Search Textbox	The School Administrator can enter in the Tag details to search
5	Help Button	If the user clicks on the Help option, Redirects School Administrator to the Help document
6	Logout Button	If the User clicks on the Logout option, then it will log the School Administrator out of the system and Redirects to the Home page

4.16 Assign Tag Screen

Screen Description

This is the Assign Tag to Bicycle screen of the #Bikes4ERP web application, accessed by the clicking “Assign” button on a tag, it allows the user to assign the specific tag to a bicycle.



ERP

Home School Administrator

5 ? Log Out 6

Assign Tag to Bicycle

Tag Serial Number:

F9 B3 CF A223

Select Bicycle to Assign:

2

3 Assign 4 Cancel

Figure 24 Assign Tag

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home page.
2	Select Bicycle to Assign Dropdown Menu	Allows the School Administrator to select and Assign a Tag to the Selected Bicycle.
3	Assign Button	Assigns the Tag to the Bicycle once all fields have been filled. And Displays Success Confirmation Dialog
4	Cancel Button	Redirects the Super Administrator to the Tag Assignment page
5	Help Button	If the user clicks on the Help option, Redirects School Administrator to the Help document
6	Logout Button	If the User clicks on the Logout option, then it will log the School Administrator out of the system and Redirects to the Home page

4.17 Document Management Screen

Screen Description

This is the Document Management screen of the #Bikes4ERP web application, accessed by the clicking “Manage Document” menu item on the “Administrator” menu icon. It allows a Super Administrator to view and search all the Documents currently on the system, the user will also be able create new Documents as well as edit Document details.

Document Management

Search for a document

Document Name	Download Document
Student Contract	
Bikes4ERP Campaign	
Mechanic Contract	
Rules And Regulations	
Log Report	

2020/10/20

#Bikes4ERP_VVS – GROUP 17

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the School Administrator to the Bikes4ERP Home page.
2	Document Management table	Displays a list of a Document Names
3	Download button	Allows the Super Administrator to download a specific Document
4	Search Textbox	The Super Administrator can enter in the Business Rule details to search
5	Help Button	If the user clicks on the Help option, Redirects Super Administrator to the Help document
6	Logout Button	If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page

5 Super Administrator Screens

Screen Description

This is the Administrator Home Screen of the #Bikes4ERP web application, available after the Administrator has logged into the system. The administrator will be able to perform most the functions in the system. The administrator will have access to the "Administrator", "Reports" and "System" menu icons. These menu icons will allow the administrator to perform an abundance of functions that will be visible in the following 3 figures:

5.1 Home Screen

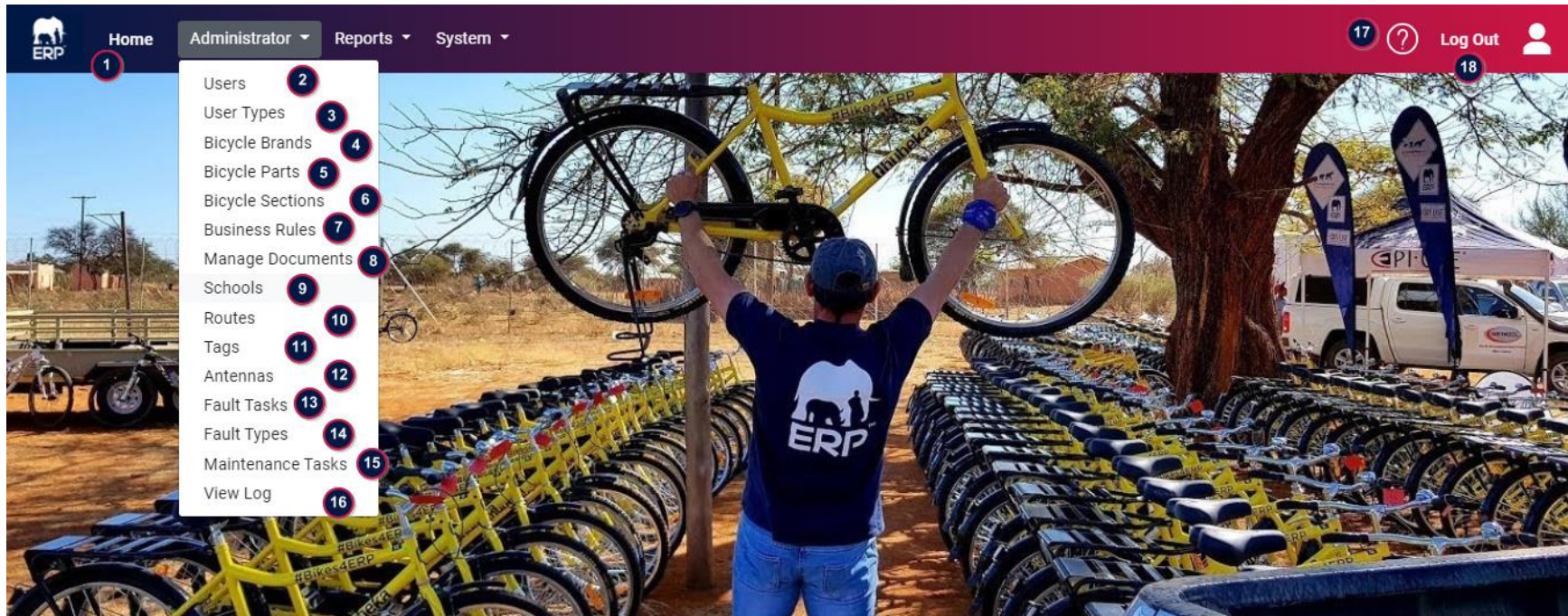


Figure 25 Super Admin Home Screen

2020/10/20

#Bikes4ERP_VVS – GROUP 17

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home Screen.
2	Dropdown Menu Item: Users	Redirects the Super Administrator to the Users page
3	Dropdown Menu Item: User Types	Redirects the Super Administrator to the User Types page
4	Dropdown Menu Item: Bicycle Brands	Redirects the Super Administrator to the Bicycle Brands page
5	Dropdown Menu Item: Bicycle Parts	Redirects the Super Administrator to the Bicycle Parts page
6	Dropdown Menu Item: Bicycle Section	Redirects the Super Administrator to the Bicycle Sections page
7	Dropdown Menu Item: Business Rules	Redirects the Super Administrator to the Business Rules page
8	Dropdown Menu Item: Manage Documents	Redirects the Super Administrator to the Manage Documents page
9	Dropdown Menu Item: Schools	Redirects the Super Administrator to the Schools page
10	Dropdown Menu Item: Routes	Redirects the Super Administrator to the Routes page
11	Dropdown Menu Item: Tags	Redirects the Super Administrator to the Tags page

2020/10/20

#Bikes4ERP_VVS – GROUP 17

- | | | |
|----|---------------------|---|
| 12 | Dropdown Menu Item: | Redirects the Super Administrator to the Antennas page
Antennas |
| 13 | Dropdown Menu Item: | Redirects the Super Administrator to the Fault Tasks page
Fault Tasks |
| 14 | Dropdown Menu Item: | Redirects the Super Administrator to the Fault Types page
Fault Types |
| 15 | Dropdown Menu Item: | Redirects the Super Administrator to the Maintenance Tasks page
Maintenance Tasks |
| 16 | Dropdown Menu Item: | Redirects the Super Administrator to the View Log page
View Log |
| 17 | Help Button | If the user clicks on the Help option, Redirects School Administrator to the Help document |
| 18 | Logout Button | If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page |

2020/10/20
#Bikes4ERP_VVS – GROUP 17

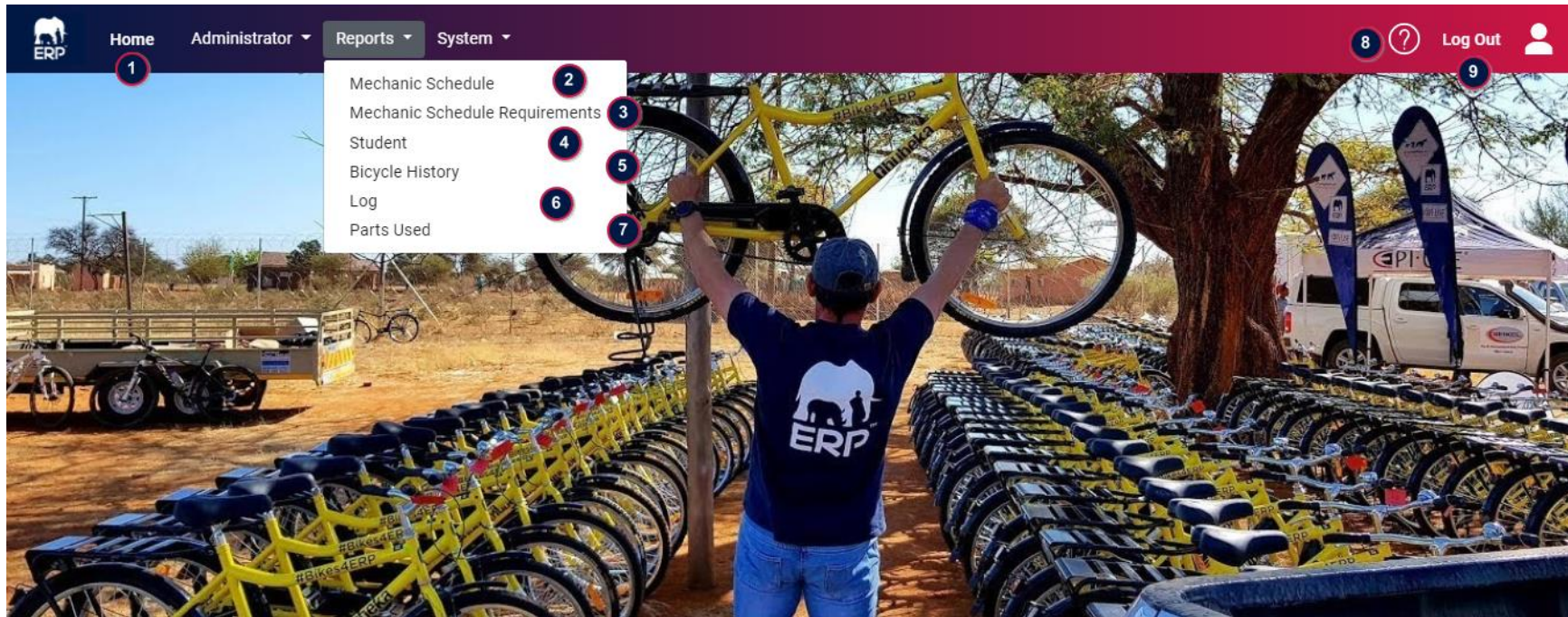


Figure 26 Super Admin Home Screen 2

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home Screen.
2	Dropdown Menu Item: Mechanic Schedule	Redirects the Super Administrator to the Mechanic Schedule page
3	Dropdown Menu Item: Mechanic Schedule Requirements	Redirects the Super Administrator to the Mechanic Schedule Requirements page

2020/10/20

#Bikes4ERP_VVS – GROUP 17

- | | | |
|---|---------------------|---|
| 4 | Dropdown Menu Item: | Redirects the Super Administrator to the Student page
Student |
| 5 | Dropdown Menu Item: | Redirects the Super Administrator to the Bicycle History page
Bicycle History |
| 6 | Dropdown Menu Item: | Redirects the Super Administrator to the Log page
Log |
| 7 | Dropdown Menu Item: | Redirects the Super Administrator to the Parts Used page
Parts Used |
| 8 | Help Button | If the user clicks on the Help option, Redirects School Administrator to the Help document |
| 9 | Logout Button | If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page |

2020/10/20
#Bikes4ERP_VVS – GROUP 17

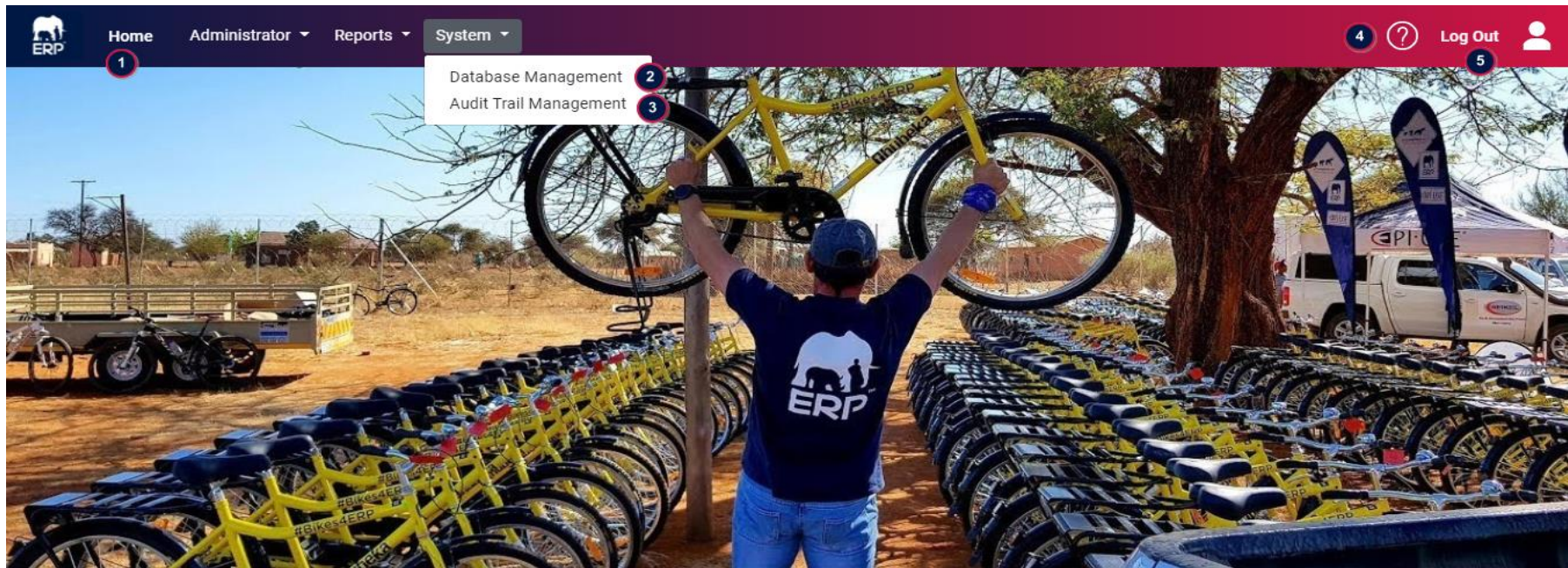


Figure 27 Super Admin Home Screen 2

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home Screen.
2	Dropdown Menu Item: Database Management	Redirects the Super Administrator to the Database Management page
3	Dropdown Menu Item: Audit Trail Management	Redirects the Super Administrator to the Audit Trail Management page
4	Help Button	If the user clicks on the Help option, Redirects School Administrator to the Help document
5	Logout Button	If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page

5.2 Login Screen

Screen Description

This is the login screen of the #Bikes4ERP web application, accessed by clicking “Log in” in the top- right corner. The user must be registered on the system and input their Username and Password and proceed by clicking the “Login” button. The system will log the user in according to their user type specified by the administrator.

The screenshot displays the login interface of the #Bikes4ERP web application. At the top, a dark red navigation bar contains the ERP logo, 'Home' and 'Student' menu items, and a 'Log In' button with a question mark icon. The main content area is white and features a 'Welcome Back!' message, followed by the instruction 'Please log into your account'. Below this are two input fields: 'Username:' and 'Password:'. The 'Username' field has a blue error message 'Username is required' below it. The 'Password' field has a blue error message 'Password is required' below it. At the bottom of the form are two buttons: 'Login' and 'Forgot Password?'. Numbered callouts (1-5) highlight specific elements: 1 points to the 'Home' menu, 2 points to the 'Login' button, 3 points to the 'Forgot Password?' button, 4 points to the question mark icon, and 5 points to the 'Log In' button.

Figure 28 Login Screen

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home Screen.
2	Login Button	Log's the User into the system and Redirects to the Home page provided their Username and Password is correct
3	Forgot Password Button	Redirects the User to the Forgot Password page
4	Help Button	If the user clicks on the Help option, Redirects School Administrator to the Help document
5	Login Button	If the User clicks on the Login option, Redirects to the Login page

5.3 Forgot Password Screen

Screen Description

This is the Forgot Password screen of the #Bikes4ERP web application, accessed by the clicking “Forgot Password” button on the Login screen. It allows a user to reset their password, the user must be registered on the system and input their Email proceed by clicking the “Submit” button. The system will send the user an email with the reset password instructions.

The screenshot displays the 'Forgot Password' interface. At the top, a dark blue navigation bar includes the ERP logo, 'Home' and 'Student' links, a question mark icon, and a 'Log In' button. The main content area is white and centered, featuring the title 'Forgot Password', the instruction 'Please enter your email', and an 'Email:' label above a text input field. Below the input field are two buttons: 'Submit' and 'Return'. Numbered callouts identify key elements: 1 (Home link), 2 (Submit button), 3 (Return button), 4 (question mark icon), and 5 (Log In button).

Figure 29 Forgot Password Screen

2020/10/20

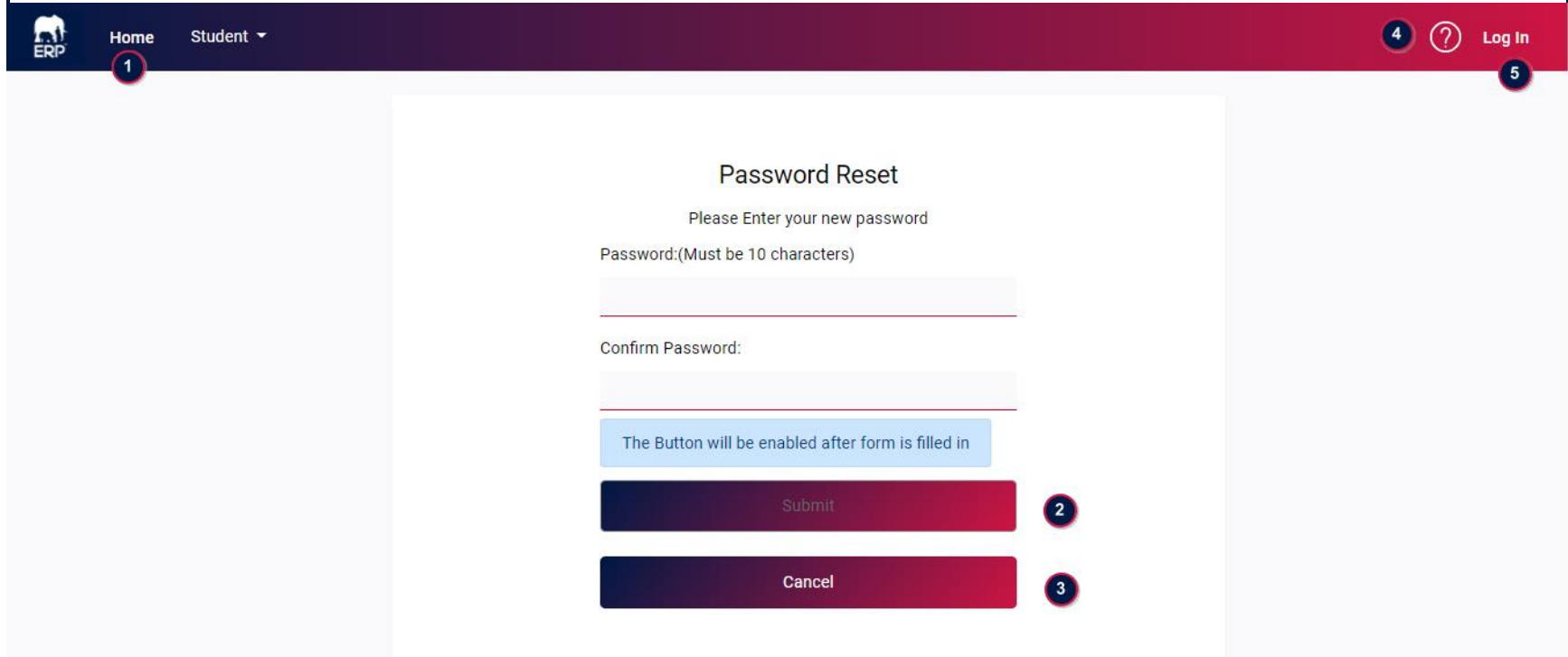
#Bikes4ERP_VVS – GROUP 17

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home Screen.
2	Submit Button	Sends an email to the user with Forgot Password details
3	Return Button	Redirects the User to the Login page
4	Help Button	If the user clicks on the Help option, Redirects School Administrator to the Help document
5	Login Button	If the User clicks on the Login option, Redirects to the Login page

5.4 Password Reset Screen

Screen Description

This is the Password Reset screen of the #Bikes4ERP web application, accessed by the clicking “Forgot Password” button on the Login screen. It allows a user to reset their password, the user must be registered on the system and input their Email proceed by clicking the “Submit” button. The system will send the user an email with the reset password instructions.



ERP

Home Student

Log In

Password Reset

Please Enter your new password

Password:(Must be 10 characters)

Confirm Password:

The Button will be enabled after form is filled in

Submit

Cancel

2020/10/20

#Bikes4ERP_VVS – GROUP 17

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home Screen.
2	Submit Button	Submits the new password
3	Cancel Button	Redirects the User to the Login page
4	Help Button	If the user clicks on the Help option, Redirects School Administrator to the Help document
5	Login Button	If the User clicks on the Login option, Redirects to the Login page

Figure 30 Password Reset Screen

5.5 User Management Screen

Screen Description

This is the User Management screen of the #Bikes4ERP web application, accessed by the clicking “Users” menu item on the “Administrator” menu icon. It allows a user to view and search all the users currently registered on the system, the user will also be able create new users as well as edit current edit user details.

 Home Administrator ▾ Reports ▾ System ▾ 6 ? Log Out 7			
User		4 +	Search by Username 5
Username	User Type	Action	
ByronDonald	Mechanic	3	
Admin	Administrator		
ShanahJr	School Administrator		
Mechanic	Mechanic		
johnDoe	School Administrator		
Jennyking	School Administrator		
CammyWammy	Mechanic		
Tapiwa	Mechanic		
garethP	Administrator		

Figure 31 User Management Screen

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home Screen.
2	User table	Displays a list of usernames and user types
3	Pen button	Allows the user to view the specific User, Redirects To the View page
4	Plus Button	Redirects the Super Administrator to the Create User page
5	Search Textbox	The Super Administrator can enter in the User's details to search
6	Help Button	If the user clicks on the Help option, Redirects School Administrator to the Help document
7	Logout Button	If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page

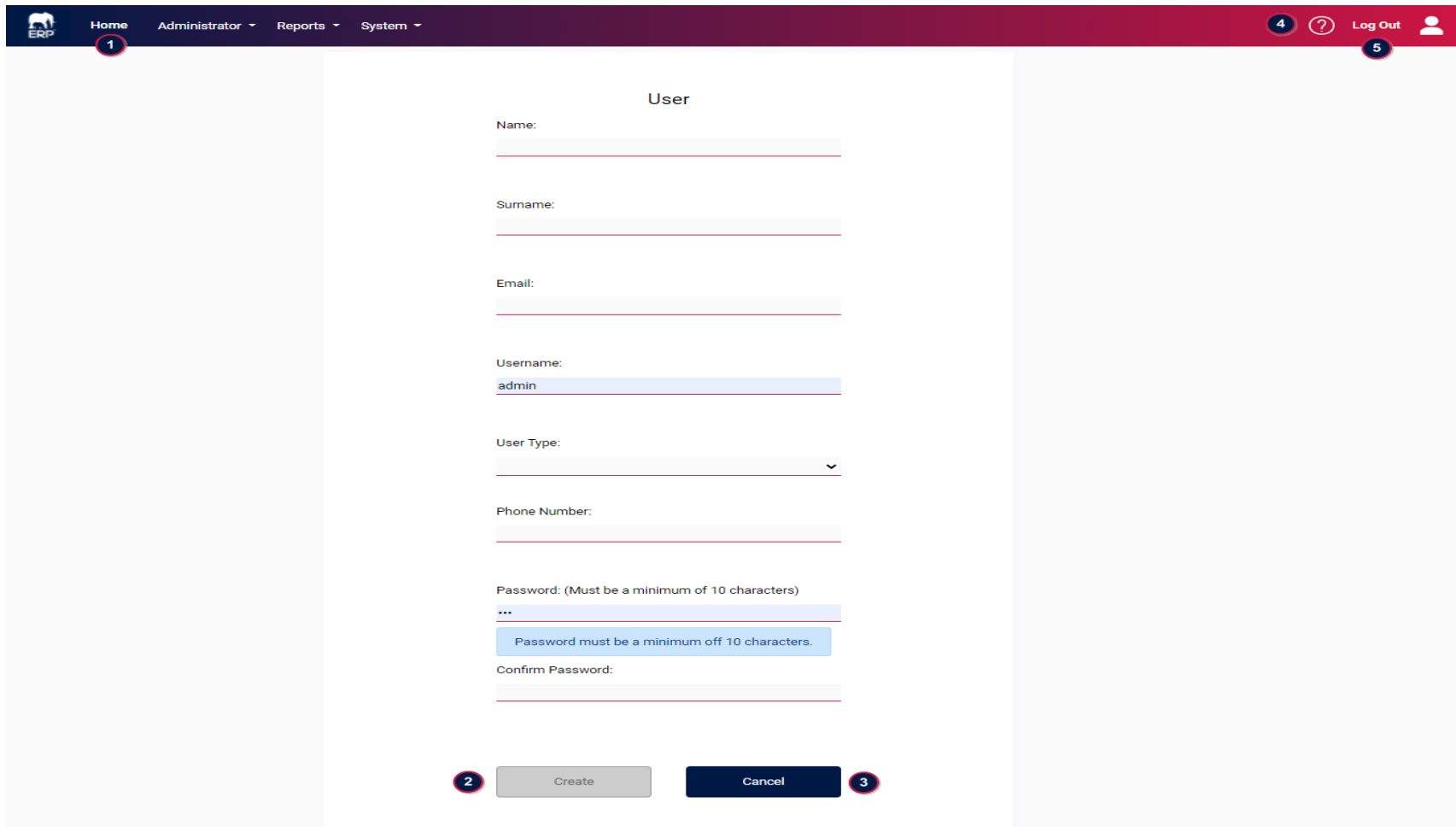
2020/10/20

#Bikes4ERP_VVS – GROUP 17

5.5.1 Create User Screen

Screen Description

This is the User Management screen of the #Bikes4ERP web application, accessed by the clicking “Users” menu item on the “Administrator” menu icon. It allows a user to view and search all the users currently registered on the system, the user will also be able create new users as well as edit current edit user details.



The screenshot displays the 'User' management interface. At the top, a navigation bar contains 'Home', 'Administrator', 'Reports', and 'System' menus. A red circle 1 highlights the 'Administrator' menu. On the right, there are icons for 'Log Out' (4), a help icon (5), and a user profile icon. The main form is titled 'User' and includes the following fields:

- Name:
- Surname:
- Email:
- Username:
- User Type:
- Phone Number:
- Password: (Must be a minimum of 10 characters)
- Confirm Password:

Below the password fields, a blue message box states: 'Password must be a minimum off 10 characters.' At the bottom, there are two buttons: 'Create' (2) and 'Cancel' (3).

Figure 32 Create User Screen 1

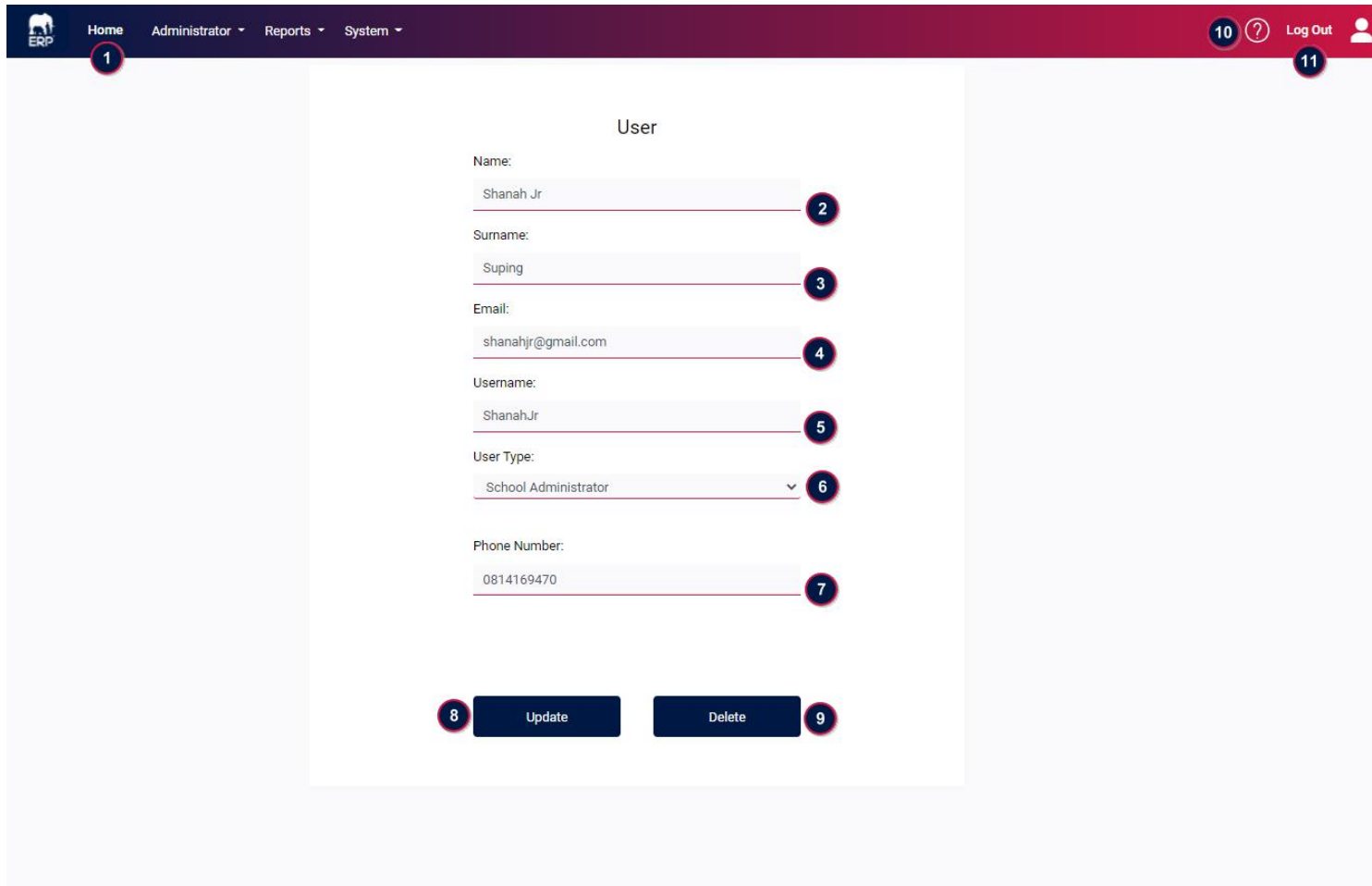
Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home Screen.
2	Create Button	Creates the new user once all fields have been filled. And Displays a Success Confirmation Dialog
3	Cancel Button	Redirects the Super Administrator to the User Management page
4	Help Button	If the user clicks on the Help option, Redirects School Administrator to the Help document
5	Logout Button	If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page

5.5.2 View User Screen

Screen Description

This is the View User screen of the #Bikes4ERP web application, accessed by the clicking “Pen” icon on a user. It allows the user to either update or delete the requested user details.

2020/10/20
#Bikes4ERP_VVS – GROUP 17



User

Name: Shanah Jr

Surname: Suping

Email: shanahjr@gmail.com

Username: ShanahJr

User Type: School Administrator

Phone Number: 0814169470

Update **Delete**

Figure 33 View User Screen 1

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home Screen.
2	Name Textbox	Allows the Super Administrator to Update a User's Name
3	Surname Textbox	Allows the Super Administrator to Update a User's Surname
4	Email Textbox	Allows the Super Administrator to Update a User's Email Address
5	Username Textbox	Allows the Super Administrator to Update a User's Username
6	User Type Dropdown Menu	Allows the Super Administrator to select and Update a User Type
7	Phone number Textbox	Allows the Super Administrator to Update a User's Phone Number
8	Update Button	Updates the current user and displays a Success Confirmation Dialog
9	Delete Button	Deletes the current user and Displays the Delete Confirmation Dialog
10	Help Button	If the user clicks on the Help option, Redirects Super Administrator to the Help document
11	Logout Button	If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page

2020/10/20
#Bikes4ERP_VVS – GROUP 17

HomeAdministrator ▾Reports ▾System ▾11 ?Log Out12

1

Mechanic

Name:
 2

Surname:
 3

Email:
 4

Username:
 5

User Type:
 6

Phone Number:
 7

8 Update

Delete 9

10 Mechanic School and Workdays

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home Screen.
2	Name Textbox	Allows the Super Administrator to Update a User's Name
3	Surname Textbox	Allows the Super Administrator to Update a User's Surname
4	Email Textbox	Allows the Super Administrator to Update a User's Email Address
5	Username Textbox	Allows the Super Administrator to Update a User's Username
6	User Type Dropdown Menu	Allows the Super Administrator to select and Update a User Type
7	Phone number Textbox	Allows the Super Administrator to enter a Phone Number
8	Update Button	Updates the current user and displays a Success Confirmation Dialog
9	Delete Button	Deletes the current user and Displays the Delete Confirmation Dialog
10	Mechanic School and Workdaays	Redirects Super Administrator to the Mechanic Word Days page
11	Help Button	If the user clicks on the Help option, Redirects School Administrator to the Help document
12	Logout Button	If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page

2020/10/20
#Bikes4ERP_VVS – GROUP 17

HomeAdministrator ▾Reports ▾System ▾4?Log Out5

1

Mechanic Work Days

Mechanic ID:

WorkDay:

▾

School

▾

3

Create

Cancel

2

2020/10/20

#Bikes4ERP_VVS – GROUP 17

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home Screen.
2	Create Button	Creates the new mechanic workday. And Displays Success Confirmation Dialog
3	Cancel Button	Redirects the Super Administrator to the View User page
4	Help Button	If the user clicks on the Help option, Redirects School Administrator to the Help document
5	Logout Button	If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page

5.6 User Type Management Screen

Screen Description

This is the User Type Management screen of the #Bikes4ERP web application, accessed by the clicking “User Types” menu item on the “Administrator” menu icon. It allows an Administrator to view and search all the user types currently registered on the system, the user will also be able create new user types as well as edit current edit user type details.

The screenshot shows the User Type Management interface. At the top is a navigation bar with 'Home', 'Administrator', 'Reports', and 'System' menus. A search bar and 'Log Out' button are on the right. Below the navigation bar is a 'User Type' section with a search input and a '+' button. The main content is a table with columns: Type, Permissions, and Action. The table lists four user types: Administrator (High permissions), Mechanic (Low permissions), School Administrator (Moderate permissions), and That guy (Moderate permissions). Each row has an edit icon in the Action column.

Type	Permissions	Action
Administrator	High	[Edit Icon]
Mechanic	Low	[Edit Icon]
School Administrator	Moderate	[Edit Icon]
That guy	Moderate	[Edit Icon]

Figure 34 User Type Management Screen

1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home Screen.
2	User Type table	Displays a list of User Types and Permissions
3	Pen button	Allows the user to view the specific User Type , Redirects To the View page
4	Plus Button	Redirects the Super Administrator to the Create User Type page
5	Search Textbox	The Super Administrator can enter in the User Type details to search
6	Help Button	If the user clicks on the Help option, Redirects School Administrator to the Help document
7	Logout Button	If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page

2020/10/20

#Bikes4ERP_VVS – GROUP 17

5.6.1 Create User Type Screen

Screen Description

This is the Create User Type screen of the #Bikes4ERP web application, accessed by the clicking “Plus” icon on the “User Type Management” screen. It allows an Administrator to create a new user type. The Administrator will enter the required details and proceed to click the “Create” button.

The screenshot displays the 'Create User Type' interface. At the top, a dark blue navigation bar includes the 'ERP' logo, a 'Home' link (marked with a red circle 1), and dropdown menus for 'Administrator', 'Reports', and 'System'. On the right side of the header are icons for a notification (4), help (question mark), 'Log Out', and a user profile (5). The main content area is a white box with the title 'User Type'. It contains a 'Type:' label above a text input field, and a 'Permissions:' label above a dropdown menu. At the bottom of the form are two buttons: a grey 'Create' button (marked with a red circle 2) and a dark blue 'Cancel' button (marked with a red circle 3).

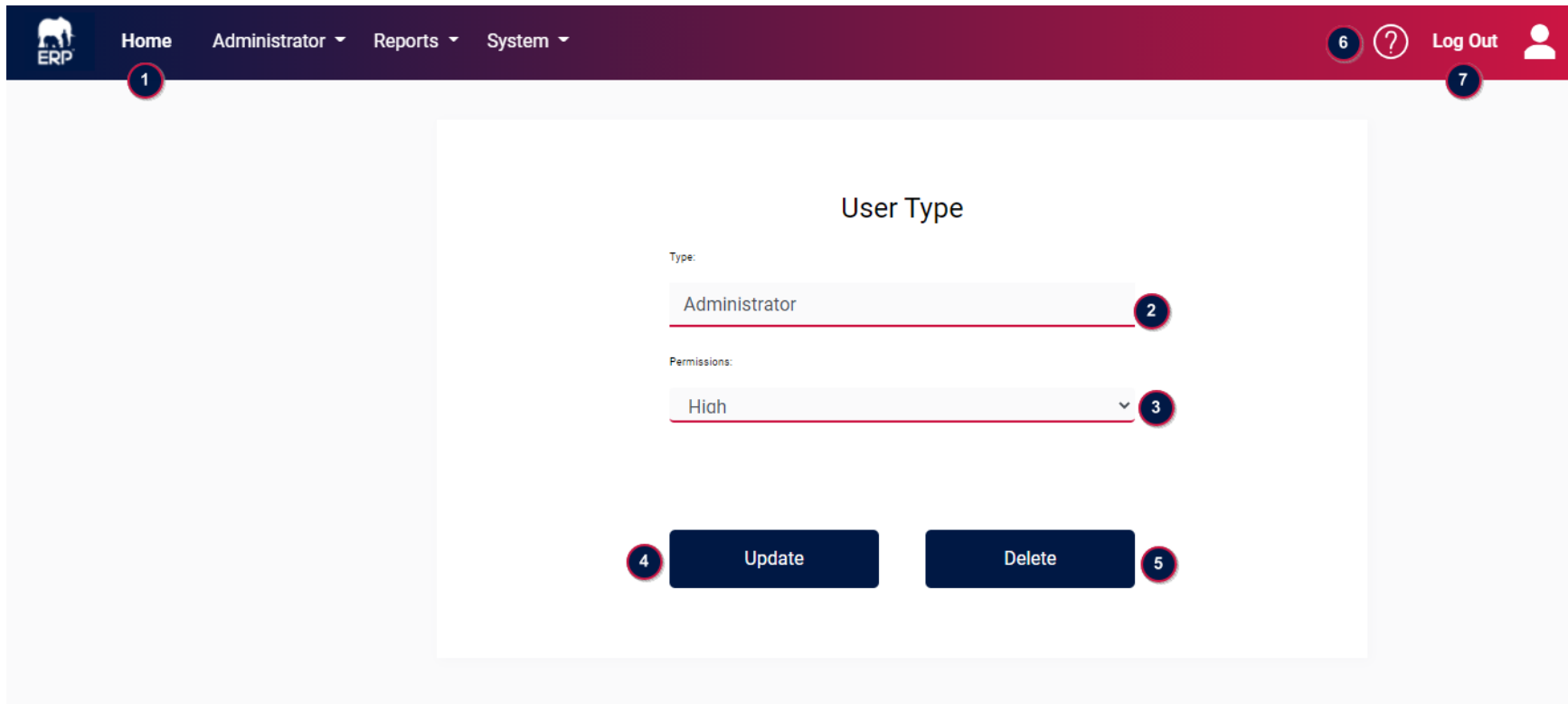
Figure 35 Create User Type Screen

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home Screen.
2	Create Button	Creates the new User Type once all fields have been filled. And Displays Success Confirmation Dialog
3	Cancel Button	Redirects the Super Administrator to the User Type Management page
4	Help Button	If the user clicks on the Help option, Redirects School Administrator to the Help document
5	Logout Button	If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page

5.6.2 View User Type Screen

Screen Description

This is the View User Type screen of the #Bikes4ERP web application, accessed by the clicking “Pen” icon on a user. It allows the user to either update or delete the requested user type details.



The screenshot displays the 'View User Type' interface. At the top, a dark blue navigation bar includes the ERP logo, 'Home', 'Administrator', 'Reports', and 'System' menus, along with a 'Log Out' button and a user profile icon. The main content area is titled 'User Type' and contains two dropdown menus: 'Type' (set to 'Administrator') and 'Permissions' (set to 'High'). Below these are two buttons: 'Update' and 'Delete'. Numbered callouts (1-7) highlight specific UI elements: 1. Header navigation bar, 2. Type dropdown, 3. Permissions dropdown, 4. Update button, 5. Delete button, 6. Log Out link, 7. User profile icon.

Figure 36 View User Type Screen

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home Screen.
2	Type Textbox	Allows the Super Administrator to update a User Type
3	Permission Textbox	Allows the Super Administrator to select and update a User type Permissions
4	Update Button	Updates the current user type and displays a Success Confirmation Dialog
5	Delete Button	Deletes the current user type and Displays the Delete Confirmation Dialog
6	Help Button	If the user clicks on the Help option, Redirects Super Administrator to the Help document
7	Logout Button	If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page

5.7 Antenna Management Screen

Screen Description

This is the Antenna Management screen of the #Bikes4ERP web application, accessed by the clicking “Antennas” menu item on the “Administrator” menu icon. It allows an Administrator to view and search all the antennas currently registered on the system, the user will also be able create new antennas as well as edit current edit antennas details.

Antenna Management

Antenna Address	Suburb	Antenna Status	Action
Sesame Street 123	Mamelodi	Operational	
Highmans Street 121	Hillcrest	Operational	
Island lane 819	Hillcrest	Non-operational	
JellyBean route 188	Hatfield	Operational	
Lily Lane 312	Hatfield	Operational	
SpiderStreet 88	Hatfield	Non-operational	
Oreo Road 331	Mamelodi	Operational	

Figure 37 Antenna Management screen

2020/10/20

#Bikes4ERP_VVS – GROUP 17

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the Super Administrator to the Bikes4ERP Home page.
2	Antenna table	Displays a list of Antenna Address, Suburb and Status for each Antenna
3	Pen button	Allows the Super Administrator to view a specific Antenna , Redirects To the View page
4	Plus Button	Redirects the Super Administrator to the Create Antenna page
5	Search Textbox	The Super Administrator can enter in the Antenna details to search
6	Help Button	If the user clicks on the Help option, Redirects Super Administrator to the Help document
7	Logout Button	If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page

2020/10/20

#Bikes4ERP_VVS – GROUP 17

5.7.1 Create Antenna Screen

Screen Description

This is the Create Antenna screen of the #Bikes4ERP web application, accessed by the clicking “Plus” icon on the “Antennas Management” screen. It allows an Administrator to create a new antenna. The Administrator will enter the required details and proceed to click the “Create” button.

Antenna

Antenna Address

Antenna Status

Co-ordinates

Suburb:

Date Installed

yyyy/mm/dd

Create Cancel

Figure 38 Create Antenna screen

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home page.
2	Create Button	Creates the new Antenna once all fields have been filled. And Displays Success Confirmation Dialog
3	Cancel Button	Redirects the Super Administrator to the Antenna Management page
4	Help Button	If the user clicks on the Help option, Redirects School Administrator to the Help document
5	Logout Button	If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page

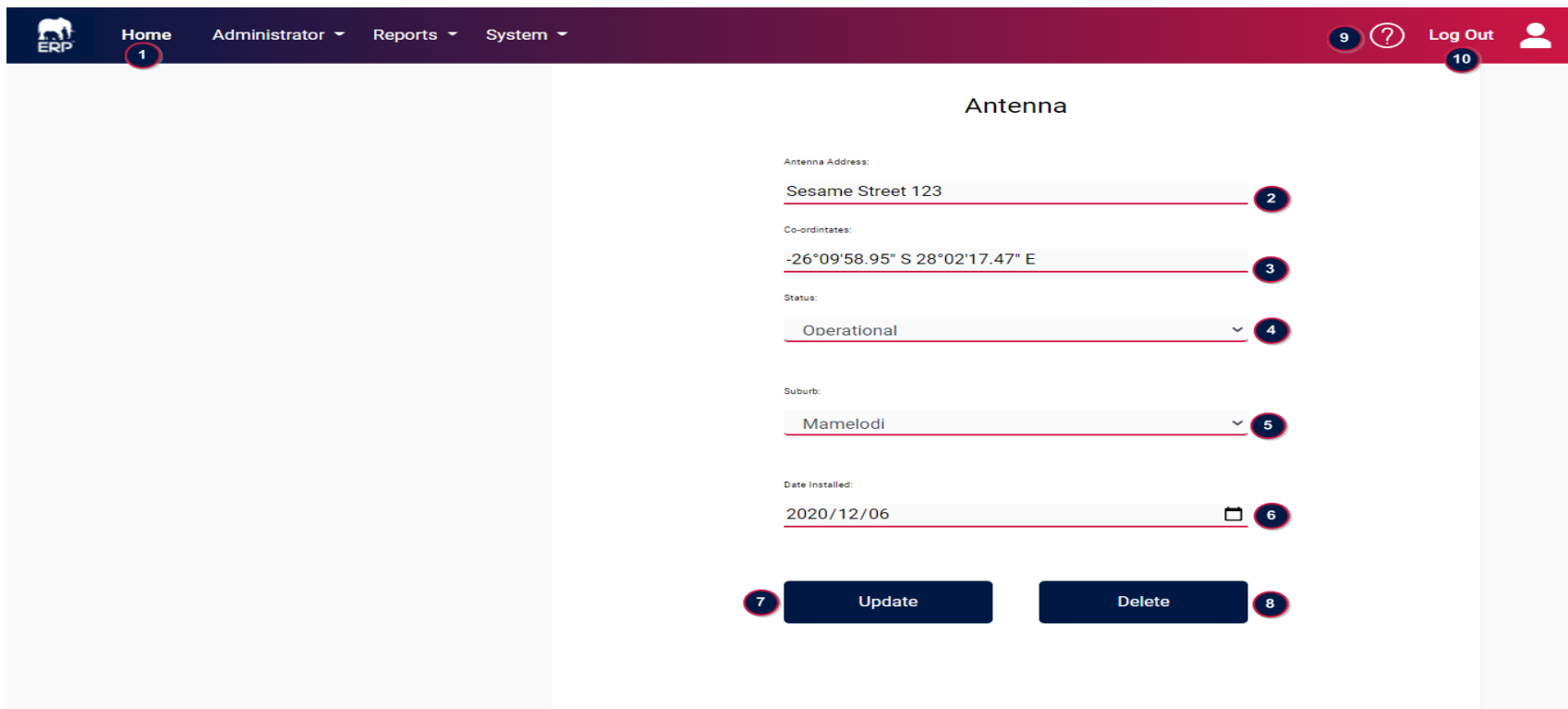
2020/10/20

#Bikes4ERP_VVS – GROUP 17

5.7.2 View Antenna Screen

Screen Description

This is the View Antenna screen of the #Bikes4ERP web application, accessed by the clicking “Pen” icon on an antenna. It allows the user to either update or delete the requested antenna details.



The screenshot shows the 'View Antenna' screen of the #Bikes4ERP web application. The interface is a web browser window with a dark blue header bar. The header bar contains the ERP logo on the left, a navigation menu with 'Home', 'Administrator', 'Reports', and 'System' in the center, and user controls on the right including a question mark icon, 'Log Out', and a user profile icon. The main content area is titled 'Antenna' and contains a form with the following fields: 'Antenna Address' (text input with value 'Sesame Street 123'), 'Co-ordinates' (text input with value '-26°09'58.95" S 28°02'17.47" E'), 'Status' (dropdown menu with value 'Operational'), 'Suburb' (dropdown menu with value 'Mamelodi'), and 'Date Installed' (calendar icon with value '2020/12/06'). At the bottom of the form are two buttons: 'Update' and 'Delete'. The interface is annotated with numbered callouts: 1 points to the 'Home' menu item, 2 points to the 'Antenna Address' field, 3 points to the 'Co-ordinates' field, 4 points to the 'Status' dropdown, 5 points to the 'Suburb' dropdown, 6 points to the 'Date Installed' field, 7 points to the 'Update' button, 8 points to the 'Delete' button, 9 points to the question mark icon in the header, and 10 points to the user profile icon in the header.

Figure 39 View Antenna screen

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home page.
2	Antenna Address Textbox	Allows the Super Administrator to Update an Antenna's Address
3	Co-ordinates Textbox	Allows the Super Administrator to Update an Antenna's Co-ordinates
4	Status Textbox	Allows the Super Administrator to Update an Antenna's Status
5	Suburb Dropdown Menu	Allows the Super Administrator to select and Update an Antenna's Suburb
6	Date Installed Date-Picker	Allows the Super Administrator to select and Update an Antenna's Date Installed
7	Update Button	Updates the current Antenna and displays a Success Confirmation Dialog
8	Delete Button	Deletes the current Antenna and Displays the Delete Confirmation Dialog
9	Help Button	If the user clicks on the Help option, Redirects Super Administrator to the Help document
10	Logout Button	If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page

5.8 Tag Management Screen

Screen Description

This is the Tag Management screen of the #Bikes4ERP web application, accessed by the clicking “Tags” menu item on the “Administrator” menu icon. It allows an Administrator to view and search all the tags currently registered on the system, the user will also be able create new tags as well as edit current edit tags details.

 Home Administrator Reports System				6 ? Log Out 
Tag Management				4 + Search by Tag Serial Number 5
Tag Serial Number	Bicycle Code	Tag Status	Action	
F9 B3 CF A2	404069	Assigned	3 	
C9 EB A0 B2	250	Assigned		
C9 EB A0 B4	516146	Assigned		
F9 B3 CF A10	2500	Assigned		
F9 B3 CF A223		Assigned		

Figure 40 Tag Management screen

2020/10/20

#Bikes4ERP_VVS – GROUP 17

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the Super Administrator to the Bikes4ERP Home page.
2	Tag table	Displays a list of Tag Serial numbers, Bicycle Code and Status for each Tag
3	Pen button	Allows the Super Administrator to view a specific Tag , Redirects To the View page
4	Plus Button	Redirects the Super Administrator to the Create Tag page
5	Search Textbox	The Super Administrator can enter in the Tag details to search
6	Help Button	If the user clicks on the Help option, Redirects Super Administrator to the Help document
7	Logout Button	If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page

2020/10/20

#Bikes4ERP_VVS – GROUP 17

5.8.1 Create Tag Screen

Screen Description

This is the Create Tag screen of the #Bikes4ERP web application, accessed by the clicking “Plus” icon on the “Tag Management” screen. It allows an Administrator to create a new tag. The Administrator will enter the required details and proceed to click the “Create” button.

The screenshot displays the 'Create Tag' interface. At the top, a dark blue navigation bar includes the ERP logo, a 'Home' link with a circled '1', and dropdown menus for 'Administrator', 'Reports', and 'System'. On the right side of the bar are a help icon with a circled '4', a 'Log Out' link, and a user profile icon with a circled '5'. The main content area is white and contains a form titled 'Tag'. The form includes a label 'Tag Serial Number:' and a corresponding text input field. Below the input field are two buttons: a light blue 'Create' button with a circled '2' and a dark blue 'Cancel' button with a circled '3'.

Figure 41 Create Tag screen

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home page.
2	Create Button	Creates the new Tag once all fields have been filled. And Displays Success Confirmation Dialog
3	Cancel Button	Redirects the Super Administrator to the Tag Management page
4	Help Button	If the user clicks on the Help option, Redirects Super Administrator to the Help document
5	Logout Button	If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page

5.8.2 View Tag Screen

Screen Description

This is the View Tag screen of the #Bikes4ERP web application, accessed by the clicking “Pen” icon on a tag. It allows the user to either update or delete the requested tags details.

Tag

Tag Serial Number:
F9 B3 CF A2

Tag Status:
Assigned

Date Installed:
yyyy/mm/dd

Update Delete

Figure 42 View Tag screen

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home page.
2	Serial Number Textbox	Allows the Super Administrator to Update a Tag's Serial Number
3	Status Dropdown Menu	Allows the Super Administrator to select and Update a Tag's Status
4	Date Installed Date-Picker	Allows the Super Administrator to select and Update a Tag's Date Installed
5	Update Button	Updates the current Tag and displays a Success Confirmation Dialog
6	Delete Button	Deletes the current Tag and Displays the Delete Confirmation Dialog
7	Help Button	If the user clicks on the Help option, Redirects Super Administrator to the Help document
8	Logout Button	If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page

5.9 Bicycle Part Management Screen

Screen Description

This is the Bicycle Part Management screen of the #Bikes4ERP web application, accessed by the clicking “Bicycle Part ” menu item on the “Administrator” menu icon. It allows a Super Administrator to view and search all the Bicycle Parts currently on the system, the user will also be able create a new Bicycle Part as well as edit the Bicycle Part details.

 Home Administrator ▾ Reports ▾ System ▾ 6 ? Log Out 				
Bicycle Part Management 4 + Search for a Bicycle Part 5				
Part Name	Description	Section	Part Type	Action
Back Rim	The Rim of the bike	Back Wheel	Heinrich	3 
Gear switch lever	Change speed modes	Gears	Heinrich	
Brake Disk/Pad	Used with the calipers or rubber	Back Wheel	Heinrich	
Seat	Stability	Body	Heinrich	
Front Tube	The real air	Front Wheel	Heinrich	
Handle grips	Firm hold	Handle bar	Heinrich	
Chain	For the motions	Gears	Heinrich	
Back Frame	The back frame part	Body	Heinrich	

Figure 43 Bicycle Part Management Screen

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the School Administrator to the Bikes4ERP Home page.
2	Bicycle table	Displays a list of Bicycle Part Name, Description, Section and Part Type for each Bicycle
3	Pen button	Allows the Super Administrator to view a specific Bicycle Part, Redirects To the View page
4	Plus Button	Redirects the Super Administrator to the Create Bicycle Part page
5	Search Textbox	The Super Administrator can enter in the Bicycle Part details to search
6	Help Button	If the user clicks on the Help option, Redirects Super Administrator to the Help document
7	Logout Button	If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page

5.9.1 Create Bicycle Part Screen

Screen Description

This is the Create Bicycle Part screen of the #Bikes4ERP web application, accessed by the clicking "Plus" icon on the "Bicycle Part Management" screen. It allows a Super Administrator to create a new Bicycle Part. The user will enter the required details and proceed to click the "Create" button.

Bicycle Part

Please Select a Bicycle Part Image

2 Choose File No file chosen

Part Name:

Part Description:

Bicycle Section:

Part Type:

Please ensure all fields are filled in and valid

3 Create Part 4 Cancel

5 ? Log Out 6

Figure 44 Create Bicycle Part Screen

2020/10/20

#Bikes4ERP_VVS – GROUP 17

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home page.
2	Choose File Button	Allows the Super Administrator to upload a Bicycle Part Picture
3	Create Button	Creates the new Bicycle Part once all fields have been filled. And Displays Success Confirmation Dialog
4	Cancel Button	Redirects the Super Administrator to the Bicycle Part Management page
5	Help Button	If the user clicks on the Help option, Redirects Super Administrator to the Help document
6	Logout Button	If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page

5.9.2 View Bicycle Part Screen

Screen Description

This is the View Bicycle Part screen of the #Bikes4ERP web application, accessed by the clicking “Pen” icon on a Bicycle Part. It allows the user to either update or delete the requested Bicycle Part details.

The screenshot shows the 'View Bicycle Part' screen. The top navigation bar is dark blue with the ERP logo and links for Home, Administrator, Reports, and System. On the right, there are icons for a user profile, a question mark, and a Log Out button. The main content area is titled 'Bicycle Part' and features an image of a bicycle part. Below the image, there is a section titled 'Choose a Bicycle Part Image to update' with a 'Choose File' button and the text 'No file chosen'. The form includes several input fields: 'Part Name' (with a red underline), 'Gear switch lever' (with a red underline), 'Part Description' (with a red underline), 'Change speed modes' (with a red underline), 'Bicycle Section' (with a dropdown arrow), 'Gears' (with a dropdown arrow), 'Part Type' (with a dropdown arrow), and 'Heinrich' (with a dropdown arrow). At the bottom, there are two buttons: 'Update' and 'Delete'.

Figure 45 View Bicycle Part Screen

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home page.
2	Choose File Button	Allows the Super Administrator to upload a Bicycle Part Picture
3	Part Name Textbox	Allows the Super Administrator to Update a Part Name
4	Part Description Textbox	Allows the Super Administrator to Update a Section Description
5	Bicycle Section Dropdown Menu	Allows the Super Administrator to select and Update a Bicycle Section
6	Part Type Dropdown Menu	Allows the Super Administrator to select and Update a Bicycle Part Type
7	Update Button	Updates the current Bicycle Part and displays a Success Confirmation Dialog
8	Delete Button	Deletes the current Bicycle Part and Displays the Delete Confirmation Dialog
9	Help Button	If the user clicks on the Help option, Redirects Super Administrator to the Help document
10	Logout Button	If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page

5.10 Bicycle Section Management Screen

Screen Description

This is the Bicycle Section Management screen of the #Bikes4ERP web application, accessed by the clicking "Bicycle Section" menu item on the "Administrator" menu icon. It allows a Super Administrator to view and search all the Bicycle Section currently on the system, the user will also be able create a new Bicycle Section as well as edit the Bicycle Section details.

The screenshot shows the 'Bicycle Section Management' interface. At the top is a navigation bar with 'Home', 'Administrator', 'Reports', and 'System' menus. A search bar is on the right with a '+' icon. Below the navigation bar is the title 'Bicycle Section Management' and a search input field labeled 'Search by Section Name'. The main content is a table with three columns: 'Section Name', 'Description', and 'Action'. The table lists various bicycle components like Front Wheel, Back Wheel, Gears, Body, Handle bar, Seat, Brakes, and TestSection, each with a corresponding description and an edit icon. Numbered callouts (1-7) highlight specific UI elements: 1 points to the 'Administrator' menu, 2 points to the 'Section Name' column header, 3 points to an edit icon, 4 points to the '+' icon, 5 points to the search input field, 6 points to a question mark icon, and 7 points to the 'Log Out' button.

Section Name	Description	Action
Front Wheel	The Wheel at the front	
Back Wheel	The wheel at the Back	
Gears	Used to Change gears	
Body	Holds Sections together	
Handle bar	Handle the control	
Seat	Made For sitting	
Brakes	used to stop the bike	
TestSection	testing	

Figure 46 Bicycle Section Management Screen

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the School Administrator to the Bikes4ERP Home page.
2	Bicycle table	Displays a list of Bicycle Section Name and Description for each section
3	Pen button	Allows the Super Administrator to view a specific Bicycle Section, Redirects To the View page
4	Plus Button	Redirects the Super Administrator to the Create Bicycle Section page
5	Search Textbox	The Super Administrator can enter in the Bicycle Section details to search
6	Help Button	If the user clicks on the Help option, Redirects Super Administrator to the Help document
7	Logout Button	If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page

2020/10/20

#Bikes4ERP_VVS – GROUP 17

5.10.1 Create Bicycle Section Screen

Screen Description

This is the Create Bicycle Section screen of the #Bikes4ERP web application, accessed by the clicking “Plus” icon on the “Bicycle Section Management” screen. It allows a Super Administrator to create a new Bicycle Section. The user will enter the required details and proceed to click the “Create” button.

Bicycle Section

Please Select a Bicycle Section Image

2 Choose File No file chosen

Section Name: 3

Section Description: 4

Please ensure all fields are filled(remember a picture!)

5 Create Section 6 Cancel

Figure 47 Create Bicycle Section Screen

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home page.
2	Choose File Button	Allows the Super Administrator to upload a Bicycle Section Picture
3	Create Button	Creates the new Bicycle Section once all fields have been filled. And Displays Success Confirmation Dialog
4	Cancel Button	Redirects the Super Administrator to the Bicycle Section Management page
5	Help Button	If the user clicks on the Help option, Redirects Super Administrator to the Help document
6	Logout Button	If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page

2020/10/20

#Bikes4ERP_VVS – GROUP 17

5.10.2View Bicycle Section Screen

Screen Description

This is the View Bicycle Section screen of the #Bikes4ERP web application, accessed by the clicking “Pen” icon on a Bicycle Section. It allows the user to either update or delete the requested Bicycle Section details.

Bicycle Section

Choose a Bicycle Section Image to update

Choose File No file chosen

Section Name:
Handle bar

Section Description:
Handle the control

Update Delete

Figure 48 View Bicycle Section Screen

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home page.
2	Choose File Button	Allows the Super Administrator to upload a Bicycle Section Picture
3	Section Name Textbox	Allows the Super Administrator to Update a Section Name
4	Section Description Textbox	Allows the Super Administrator to Update a Section Description
7	Update Button	Updates the current Bicycle Section and displays a Success Confirmation Dialog
8	Delete Button	Deletes the current Bicycle Section and Displays the Delete Confirmation Dialog
9	Help Button	If the user clicks on the Help option, Redirects Super Administrator to the Help document
10	Logout Button	If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page

5.11 Log Entry Screen

Screen Description

This is the Log Entry screen of the #Bikes4ERP web application, accessed by the clicking “Log” menu item on the “Administrator” menu icon. It allows a Super Administrator to view and search all the Log Entries currently on the system.



Home

Administrator ▾

Reports ▾

System ▾

4

?

Log Out



1

Log Entry

3

Search by Tag serial number

5

Tag Serial Number	Student Name	Date Time
F9 B3 CF A2	Gareth Philips	2020-08-25 19:26
C9 EB A0 B2	Cameron King	2020-08-25 19:27
C9 EB A0 B2	Cameron King	2020-08-25 19:27
F9 B3 CF A2	Gareth Philips	2020-08-25 19:28
F9 B3 CF A2	Gareth Philips	2020-08-25 19:28
C9 EB A0 B2	Cameron King	2020-08-25 19:29
F9 B3 CF A2	Gareth Philips	2020-08-27 09:25
F9 B3 CF A2	Gareth Philips	2020-08-27 09:25
F9 B3 CF A2	Gareth Philips	2020-08-27 09:25

Figure 49 Search Log Entry Screen

2020/10/20

#Bikes4ERP_VVS – GROUP 17

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the Super Administrator to the Bikes4ERP Home page.
2	Log table	Displays a list of Tag Serial numbers, Student Name and Date Time for each Tag
3	Search Textbox	The Super Administrator can enter in the Log details to search
4	Help Button	If the user clicks on the Help option, Redirects Super Administrator to the Help document
5	Logout Button	If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page

5.12 Route Management Screen

Screen Description

This is the Route Management screen of the #Bikes4ERP web application, accessed by the clicking “Route” menu item on the “Administrator” menu icon. It allows a Super Administrator to view and search all the Routes currently on the system, the user will also be able create a new Route as well as edit the Route details.

Route Management

RouteID	School	Position 1	Position 2	Action
1	School of Smarties	6	7	
13	Test School	6	7	
21	JohnSchool	8	9	
77	MoonshineSchool	8	10	
78	Test School	10	7	
79	School of Smarties	1	3	
80	Standard School	7	6	

Figure 50 Route Management Screen

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the School Administrator to the Bikes4ERP Home page.
2	Route table	Displays a list of Route ID, School, Position 1 and Position 2 for each Route
3	Pen button	Allows the Super Administrator to view a specific Route , Redirects To the View page
4	Plus Button	Redirects the Super Administrator to the Create Route page
5	Search Textbox	The Super Administrator can enter in the Route details to search
6	Help Button	If the user clicks on the Help option, Redirects Super Administrator to the Help document
7	Logout Button	If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page

2020/10/20

#Bikes4ERP_VVS – GROUP 17

5.12.1 Create Route Screen

Screen Description

This is the Create Route screen of the #Bikes4ERP web application, accessed by the clicking “Plus” icon on the “Route Management” screen. It allows a Super Administrator to create a new Route. The user will enter the required details and proceed to click the “Create” button.

The screenshot displays the 'Create Route' interface. The top navigation bar is dark blue with the ERP logo on the left and 'Home', 'Administrator', 'Reports', and 'System' links in the center. On the right, there are icons for help (4), a question mark, 'Log Out', and a user profile (5). The main form area is white and titled 'Route'. It contains three dropdown menus: 'School:', 'Position 1 Antenna:', and 'Position 2 Antenna:'. At the bottom, there are two buttons: 'Create Route' (labeled 2) and 'Cancel' (labeled 3). A red circle with the number 1 highlights the 'Home' link in the navigation bar.

Figure 51 Create Route Screen

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home page.
2	Create Button	Creates the new Route once all fields have been filled. And Displays Success Confirmation Dialog
3	Cancel Button	Redirects the Super Administrator to the Route Management page
4	Help Button	If the user clicks on the Help option, Redirects Super Administrator to the Help document
5	Logout Button	If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page

2020/10/20

#Bikes4ERP_VVS – GROUP 17

5.12.2 View Route Screen

Screen Description

This is the View Route screen of the #Bikes4ERP web application, accessed by the clicking “Pen” icon on a Route. It allows the user to either update or delete the requested Route details.

Figure 52 View Route Screen

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home page.
2	School Dropdown Menu	Allows the Super Administrator to select and Update a Route School
3	Position 1 Dropdown Menu	Allows the Super Administrator to select and Update a Route Position 1
4	Position 2 Dropdown Menu	Allows the Super Administrator to select and Update a Route Position 2
5	Update Button	Updates the current Route and displays a Success Confirmation Dialog
6	Delete Button	Deletes the current Route and Displays the Delete Confirmation Dialog
7	Help Button	If the user clicks on the Help option, Redirects Super Administrator to the Help document
8	Logout Button	If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page

5.13 Fault Task Management Screen

Screen Description

This is the Fault Task Management screen of the #Bikes4ERP web application, accessed by the clicking “Fault Task” menu item on the “Administrator” menu icon. It allows a Super Administrator to view and search all the Fault Task currently on the system, the user will also be able create a new Fault Task as well as edit the Fault Task details.

Fault Task

Part	Fault Type	Action
Gear switch lever	Gear Misaligned	
Back Rim	Bent Rim	
Brake Disk/Pad	Brakes Worn out	
Chain	Chain dried up	
Seat	Seat broken	
Front Tube	Punctured Tube	
Back Tube	Punctured Tube	

Figure 53 Fault Task Management Screen

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the School Administrator to the Bikes4ERP Home page.
2	Fault Task table	Displays a list of Bicycle Part and Fault Type for each Fault task
3	Pen button	Allows the Super Administrator to view a specific Fault Task , Redirects To the View page
4	Plus Button	Redirects the Super Administrator to the Create Fault Task page
5	Search Textbox	The Super Administrator can enter in the Fault Task details to search
6	Help Button	If the user clicks on the Help option, Redirects Super Administrator to the Help document
7	Logout Button	If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page

5.13.1 Create Fault Task Screen

Screen Description

This is the Create Fault Task screen of the #Bikes4ERP web application, accessed by the clicking “Plus” icon on the “Fault Task Management” screen. It allows a Super Administrator to create a new Fault Task. The user will enter the required details and proceed to click the “Create” button.

The screenshot displays the 'Create Fault Task' interface. The top navigation bar is dark blue with the ERP logo on the left and links for Home, Administrator, Reports, and System. On the right, there are icons for help (4), log out (5), and a user profile. The main content area is white and titled 'Fault Task'. It contains two dropdown menus: 'Part Name' and 'Fault Type'. At the bottom, there are two buttons: 'Create' (2) and 'Cancel' (3). Numbered callouts (1, 4, 5) are placed on the navigation bar, and callout (3) is on the Cancel button.

Figure 54 Create Fault Task Screen

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home page.
2	Create Button	Creates the new Fault Task once all fields have been filled. And Displays Success Confirmation Dialog
3	Cancel Button	Redirects the Super Administrator to the Fault Task Management page
4	Help Button	If the user clicks on the Help option, Redirects Super Administrator to the Help document
5	Logout Button	If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page

5.13.2 View Fault Task Screen

Screen Description

This is the View Fault Task screen of the #Bikes4ERP web application, accessed by the clicking “Pen” icon on a Fault Task. It allows the user to either update or delete the requested Fault Task details.

The screenshot displays the 'View Fault Task' interface. At the top, a dark blue navigation bar includes the 'Home' link (1), 'Administrator', 'Reports', and 'System' menus. On the right, it shows 'Log Out' (6), a help icon, and a user profile icon (7). The main content area is titled 'Fault Task'. It contains two dropdown menus: 'Part Name' (2) with 'Gear switch lever' selected, and 'Fault Type' (3) with 'Gear Misaligned' selected. Below these are two buttons: 'Update' (4) and 'Delete' (5).

Figure 55 View Fault Task Screen

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home page.
2	Part Name Dropdown Menu	Allows the Super Administrator to select and Update a Fault Task Part Name
3	Fault type Dropdown Menu	Allows the Super Administrator to select and Update a Fault Task Fault Type
4	Update Button	Updates the current Fault Task and displays a Success Confirmation Dialog
5	Delete Button	Deletes the current Fault Task and Displays the Delete Confirmation Dialog
6	Help Button	If the user clicks on the Help option, Redirects Super Administrator to the Help document
7	Logout Button	If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page

5.14 Maintenance Task Management Screen

Screen Description

This is the Maintenance Task Management screen of the #Bikes4ERP web application, accessed by the clicking “Maintenance Task” menu item on the “Administrator” menu icon. It allows a Super Administrator to view and search all the Maintenance Task currently on the system, the user will also be able create a new Maintenance Task as well as edit the Maintenance Task details.

Maintenance Task			
Maintenance Task	Maintenance Type	Action	
Maintain brake disks	Monthly	3	
Replace brake disks	3 Monthly		
Oiling Chain	3 Monthly		
Rust removal	6 Monthly		
Repainting Back Frame	12 Monthly		
Check Tyre pressure	Monthly		
Seat clean	Monthly		

Figure 56 Maintenance Task Management Screen

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the School Administrator to the Bikes4ERP Home page.
2	Maintenance Task table	Displays a list of Maintenance Task and Maintenance Type for each Maintenance task
3	Pen button	Allows the Super Administrator to view a specific Maintenance Task , Redirects To the View page
4	Plus Button	Redirects the Super Administrator to the Create Maintenance Task page
5	Search Textbox	The Super Administrator can enter in the Maintenance Task details to search
6	Help Button	If the user clicks on the Help option, Redirects Super Administrator to the Help document
7	Logout Button	If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page

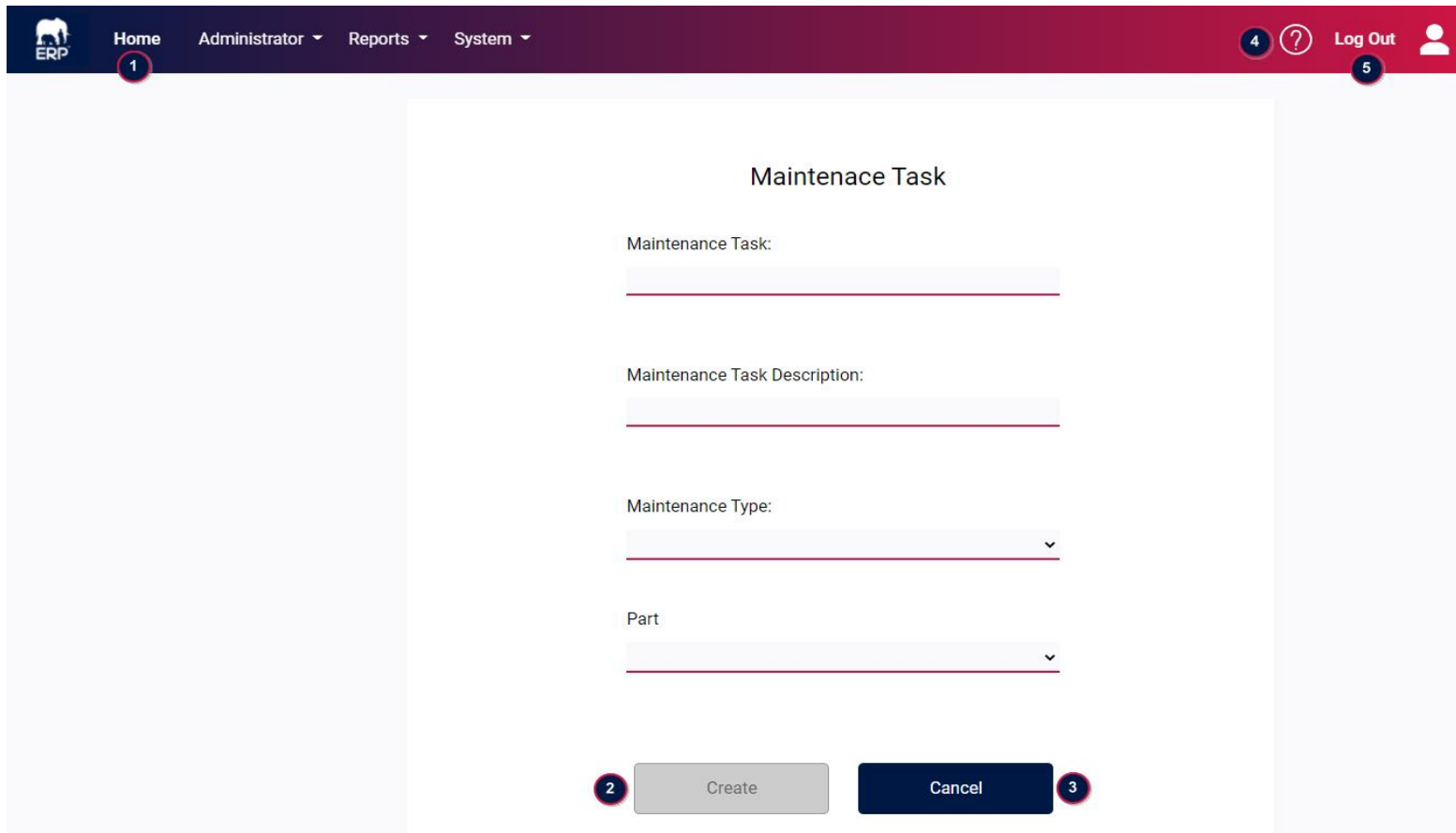
2020/10/20

#Bikes4ERP_VVS – GROUP 17

5.14.1 Create Maintenance Task Screen

Screen Description

This is the Create Maintenance Task screen of the #Bikes4ERP web application, accessed by the clicking “Plus” icon on the “Maintenance Task Management” screen. It allows a Super Administrator to create a new Maintenance Task. The user will enter the required details and proceed to click the “Create” button.



The screenshot displays the 'Create Maintenance Task' interface. The top navigation bar is dark blue with the ERP logo on the left and navigation links (Home, Administrator, Reports, System) in the center. On the right, there are links for Log Out and a user profile icon. The main content area is white and titled 'Maintenance Task'. It contains four input fields: 'Maintenance Task', 'Maintenance Task Description', 'Maintenance Type', and 'Part'. At the bottom, there are two buttons: 'Create' and 'Cancel'. Numbered callouts 1 through 5 highlight specific UI elements: 1 points to the Home link, 2 to the Create button, 3 to the Cancel button, 4 to the Log Out link, and 5 to the profile icon.

Figure 57 Create Maintenance Task Screen

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home page.
2	Create Button	Creates the new Maintenance Task once all fields have been filled. And Displays Success Confirmation Dialog
3	Cancel Button	Redirects the Super Administrator to the Maintenance Task Management page
4	Help Button	If the user clicks on the Help option, Redirects Super Administrator to the Help document
5	Logout Button	If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page

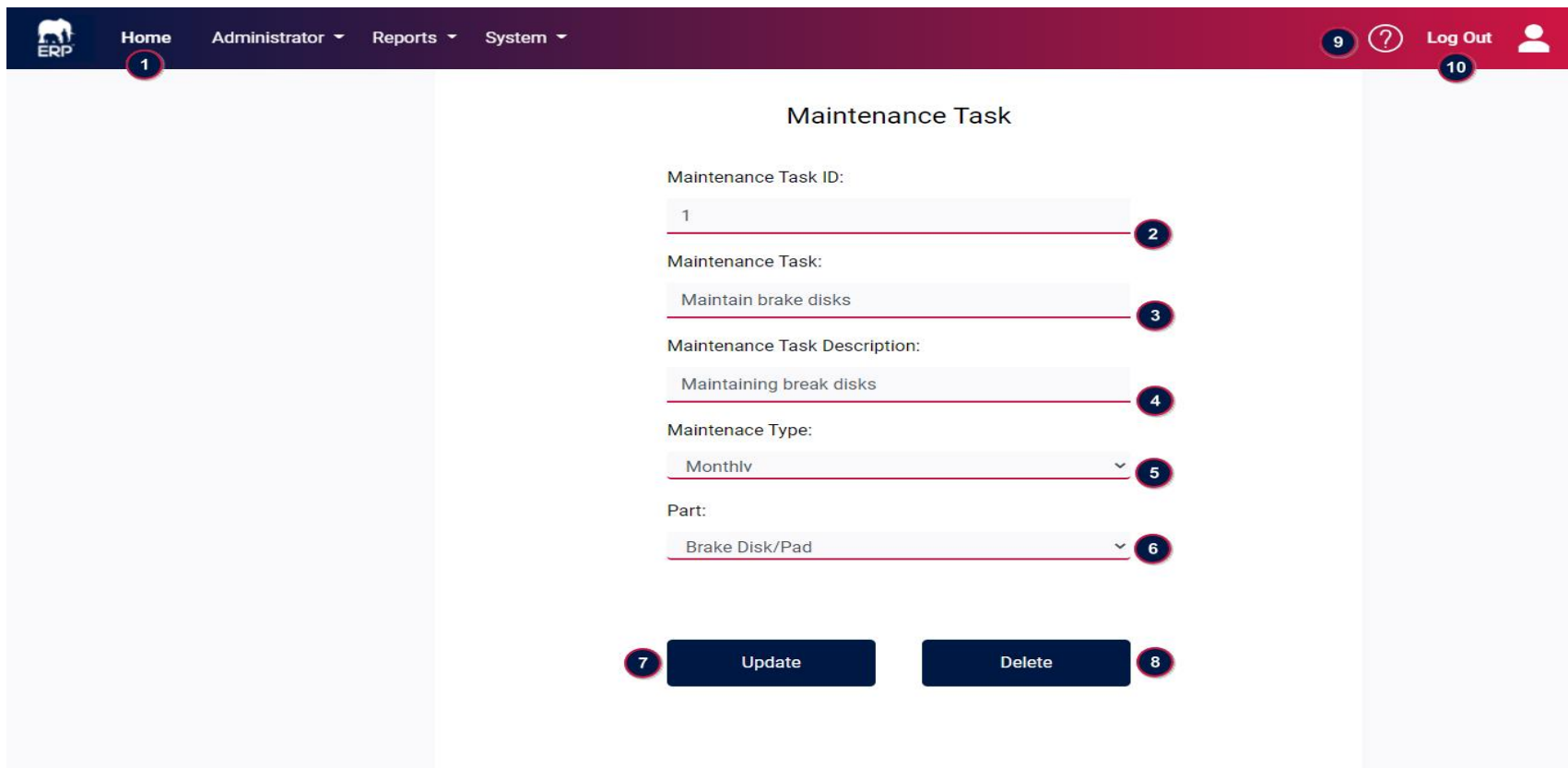
2020/10/20

#Bikes4ERP_VVS – GROUP 17

5.14.2 View Maintenance Task Screen

Screen Description

This is the View Maintenance Task screen of the #Bikes4ERP web application, accessed by the clicking “Pen” icon on a Maintenance Task. It allows the user to either update or delete the requested Maintenance Task details.



Maintenance Task

Maintenance Task ID:
1

Maintenance Task:
Maintain brake disks

Maintenance Task Description:
Maintaining break disks

Maintenance Type:
Monthlv

Part:
Brake Disk/Pad

Update Delete

Figure 58 View Maintenance Task Screen

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home page.
2	Maintenance Task ID Textbox	Allows the Super Administrator to Update a Maintenance Task ID
3	Maintenance Task Textbox	Allows the Super Administrator to Update a Maintenance Task
4	Maintenance Task Description Textbox	Allows the Super Administrator to Update a Maintenance Task Description
5	Maintenance Type Section Dropdown Menu	Allows the Super Administrator to select and Update a Maintenance Type
6	Part Dropdown Menu	Allows the Super Administrator to select and Update a Maintenance Part
7	Update Button	Updates the current Maintenance Task and displays a Success Confirmation Dialog
8	Delete Button	Deletes the current Maintenance Task and Displays the Delete Confirmation Dialog
9	Help Button	If the user clicks on the Help option, Redirects Super Administrator to the Help document
10	Logout Button	If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page

5.15 School Management Screen

Screen Description

This is the School Management screen of the #Bikes4ERP web application, accessed by the clicking “School Management” menu item on the “Administrator” menu icon. It allows a Super Administrator to view and search all the Schools currently on the system, the user will also be able create new School as well as edit the School details.

School Management

School Name	Village	Action
School of Smarties	Villy	
Test School	HomeyVillage	
JohnSchool	DangerousVillage	
JaneSchool	Villy	
Standard School	SafeVillage	
MoonshineSchool	HomeyVillage	

Figure 59 School Management Screen

2020/10/20

#Bikes4ERP_VVS – GROUP 17

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the School Administrator to the Bikes4ERP Home page.
2	School table	Displays a list of School Name and Village for each School
3	Pen button	Allows the Super Administrator to view a specific School , Redirects To the View page
4	Plus Button	Redirects the Super Administrator to the Create School page
5	Search Textbox	The Super Administrator can enter in the School details to search
6	Help Button	If the user clicks on the Help option, Redirects Super Administrator to the Help document
7	Logout Button	If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page

2020/10/20

#Bikes4ERP_VVS – GROUP 17

5.15.1 Create School Screen

Screen Description

This is the Create School screen of the #Bikes4ERP web application, accessed by the clicking “Plus” icon on the “School Management” screen. It allows a Super Administrator to create a new School. The user will enter the required details and proceed to click the “Create” button.

School

School Name:

School Email:

School Telephone:

Village:

Create School Cancel

Figure 60 Create School Screen

2020/10/20

#Bikes4ERP_VVS – GROUP 17

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home page.
2	Create Button	Creates the new School once all fields have been filled. And Displays Success Confirmation Dialog
3	Cancel Button	Redirects the Super Administrator to the School Management page
4	Help Button	If the user clicks on the Help option, Redirects Super Administrator to the Help document
5	Logout Button	If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page

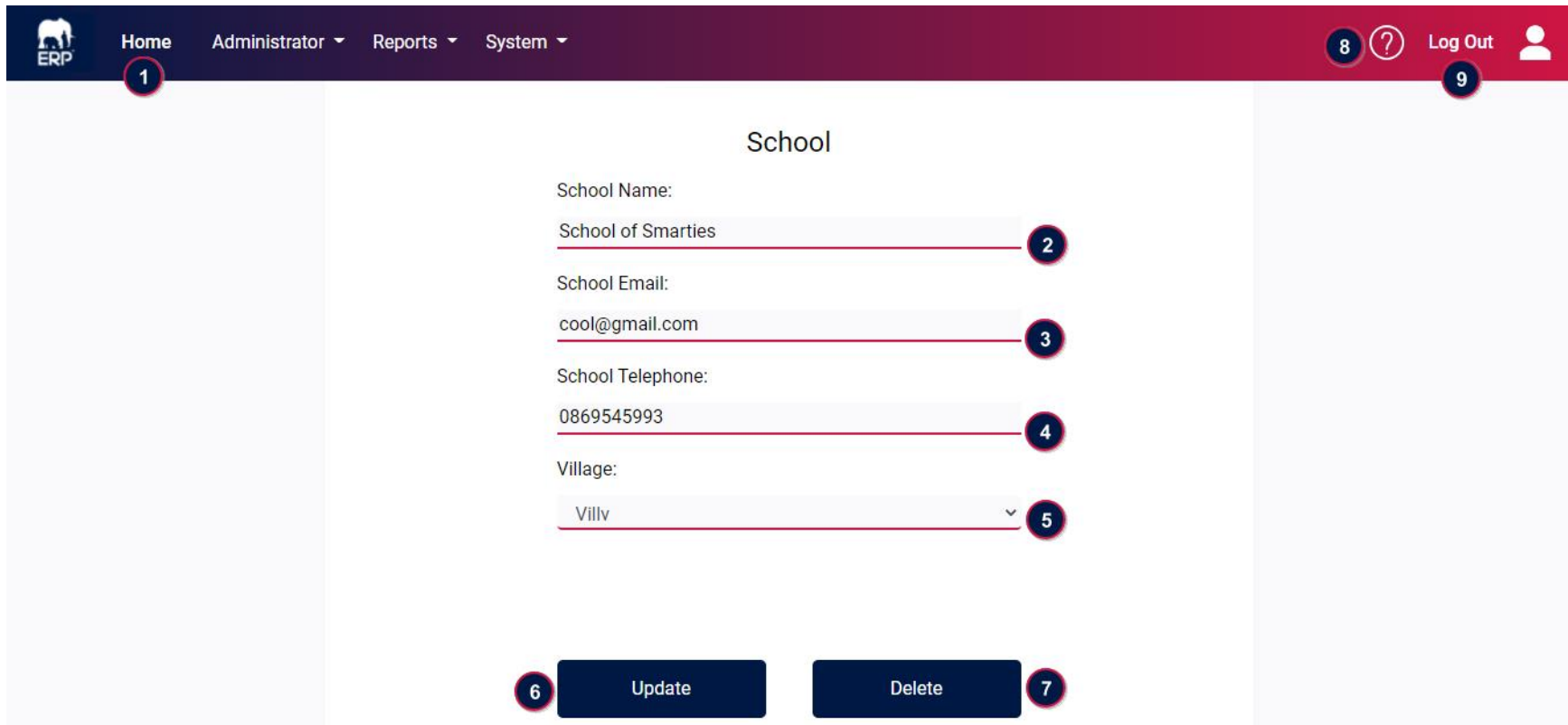
2020/10/20

#Bikes4ERP_VVS – GROUP 17

5.15.2 View School Screen

Screen Description

This is the View School screen of the #Bikes4ERP web application, accessed by the clicking “Pen” icon on a School. It allows the user to either update or delete the requested School details.



The screenshot shows the 'View School' screen of the #Bikes4ERP web application. The top navigation bar is dark blue with the ERP logo on the left and navigation links: Home (1), Administrator, Reports, and System. On the right of the navigation bar are a help icon (8), a question mark icon, a 'Log Out' link, and a user profile icon (9). The main content area is titled 'School' and contains a form with the following fields: 'School Name:' with the value 'School of Smarties' (2); 'School Email:' with the value 'cool@gmail.com' (3); 'School Telephone:' with the value '0869545993' (4); and 'Village:' with a dropdown menu showing 'Villiv' (5). At the bottom of the form are two buttons: 'Update' (6) and 'Delete' (7).

Figure 61 View School Screen

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home page.
2	School Name Textbox	Allows the Super Administrator to Update a School Name
3	School Email Textbox	Allows the Super Administrator to Update a School Email
4	School Telephone Textbox	Allows the Super Administrator to Update a School Telephone
5	Village Dropdown Menu	Allows the Super Administrator to select and Update a School Village
6	Update Button	Updates the current School and displays a Success Confirmation Dialog
7	Delete Button	Deletes the current School and Displays the Delete Confirmation Dialog
8	Help Button	If the user clicks on the Help option, Redirects Super Administrator to the Help document
9	Logout Button	If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page

5.16 Reports

5.16.1 Mechanic Schedule Report

Screen Description

This is the Mechanic Schedule Report screen of the #Bikes4ERP web application, accessed by the clicking “Mechanic Schedule” menu item on the “Reports” menu icon. It allows a Super Administrator to generate and view the Mechanic Schedule for the Selected Time frame. The User is also able to Download this report in Excel or PDF format for the selected Time frame.

Mechanic Schedule Report Explanation

This report shows a simple list table that contains the following information:

- **Job Code:** This is the Job identifier code that can be used to identify a unique job to be done by a mechanic.
- **Bicycle Code:** This is the unique bicycle identifier number that will be visible on the bicycle.
- **Student Name:** This is the full name of the student using the bicycle with mechanic jobs on display.
- **Job Type:** This is the classification to differentiate between the category that a mechanic job falls under.
- **Student Contact:** This is the contact number that is used to notify the student using the bicycle of jobs.
- **Guardian Contact:** This is the contact number belonging to the student’s Guardian in case of emergencies, etc.
- **Date Scheduled:** This indicates the date that specific jobs were scheduled to be done within the parameters.

This report is utilized by the Administrator to extract the mechanic schedule that can be emailed to the Mechanics with the specific jobs, ahead of time. The date parameters are the bounds of the data that gets displayed.

2020/10/20
#Bikes4ERP_VVS – GROUP 17


Home
Administrator
Reports
System
7
?
Log Out
8

Mechanic Schedule Report

Download in Excel
Download in PDF
Generate Report

Start Date:
End Date:

				Start Date : 2020-07-31	End Date : 2020-10-07	
Job Code	Bicycle Code	Student Name	Job Type	Student Contact	Guardian Contact	Date Scheduled
6	1	Cameron King	Repair	0724164483	0265987	09-09-2020
8	1	Cameron King	Repair	0724164483	0265987	09-09-2020
7	1	Cameron King	Repair	0724164483	0265987	09-09-2020

Figure 62 Mechanic Schedule Report Screen

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home page.
2	Download in Excel Button	Allows the User to download the Mechanic Schedule Report in Excel format
3	Download in PDF Button	Allows the User to download the Mechanic Schedule Report in PDF format
4	Generate Report Button	Generates the Mechanic Schedule Report for the selected dates
5	Date Picker	Allows the User to select the start and end date of the Mechanic Schedule Report
6	Report Table	Displays the Mechanic Schedule Report for the selected dates
7	Help Button	If the user clicks on the Help option, Redirects User Administrator to the Help document
8	Logout Button	If the User clicks on the Logout option, then it will log the User out of the system and Redirects to the Home page

2020/10/20

#Bikes4ERP_VVS – GROUP 17

5.16.2 Mechanic Schedule Requirements Report

Screen Description

This is the Mechanic Schedule Requirements Report screen of the #Bikes4ERP web application, accessed by the clicking “Mechanic Schedule Requirements” menu item on the “Reports” menu icon. It allows a Super Administrator to generate and view the Mechanic Schedule Requirements for the Selected Time frame. The User is also able to Download this report in Excel format for the selected Time frame.

Mechanic Schedule Requirements Report Explanation

This report shows a simple list table that contains the following information:

- **Job Code:** This is the Job identifier code that can be used to identify a unique job to be done by a mechanic.
- **Bicycle Code:** This is the unique bicycle identifier number that will be visible on the bicycle.
- **Student Name:** This is the full name of the student using the bicycle with mechanic jobs on display.
- **Job Type:** This is the classification to differentiate between the category that a mechanic job falls under.
- **Date Scheduled:** This indicates the date that specific jobs were scheduled to be done within the parameters.

There mini-table displays information on what parts the mechanic needs to have ready for the jobs on display.

- **Parts Needed:** This is the name of the part that is needed for replacement or completing the pending jobs.
- **Quantity:** This is the count of the parts that are needed for replacement or completing the pending jobs.

This report is utilized by the Administrator to extract the mechanic schedule requirements report that can be emailed to the Mechanics with the specific jobs, ahead of time. This prepares them, as they know what to bring ahead of time (parts, tools, etc.). The date parameters are the bounds of the data that gets displayed.

2020/10/20
#Bikes4ERP_VVS – GROUP 17


Home
Administrator ▾
Reports ▾
System ▾
6
?
Log Out
7

Mechanic Schedule Requirements Report

Download in Excel
Generate Report

Start Date:
End Date:

Job Code	Bicycle Code	Student Name	Job Type	Date Scheduled
6	1	Cameron King	Repair	09-09-2020
8	1	Cameron King	Repair	09-09-2020
7	1	Cameron King	Repair	09-09-2020
6	1	Cameron King	Repair	25-08-2020
6	1	Cameron King	Repair	17-09-2020

Figure 63 Mechanic Schedule Requirements Report Screen

Number	Item	Description
--------	------	-------------

2020/10/20

#Bikes4ERP_VVS – GROUP 17

1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home page.
2	Download in Excel Button	Allows the User to download the Mechanic Schedule Requirements Report in Excel format
3	Generate Report Button	Generates the Mechanic Schedule Requirements Report for the selected dates
4	Date Picker	Allows the User to select the start and end date of the Mechanic Schedule Requirements Report
5	Report Table	Displays the Mechanic Schedule Requirements Report for the selected dates
6	Help Button	If the user clicks on the Help option, Redirects User Administrator to the Help document
7	Logout Button	If the User clicks on the Logout option, then it will log the User out of the system and Redirects to the Home page

5.16.3 Generate Student Report

Screen Description

This is the Student Report screen of the #Bikes4ERP web application, accessed by the clicking “Student Report ” menu item on the “Reports” menu icon. It allows a Super Administrator to generate and view the Student Report for the Selected Time frame. The User is also able to Download this report in Excel format for the selected Time frame.

Student Report Explanation

This report is a Management Report with several sub-tables and control breaks. They show the following information:

- **Graph:** This is a visualization tool that gives a high-level overview of how school attendance correlates with student overall performance per school, within the specified criteria.
- **Sub-Tables:** This is a tabular display of all individual students within each school, clearly showing their average academic mark within that specified time period, including their attendance percentage then as well.

This report is utilized by the Administrator to assess the impact that the bicycles’ usage has on academic performance. The date parameters are the bounds of the data that gets displayed.

2020/10/20
#Bikes4ERP_VVS – GROUP 17

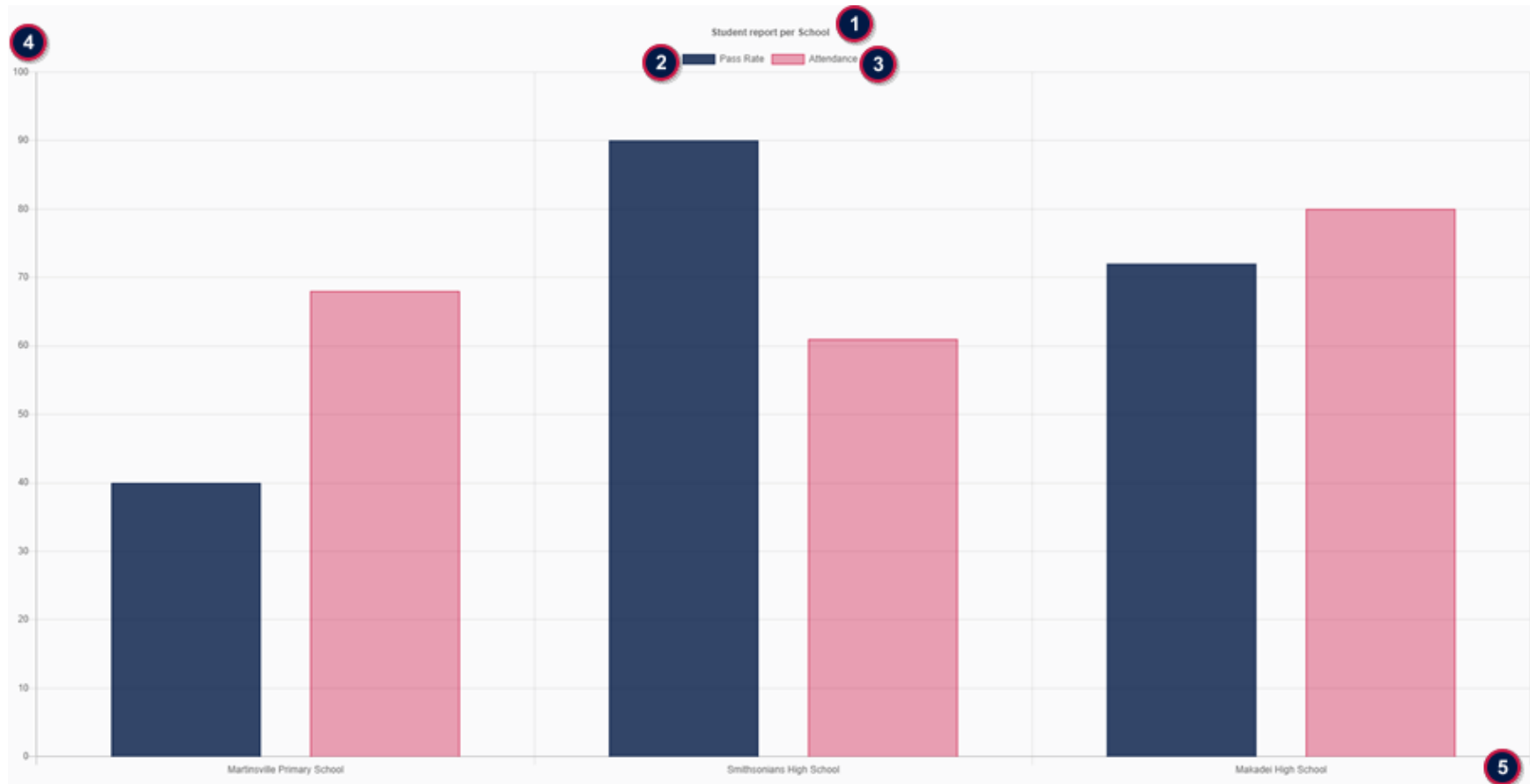


Figure 64 Student Report Screen Part 2

2020/10/20

#Bikes4ERP_VVS – GROUP 17

Number	Item	Description
1	Label	Displays the Heading of the Chart on display
2	Legend icon	Indicates the Legend of the Pass Rate Dataset
3	Legend icon	Indicates the Legend of the Attendance Dataset
4	Graph Y-axis	Indicates the Y-axis values ranging from 0-100, indicating Percentage values.
5	Graph X-axis	Indicates the X-axis values indicating the school names with the different Datasets

2020/10/20
#Bikes4ERP_VVS – GROUP 17

Martinsville Primary School - Total Students: 5				
Student Name	Bicycle Code	Age	Attendance %	Average Mark %
Johnson Sonny	10111	8	45	67
Ted Manga	20512	9	56	98
Peter Packerd	13632	11	75	65
Freedoms Mayson	05698	10	68	76
Matthew Matt	19756	12	95	52
			68% - Average School Attendance	78% - Overall School Average
Smithsonians High School - Total Students: 3				
Student Name	Bicycle Code	Age	Attendance %	Average Mark %
Jack Nxumalo	12344	14	45	67
Patrick Eeks	02468	16	56	98
Patricia Minnie	65935	14	75	65
			61% - Average School Attendance	88% - Overall School Average
Makadei High School - Total Students: 3				
Student Name	Bicycle Code	Age	Attendance %	Average Mark %
Patrick Eeks	23478	14	45	67
Kevin Hartford	36254	16	56	98
Ellen Nkosi	00324	14	56	98
Trevor Ark	10362	15	75	65
			59% - Average School Attendance	72% - Overall School Average

Figure 65 Student Report Screen Part 3

Number	Item	Description
1	Table Column	Displays the Student Names of the students within the selected criteria
2	Table Column	Displays the Bicycle Identifier in the form of a Bicycle Code/ID within the selected criteria
3	Table Column	Displays the Age of the students within the selected criteria
4	Table Column	Displays the Attendance Percentage of the students in the Schools within the selected criteria
5	Table Column	Displays the Average Mark per student in the Schools within the selected criteria
6	Control Break	Displays the running average of Attendance of that specific school within the selected criteria
7	Control Break	Displays the running average of Marks for that specific school within the selected criteria
8	Control Break	Displays the Name of that specific school within the selected criteria
9	Control Break	Displays the total count of students in that specific school within the selected criteria

Overall Pass Rate: 75% **1**
Overall School Attendance: 77% **2**

Figure 66 Student Report Screen Part 4

Number	Item	Description
1	Running Average	Displays the running average of all school's student mark averages within the selected criteria
2	Running Average	Displays the running average of all school's student attendances within the selected criteria

Success **1**
Student Report has been downloaded successfully. **2**
Ok **3**

Figure 67 Student Report has been successfully downloaded Screen

Number	Item	Description
1	Label	Displays the kind of a message being displayed on the modal, in this case, Success
2	Modal message	Displays the success message being conveyed to the user
3	Button	Ok button Redirects the Mechanic back to the Student Report screen

Screen Description

This is the Bicycle History Report screen of the #Bikes4ERP web application, accessed by the clicking "Bicycle History" menu item on the "Reports" menu icon. It allows a Super Administrator to generate and view the Bicycle History Report for the Selected Time frame. The User is also able to Download this report in Excel format for the selected Time frame.

5.16.4 Bicycle History Report

Bicycle History Report Explanation

This report is a Transaction Report with several sub-tables and control breaks. The determining parameters for the displayed data are: The specific School that the Administrator wants to analyze, & the Job Type that he wants to assess. They show the following information:

- **Sub-Tables:** This is a tabular display of all individual jobs completed per bicycle, clearly showing the completion date within that specified criteria.
- **Job Code:** This is the Job identifier code that can be used to identify jobs connected or related to the bicycle.
- **Specific Reported Job ID:** This is the unique job identifier number, depending on whether it is a maintenance job or a repair job.
- **Student Name:** This is the full name of the student using or assigned the bicycle with mechanic jobs on display. If they were assigned at the time, their name will display.
- **Date Completed:** This indicates the date that specific jobs were completed within the parameters. If they're not completed, "Pending" is displayed in place of the date and time.
- **Bicycle Code:** This is the unique bicycle identifier number that will be visible on the bicycle.

- **Status:** This is the individual status of the bicycles, whether they are currently assigned to a student, broken or available for assignment.

This report is utilized by the Administrator to assess the “health” of the bicycles’. Key areas in need of attention become clearer.

The screenshot shows the 'Bicycle History Report' page. At the top is a navigation bar with 'Home' (1), 'Administrator', 'Reports', and 'System'. On the right of the navigation bar are icons for notifications (7), help (?), 'Log Out', and a user profile (8). Below the navigation bar is the title 'Bicycle History Report'. There are two buttons: 'Download in Excel' (2) and 'Generate Report' (3). Below these are two dropdown menus: 'Choose School:' with 'School of Smarties' selected (4), and 'Choose Job Type:' with 'Repair' selected (5). At the top of the table area, there are two status bars: 'Bicycle Code: 250 | Status: Assigned' and 'Selected School : 4 | Selected Job Type : 1'. The table has four columns: 'Job Code', 'Specific Reported Job ID' (6), 'Student Name', and 'Date Completed'. The table contains three rows of data for Cameron King.

Job Code	Specific Reported Job ID	Student Name	Date Completed
6	1	Cameron King	04-12-2016 00:00:00
8	2	Cameron King	24-08-2017 00:00:00
7	3	Cameron King	22-06-2017 00:00:00

Figure 68 Bicycle History Report Screen Part 1

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home page.
2	Download in Excel Button	Allows the User to download the Mechanic Schedule Report in Excel format
3	Generate Report Button	Generates the Mechanic Schedule Report for the selected dates
4	School Dropdown Menu	Allows the User to select a School for the report
5	Job Type Dropdown Menu	Allows the User to select a Job Type for the report
6	Report Table	Displays the Bicycle History Report for the selected dates
7	Help Button	If the user clicks on the Help option, Redirects User Administrator to the Help document
8	Logout Button	If the User clicks on the Logout option, then it will log the User out of the system and Redirects to the Home page

5.16.5 Log Report

Screen Description

This is the Log Report screen of the #Bikes4ERP web application, accessed by the clicking “Log” menu item on the “Reports” menu icon. It allows a Super Administrator to generate and view the Log Report for the Selected Time frame. The User is also able to Download this report in Excel format for the selected Time frame.

Log Report Explanation

This report is a Transaction Report with several sub-tables and control breaks. The determining parameters for the displayed data are a start and end date that he/she wants to assess. They show the following information:

- **Sub-Tables:** This is a tabular display of all individual RFID tags that were detected past a certain Antenna on their assigned route. per detecting BLE Antenna, clearly showing the activity past certain antennas.
- **Tag Serial Number:** This is the Tag identifier code that can be used to identify a specific tag that is on a bicycle.
- **Bicycle Code:** This is the unique bicycle identifier number that will be visible on the bicycle.
- **Student Name:** This is the full name of the student using or assigned the bicycle with log entries on display.
- **School:** This is the name of the school where the student on display, is enrolled
- **Entry Date:** This indicates the date that tag had registered activity past the antenna on display.
- **Entry Time:** This indicates the time that tag had registered activity past the antenna on display
- **Status:** This is the individual status of the tag on a bicycle, whether they are currently operational, broken or available for assignment.

This report is utilized by the Administrator to assess the bicycle activity and traffic on antennas. Key areas in need of attention become clearer, e.g., a high demand antenna that is Non-Operational.

2020/10/20
#Bikes4ERP_VVS – GROUP 17


Home
Administrator ▾
Reports ▾
System ▾
6
?
Log Out
7

Log Report

Download in Excel
Generate Report

Start Date:
End Date:

Antenna Serial Number : 1 | Status - Operational
5
Start Date : 2020-07-31
End Date : 2020-10-07

Tag Serial Number	Bicycle Code	Student Name	School	Entry Date	Entry Time
F9 B3 CF A2	404069	Gareth Phillips	School of Smarties	25-08-2020	19:26:33
C9 EB A0 B2	250	Cameron King	School of Smarties	25-08-2020	19:27:05
C9 EB A0 B2	250	Cameron King	School of Smarties	25-08-2020	19:27:59
F9 B3 CF A2	404069	Gareth Phillips	School of Smarties	25-08-2020	19:28:20
F9 B3 CF A2	404069	Gareth Phillips	School of Smarties	25-08-2020	19:28:30

Figure 69 Log Report Screen

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home page.
2	Download in Excel Button	Allows the User to download the Log Report in Excel format
3	Generate Report Button	Generates the Log Report for the selected dates
4	Date Picker	Allows the User to select the start and end date of the Log Report
5	Report Table	Displays the Log Report for the selected dates
6	Help Button	If the user clicks on the Help option, Redirects User Administrator to the Help document
7	Logout Button	If the User clicks on the Logout option, then it will log the User out of the system and Redirects to the Home page

2020/10/20

#Bikes4ERP_VVS – GROUP 17

5.16.6 Parts Used Report

Screen Description

This is the Parts Used Report screen of the #Bikes4ERP web application, accessed by the clicking “Parts Used” menu item on the “Reports” menu icon. It allows a Super Administrator to generate and view the Parts Used Report for the Selected Time frame. The User is also able to Download this report in Excel format for the selected Time frame.

Parts Used Report Explanation

This report shows a simple list table that contains the following information:

- **Job:** This is the classification to differentiate between the category that a mechanic job falls under.
- **Bicycle Code:** This is the unique bicycle identifier number that will be visible on the bicycle.
- **Student Name:** This is the full name of the student using the bicycle with mechanic jobs on display.
- **Job Code:** This is the Job identifier code that can be used to identify a unique job to be done by a mechanic.
- **Date Completed:** This indicates the date that specific jobs were completed to be done within the parameters.
- **Time Completed:** This indicates the time that specific jobs were completed to be done within the parameters.

There mini-table displays information on what parts the mechanic used for the completed jobs on display.

- **Parts Needed:** This is the name of the part that was used or worked on in the job.
- **Quantity:** This is the count of the parts that are were used or worked on in the job.

This report is utilized by the Administrator to extract the parts used report. This can be used to assess what is breaking often and when most jobs get completed. Can assist with a mini-inventory management. The date parameters are the bounds of the data that gets displayed.

2020/10/20
#Bikes4ERP_VVS – GROUP 17


Home
Administrator ▾
Reports ▾
System ▾

6
?
Log Out
7

Parts Used Report

Download in Excel
Generate Report

Start Date:
End Date:

Start Date : 2020-07-31

End Date : 2020-10-07

Job	Bicycle Code	Student Name	Job Code	Date Completed	Time Completed
Repair	250	Cameron King	6	04-12-2016	00:00:00
Repair	250	Cameron King	8	24-08-2017	00:00:00
Repair	250	Cameron King	7	22-06-2017	00:00:00
Repair	250	Cameron King	6	04-12-2016	00:00:00
Repair	250	Cameron King	6	04-12-2016	00:00:00

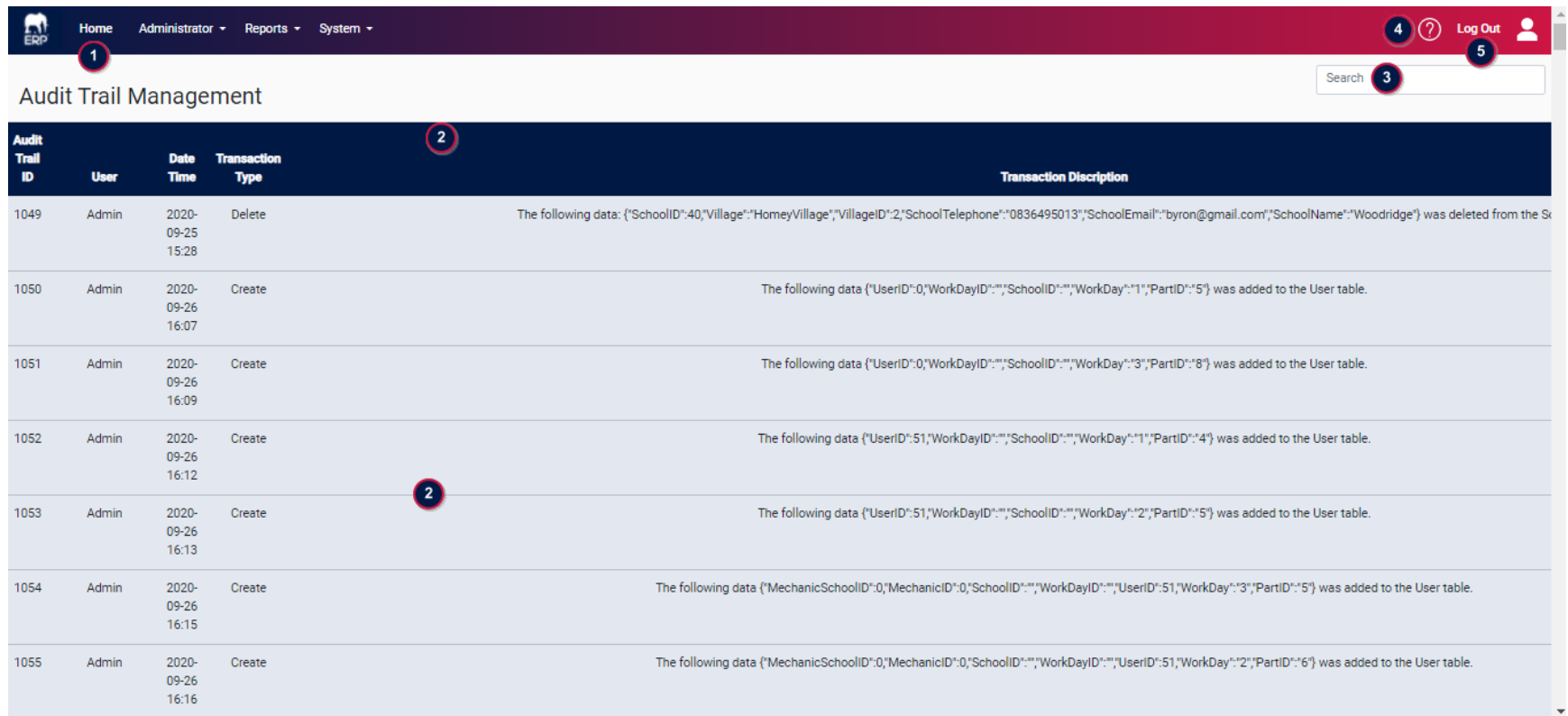
Figure 70 Parts Used Report Screen

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home page.
2	Download in Excel Button	Allows the User to download the Parts Used Report in Excel format
3	Generate Report Button	Generates the Parts Used Report for the selected dates
4	Date Picker	Allows the User to select the start and end date of the Parts Used Report
5	Report Table	Displays the Parts Used Report for the selected dates
6	Help Button	If the user clicks on the Help option, Redirects User Administrator to the Help document
7	Logout Button	If the User clicks on the Logout option, then it will log the User out of the system and Redirects to the Home page

5.17 Audit Trail Management Screen

Screen Description

This is the Audit Trail Management screen of the #Bikes4ERP web application, accessed by the clicking “Manage Audit Trail” menu item on the “Administrator” menu icon. It allows a Super Administrator to view and search all the Audit Trail entries currently on the system.



Audit Trail ID	User	Date Time	Transaction Type	Transaction Description
1049	Admin	2020-09-25 15:28	Delete	The following data: {"SchoolID":40,"Village":"HomeyVillage","VillageID":2,"SchoolTelephone":"0836495013","SchoolEmail":"byron@gmail.com","SchoolName":"Woodridge"} was deleted from the St
1050	Admin	2020-09-26 16:07	Create	The following data {"UserID":0,"WorkDayID":"","SchoolID":"","WorkDay":"1","PartID":"5"} was added to the User table.
1051	Admin	2020-09-26 16:09	Create	The following data {"UserID":0,"WorkDayID":"","SchoolID":"","WorkDay":"3","PartID":"8"} was added to the User table.
1052	Admin	2020-09-26 16:12	Create	The following data {"UserID":51,"WorkDayID":"","SchoolID":"","WorkDay":"1","PartID":"4"} was added to the User table.
1053	Admin	2020-09-26 16:13	Create	The following data {"UserID":51,"WorkDayID":"","SchoolID":"","WorkDay":"2","PartID":"5"} was added to the User table.
1054	Admin	2020-09-26 16:15	Create	The following data {"MechanicSchoolID":0,"MechanicID":0,"SchoolID":"","WorkDayID":"","UserID":51,"WorkDay":"3","PartID":"5"} was added to the User table.
1055	Admin	2020-09-26 16:16	Create	The following data {"MechanicSchoolID":0,"MechanicID":0,"SchoolID":"","WorkDayID":"","UserID":51,"WorkDay":"2","PartID":"6"} was added to the User table.

Figure 71 Audit Trail Management Screen

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the Super Administrator to the Bikes4ERP Home page.
2	Audit Trail table	Displays a list of AuditTrail ID, User, Date/Time, Transaction Type and Transaction Description for each Audit Trail Entry
3	Search Textbox	The Super Administrator can enter in the Audit Trail Entry details to search
4	Help Button	If the user clicks on the Help option, Redirects Super Administrator to the Help document
5	Logout Button	If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page

5.18 Business Rule Management Screen

Screen Description

This is the Business Rule Management screen of the #Bikes4ERP web application, accessed by the clicking “Manage Business Rules” menu item on the “Administrator” menu icon. It allows a Super Administrator to view and search all the Business Rules currently on the system, the user will also be able create new Business Rules as well as edit Business Rules details.

	Home	Administrator ▾	Reports ▾	System ▾	6	?	Log Out	
1								
Business Rule Management					4	+	Search for a business rule	5
Business Rule	2	Value	Action					
Student Did Not Arrive Notification Time			3					
Maintenance Schedule Reminder								
Change ownership	2	2						
Max Amount of days mechanic can book		2						

Figure 211 Business Rules Management Screen

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the School Administrator to the Bikes4ERP Home page.
2	Business Rules table	Displays a list of a Business Rule and Values for each Business Rule
3	Pen button	Allows the Super Administrator to view a specific Business Rule , Redirects to the View page
4	Plus Button	Redirects the Super Administrator to the Create Business Rule page
5	Search Textbox	The Super Administrator can enter in the Business Rule details to search
6	Help Button	If the user clicks on the Help option, Redirects Super Administrator to the Help document
7	Logout Button	If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page

5.18.1 Create Business Rule Screen

Screen Description

This is the Create Business Rule screen of the #Bikes4ERP web application, accessed by the clicking “Plus” icon on the “Business Rule Management” screen. It allows a Super Administrator to create a new Business Rule. The user will enter the required details and proceed to click the “Create” button.

The screenshot displays the 'Create Business Rule' interface. At the top, a dark blue navigation bar includes the 'ERP' logo, a 'Home' link (marked with a red circle 1), and dropdown menus for 'Administrator', 'Reports', and 'System'. On the right side of the header, there are icons for a user profile (marked with a red circle 4), a question mark (marked with a red circle 5), and a 'Log Out' link. The main content area has a light gray background and is titled 'Business Rule'. It contains two text input fields: the first is labeled 'Business Rule:' and the second is labeled 'Value:'. Below the input fields are two dark blue buttons: 'Create' (marked with a red circle 2) and 'Cancel' (marked with a red circle 3).

Figure 72 Create Business Rule Screen

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home page.
2	Create Button	Creates the new Business Rule once all fields have been filled. And Displays Success Confirmation Dialog
3	Cancel Button	Redirects the Super Administrator to the Business Rule Management page
4	Help Button	If the user clicks on the Help option, Redirects Super Administrator to the Help document
5	Logout Button	If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page

5.18.2 View Business Rule Screen

Screen Description

This is the View Business Rule screen of the #Bikes4ERP web application, accessed by the clicking “Pen” icon on a Business Rule. It allows the user to either update or delete the requested Business Rule details.

Business Rule

Business Rule:

Change ownership

Value:

2

Update Delete

Figure 73 View Business Rule Screen

2020/10/20

#Bikes4ERP_VVS – GROUP 17

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home page.
2	Business Rule Textbox	Allows the Super Administrator to Update a Business Rule
3	Value Textbox	Allows the Super Administrator to Update a Business Rule Value
4	Update Button	Updates the current Business Rule and displays a Success Confirmation Dialog
5	Delete Button	Deletes the current Business Rule and Displays the Delete Confirmation Dialog
6	Help Button	If the user clicks on the Help option, Redirects Super Administrator to the Help document
7	Logout Button	If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page

5.19 Document Management Screen

Screen Description

This is the Document Management screen of the #Bikes4ERP web application, accessed by the clicking “Manage Document” menu item on the “Administrator” menu icon. It allows a Super Administrator to view and search all the Documents currently on the system, the user will also be able create new Documents as well as edit Document details.

Document Management

Document Name	Document Path	Edit Document	Download Document
Student Contract	C:\Users\Nodoro\Desktop\INF370_Project_VVS\vvs-full-project\API\VVS_API_CF\VVS_API_CF\Resources\Documents\INF370 Complexity matrix-4102020031922.pdf		
Bikes4ERP Campaign	C:\Users\Nodoro\Desktop\INF370_Project_VVS\vvs-full-project\API\VVS_API_CF\VVS_API_CF\Resources\Documents\Programme-07130043-4102020031753.pdf		
Mechanic Contract	C:\Users\Nodoro\Desktop\INF370_Project_VVS\vvs-full-project\API\VVS_API_CF\VVS_API_CF\Resources\Documents\Homemade Pierogi-4102020031902.pdf		
Rules And Regulations	C:\Users\Nodoro\Desktop\INF370_Project_VVS\vvs-full-project\API\VVS_API_CF\VVS_API_CF\Resources\Documents\chakalaka3-5102020164533.pdf		
Log Report	D:\TUKS\3rd Year\INF370\VVS\vvs-full-project\API\VVS_API_CF\VVS_API_CF\Resources\Documents\LogReport-20201007141328.xlsx		

Figure 74 Document Management Screen

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the School Administrator to the Bikes4ERP Home page.
2	Document Management table	Displays a list of a Document Name and Document Path for each Document
3	Pen button	Allows the Super Administrator to view a specific Document , Redirects To the View page
4	Download button	Allows the Super Administrator to download a specific Document
5	Plus Button	Redirects the Super Administrator to the Create Document page
6	Search Textbox	The Super Administrator can enter in the Business Rule details to search
7	Help Button	If the user clicks on the Help option, Redirects Super Administrator to the Help document
8	Logout Button	If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page

5.19.1 Create Document Screen

Screen Description

This is the Create Document screen of the #Bikes4ERP web application, accessed by the clicking “Plus” icon on the “Document Management” screen. It allows a Super Administrator to create a new Document. The user will enter the required details and proceed to click the “Create” button.

The screenshot displays the 'Create Document' interface. At the top, a dark red navigation bar includes the ERP logo, a 'Home' link (1), and dropdown menus for 'Administrator', 'Reports', and 'System'. On the right of the header are icons for a help menu (5), a question mark (6), a 'Log Out' button, and a user profile icon. The main content area is titled 'Document' and prompts the user to 'Please Select the document file'. It features a 'Choose File' button (2) and a text input field for 'Document Name:'. Below the input field is a light blue validation message: 'Please ensure all fields are filled in and valid'. At the bottom are two dark blue buttons: 'Create' (3) and 'Cancel' (4).

Figure 75 Create Document

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home page.
2	Choose File Button	Allows the Super Administrator to upload a Bicycle Part Picture
3	Create Button	Creates the new Document once all fields have been filled. And Displays Success Confirmation Dialog
4	Cancel Button	Redirects the Super Administrator to the Document Management page
5	Help Button	If the user clicks on the Help option, Redirects Super Administrator to the Help document
6	Logout Button	If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page

5.19.2 View Document Screen

Screen Description

This is the View Document screen of the #Bikes4ERP web application, accessed by the clicking “Pen” icon on a Document. It allows the user to either update or delete the requested Document details.

Document

Download File

Choose a Document to update

Choose File No file chosen

Document Name:

Student Contract

Update Delete

Figure 76View Document Screen

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home page.
2	Download File Button	Allows the User to download the current file
3	Choose File Button	Allows the Super Administrator to upload a File
3	Document Name Textbox	Allows the Super Administrator to Update a Document Name
7	Update Button	Updates the current Bicycle Part and displays a Success Confirmation Dialog
8	Delete Button	Deletes the current Bicycle Part and Displays the Delete Confirmation Dialog
9	Help Button	If the user clicks on the Help option, Redirects Super Administrator to the Help document
10	Logout Button	If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page

5.20 Bicycle Brand Management Screen

Screen Description

This is the Bicycle Brand Management screen of the #Bikes4ERP web application, accessed by the clicking “Bicycle Brands” menu item on the “Administrator” menu icon. It allows a Super Administrator to view and search all the Bicycle Brands currently on the system, the user will also be able create new Bicycle Brands as well as edit Bicycle Brand details.

The screenshot shows the Bicycle Brand Management interface. At the top is a navigation bar with the ERP logo (1), menu items Home, Administrator (2), Reports, and System, and user controls including a question mark icon (6), Log Out, and a user profile icon (7). Below the navigation bar is the title 'Bicycle Brand Management' (4) and a search bar (5). The main content area is a table with two columns: 'Bicycle Brand' (2) and 'Action' (3). The table lists three brands: Totem, Qhubeka, and ThinkPad, each with an edit icon in the Action column.

Bicycle Brand	Action
Totem	[Edit Icon]
Qhubeka	[Edit Icon]
ThinkPad	[Edit Icon]

Figure 77 Bicycle Brand management Screen

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the School Administrator to the Bikes4ERP Home page.
2	Bicycle Brand table	Displays a list of a Bicycle Brands
3	Pen button	Allows the Super Administrator to view a specific Bicycle Brand , Redirects To the View page
4	Plus Button	Redirects the Super Administrator to the Create Bicycle Brand page
5	Search Textbox	The Super Administrator can enter in the Bicycle Brand details to search
6	Help Button	If the user clicks on the Help option, Redirects Super Administrator to the Help document
7	Logout Button	If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page

2020/10/20

#Bikes4ERP_VVS – GROUP 17

5.20.1 Create Bicycle Brand Screen

Screen Description

This is the Create Bicycle Brand screen of the #Bikes4ERP web application, accessed by the clicking “Plus” icon on the “Bicycle Brand Management” screen. It allows a Super Administrator to create a new Bicycle Brand. The user will enter the required details and proceed to click the “Create” button.

Figure 78 Create Bicycle Brand Screen

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home page.
2	Create Button	Creates the new Bicycle Brand once all fields have been filled. And Displays Success Confirmation Dialog
3	Cancel Button	Redirects the Super Administrator to the Bicycle Brand Management page
4	Help Button	If the user clicks on the Help option, Redirects Super Administrator to the Help document
5	Logout Button	If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page

2020/10/20

#Bikes4ERP_VVS – GROUP 17

5.20.2 View Bicycle Brand Screen

Screen Description

This is the View Bicycle Brand screen of the #Bikes4ERP web application, accessed by the clicking “Pen” icon on a Bicycle Brand. It allows the user to either update or delete the requested Bicycle Brand details.

Figure 79 View Bicycle brand Screen

2020/10/20

#Bikes4ERP_VVS – GROUP 17

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home page.
2	Bicycle Brand Textbox	Allows the Super Administrator to Update a Bicycle Brand
3	Update Button	Updates the current Business Rule and displays a Success Confirmation Dialog
4	Delete Button	Deletes the current Business Rule and Displays the Delete Confirmation Dialog
5	Help Button	If the user clicks on the Help option, Redirects Super Administrator to the Help document
6	Logout Button	If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page

5.21 Fault Type Management Screen

Screen Description

This is the Fault Type Management screen of the #Bikes4ERP web application, accessed by the clicking “ Fault Types” menu item on the “Administrator” menu icon. It allows a Super Administrator to view and search all the Fault Type currently on the system, the user will also be able create new Fault Type as well as edit Fault Type details.

Fault Type Management Screen

Fault Type	Part Needed	Action
Bent Rim	Rim	
Punctured Tyre	Tyre	
Shattered frame	Bike Frame	
Shattered Rim	Rim	
Dent Rim	Rim	
Blown Tyre	Tyre	
Bent Frame	Bike Frame	

Figure 80 Fault Type Management Screen

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the School Administrator to the Bikes4ERP Home page.
2	Fault Type table	Displays a list of a Fault Type and Parts Needed for each Fault Type
3	Pen button	Allows the Super Administrator to view a specific Fault Type , Redirects To the View page
4	Plus Button	Redirects the Super Administrator to the Create Fault Type page
5	Search Textbox	The Super Administrator can enter in the Bicycle Brand details to search
6	Help Button	If the user clicks on the Help option, Redirects Super Administrator to the Help document
7	Logout Button	If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page

5.21.1 Create Fault Type Screen

Screen Description

This is the Create Fault Type screen of the #Bikes4ERP web application, accessed by the clicking "Plus" icon on the "Fault Type Management" screen. It allows a Super Administrator to create a new Fault Type. The user will enter the required details and proceed to click the "Create" button.

The screenshot displays the 'Create Fault Type' interface. At the top, a dark blue navigation bar includes the ERP logo, a 'Home' link (marked with a red circle 1), and dropdown menus for 'Administrator', 'Reports', and 'System'. On the right side of the header are a 'Log Out' link (marked with a red circle 5), a user profile icon (marked with a red circle 4), and a help icon (marked with a red circle 4). The main content area has a light gray background and is titled 'Fault Type'. It contains two input fields: 'Fault Type:' (marked with a red circle 1) and 'Part Name:' (marked with a red circle 2). Below these fields are two buttons: a gray 'Create' button (marked with a red circle 2) and a dark blue 'Cancel' button (marked with a red circle 3).

Figure 81 Create Fault type Screen

2020/10/20

#Bikes4ERP_VVS – GROUP 17

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home page.
2	Create Button	Creates the new Fault Type once all fields have been filled. And Displays Success Confirmation Dialog
3	Cancel Button	Redirects the Super Administrator to the Fault Type Management page
4	Help Button	If the user clicks on the Help option, Redirects Super Administrator to the Help document
5	Logout Button	If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page

5.21.2 View Fault Type Screen

Screen Description

This is the View Fault Type screen of the #Bikes4ERP web application, accessed by the clicking “Pen” icon on a Fault Type. It allows the user to either update or delete the requested Fault Type details.

Fault Task

Fault Type
Bent Rim

Part Name
Back Rim

Update Delete

Figure 82 View Fault Task Screen

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home page.
2	Fault Type Textbox	Allows the Super Administrator to Update a Fault Type
3	Part Name Dropdown Menu	Allows the Super Administrator to select and Update a Part Name
4	Update Button	Updates the current Fault Type and displays a Success Confirmation Dialog
5	Delete Button	Deletes the current Fault Type and Displays the Delete Confirmation Dialog
6	Help Button	If the user clicks on the Help option, Redirects Super Administrator to the Help document
7	Logout Button	If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page

5.22 Part Type Management Screen

Screen Description

This is the Part Type Management screen of the #Bikes4ERP web application, accessed by the clicking “Part Types” menu item on the “Administrator” menu icon. It allows a Super Administrator to view and search all the Part Types currently on the system, the user will also be able create new Part Type as well as edit Part Type details.

Part Type Management

Part Type	Action
Atala	
Bell Sports Inc.	
Continental	
Fulcrum Wheels	
Haro Bikes	
Huck Norris	
Michelin	
Raleigh	

Figure 83 Fault Type Management Screen

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the School Administrator to the Bikes4ERP Home page.
2	Part Type table	Displays a list of a Fault Type and Parts Needed for each Part Type
3	Pen button	Allows the Super Administrator to view a specific Part Type , Redirects To the View page
4	Plus Button	Redirects the Super Administrator to the Create Part Type page
5	Search Textbox	The Super Administrator can enter in the Part Type details to search
6	Help Button	If the user clicks on the Help option, Redirects Super Administrator to the Help document
7	Logout Button	If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page

5.22.1 Create Part Type Screen

Screen Description

This is the Create Part Type screen of the #Bikes4ERP web application, accessed by the clicking “Plus” icon on the “Part Type Management” screen. It allows a Super Administrator to create a new Part Type. The user will enter the required details and proceed to click the “Create” button.

The screenshot displays the 'Part Type' creation interface. At the top, a dark blue navigation bar includes the 'ERP' logo, a 'Home' link (circled with a red '1'), and dropdown menus for 'Administrator', 'Reports', and 'System'. On the right side of the header are a help icon (circled with a red '4'), a 'Log Out' link (circled with a red '5'), and a user profile icon. The main content area has a light gray background and is titled 'Part Type'. It contains a text input field with the placeholder 'Part Type:'. Below the input field are two dark blue buttons: 'Create' (circled with a red '2') and 'Cancel' (circled with a red '3').

Figure 84 Create Fault type Screen

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home page.
2	Create Button	Creates the new Fault Type once all fields have been filled. And Displays Success Confirmation Dialog
3	Cancel Button	Redirects the Super Administrator to the Fault Type Management page
4	Help Button	If the user clicks on the Help option, Redirects Super Administrator to the Help document
5	Logout Button	If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page

5.22.2 View Part Type Screen

Screen Description

This is the View Part Type screen of the #Bikes4ERP web application, accessed by the clicking “Pen” icon on a Part Type. It allows the user to either update or delete the requested Part Type details.

The screenshot shows the 'View Part Type' screen. At the top is a dark blue navigation bar with the ERP logo on the left and links for Home, Administrator, Reports, and System in the center. On the right of the bar are a help icon (question mark), a 'Log Out' link, and a user profile icon. Below the navigation bar, the main content area has a light gray background. In the center, there's a white box titled 'Part Type'. Inside this box, there's a label 'Part Type:' followed by a text input field containing the value 'Atala'. Below the input field are two dark blue buttons: 'Update' and 'Delete'. Numbered callouts are placed around the interface: 1 is on the Home link, 2 is on the text input field, 3 is on the Update button, 4 is on the Delete button, 5 is on the help icon, and 6 is on the user profile icon.

Figure 85 View Fault Task Screen

2020/10/20

#Bikes4ERP_VVS – GROUP 17

Number	Item	Description
1	Navigation Bar: Home Button	Redirects the User to the Bikes4ERP Home page.
2	Part Type Textbox	Allows the Super Administrator to Update a Part Type
3	Update Button	Updates the current Fault Type and displays a Success Confirmation Dialog
4	Delete Button	Deletes the current Fault Type and Displays the Delete Confirmation Dialog
5	Help Button	If the user clicks on the Help option, Redirects Super Administrator to the Help document
6	Logout Button	If the User clicks on the Logout option, then it will log the Super Administrator out of the system and Redirects to the Home page

6 Error Messages

6.1 Logging in

Error Message	Description
"Incorrect Username or Password. Please try again."	The inputted Username or Password does not match an existing password or username stored in the database. Please confirm you have entered the correct information or alternatively you can reset your password by clicking "Forgot Password?" button and follow the steps.

6.2 Forgot Password

Error Message	Description
"This email does not exist. Please try again."	The inputted Email does not match any of the emails of existing users in stored in the database. Please confirm you have entered the correct email address.

6.3 User

Error Message	Description
"Please enter a..."	▪ First name – Field is empty – Only characters

	▪ Surname – Field is empty – Only characters ▪ Email – Must contain special characters (@, .com/.co.za) – Must be valid email address – Field is empty ▪ Username – Field is empty – Only characters – Unique ▪ Phone number – Only numbers (10 min and max) – Must start with 0 ▪ Password – Must be 10 characters/numbers
"Please ensure all fields are filled in and valid."	The user you are currently viewing has a required field that is empty.

6.4 User Type

Error Message	Description
"Please enter a..."	▪ Type – Field is empty – Only characters

"Please select a..."	- Permissions level - Select a valid combo box option
"Please ensure all fields are filled in and valid."	The user type you are currently viewing has a required field that is empty.

6.5 Bicycle Brand

Error Message	Description
"Please enter a..."	- Bicycle Brand - Field is empty - Only characters
"Please ensure all fields are filled in and valid."	The bicycle brand you are currently viewing has a required field that is empty.

6.6 Bicycle Part

Error Message	Description
"Please ensure all fields are filled in and valid."	The bicycle part you are currently creating/viewing has a required field that is empty.

6.7 Bicycle Section

Error Message	Description
"Please ensure all fields are filled (remember a picture!)"	The bicycle section you are currently creating/viewing has a required field that is empty.

6.8 School

Error Message	Description
"Please enter a..."	- School name - Field is empty - Only characters - School Email - Must contain special characters (@, .com/.co.za) - Must be valid email address - Username - Field is empty - Only characters - Unique - School Telephone - Only numbers (10 min and max) - Must start with 0

2020/10/20

#Bikes4ERP_VVS – GROUP 17

Please select a..."	- Village - Select a valid combo box option
"Please ensure all fields are filled in and valid."	The user you are currently viewing has a required field that is empty.

6.9 Tag

Error Message	Description
"Please enter a..."	- Tag Serial Number - Field is empty
"The entered details already exist in the database. Please try again with different details."	The unique identifier (Username, Bicycle Code, Tag Serial Number etc.) for the object you are trying to create already exists in the database. Please input unique details and try again.

6.10 Antenna

Error Message	Description
---------------	-------------

2020/10/20

#Bikes4ERP_VVS – GROUP 17

"Please enter a..."	▪ Antenna Address – Field is empty ▪ Co-ordinates – Field is empty ▪ Date Installed – Field is empty – Must follow format: "yyyy/mm/dd"
Please select a..."	▪ Antenna Status – Select a valid combo box option ▪ Suburb – Select a valid combo box option
"Please ensure all fields are filled in and valid."	The antenna you are currently viewing has a required field that is empty.

6.11 Fault Type

Error Message	Description
"Please enter a..."	▪ Fault Type – Field is empty ▪ Co-ordinates – Field is empty ▪ Date Installed – Field is empty – Must follow format: "yyyy/mm/dd"

Please select a..."	- Part Name - Select a valid combo box option
"Please ensure all fields are filled in and valid."	The fault type you are currently viewing has a required field that is empty.

6.12 Maintenance Task

Error Message	Description
"Please enter a..."	- Maintenance Task - Field is empty - Maintenance Task Description - Field is empty
Please select a..."	- Part - Select a valid combo box option - Maintenance Type - Select a valid combo box option
"Please ensure all fields are filled in and valid."	The maintenance task you are currently viewing has a required field that is empty.

6.13 Reports

Error Message	Description
"No Bicycle History Report Data for the chosen Job Type in the chosen School to download. Please capture new dates and try again."	The chosen date period does not have data to display in the report, please choose a different time period or increase the gap for the period you are trying to report for.
"No Bicycle History Report Data for the chosen Job Type in the chosen School. Please capture different search criteria and try again."	The chosen date period does not have data to display in the report, please choose a different time period or increase the gap for the period you are trying to report for.
"No Log Report Data within the chosen dates to download. Please capture new dates and try again."	The chosen date period does not have data to display in the report, please choose a different time period or increase the gap for the period you are trying to report for.
"No Log Report Data within the chosen dates. Please capture new dates and try again."	The chosen date period does not have data to display in the report, please choose a different time period or increase the gap for the period you are trying to report for.
"No Mechanic Schedule Report Data within the chosen dates to download. Please capture new dates and try again."	The chosen date period does not have data to display in the report, please choose a different time period or increase the gap for the period you are trying to report for.
"No Mechanic Schedule Requirements Report Data within the chosen dates. Please capture new dates and try again."	The chosen date period does not have data to display in the report, please choose a different time period or increase the gap for the period you are trying to report for.

"No Student Report Data within the chosen dates to download. Please capture new dates and try again."	The chosen date period does not have data to display in the report, please choose a different time period or increase the gap for the period you are trying to report for.
"No Parts Used Report Data within the chosen dates. Please capture new dates and try again."	The chosen date period does not have data to display in the report, please choose a different time period or increase the gap for the period you are trying to report for.
"No Bicycle History Report Data for the chosen Job Type in the chosen School to download. Please capture new dates and try again."	The chosen date period does not have data to display in the report, please choose a different time period or increase the gap for the period you are trying to report for.

6.14 Student

Error Message	Description
"Please enter a..."	▪ First name – Field is empty – Must be characters ▪ Surname – Field is empty – Must be characters ▪ Phone number – Only numbers (10 min and max)

2020/10/20

#Bikes4ERP_VVS – GROUP 17

	– Must start with 0 ▪ Date of Birth – Field is empty – Must follow format: "yyyy/mm/dd" ▪ Guardian Name – Must be characters – Field is empty ▪ Email – Must contain special characters (@, .com/.co.za) – Must be valid email address – Field is empty ▪ Guardian phone number – Only numbers (10 min and max) – Must start with 0
Please select a..."	▪ Village – Select a valid combo box option ▪ School – Select a valid combo box option
"Please ensure all fields are filled in and valid."	The fault type you are currently viewing has a required field that is empty.

6.15 Bicycle

Error Message	Description
---------------	-------------

"Please enter a..."	▪ Bicycle Code – Must be a number (unique) –
Please select a..."	▪ Bicycle Brand – Select a valid combo box option
"Please ensure all fields are filled in and valid."	The bicycle you are currently viewing has a required field that is empty.
"The entered details already exist in the database. Please try again with different details."	The unique identifier (Username, Bicycle Code, Tag Serial Number etc.) for the object you are trying to create already exists in the database. Please input unique details and try again.

6.16 Miscellaneous

Error Message	Description
"You are currently not authorized to access this resource."	The User Permissions assigned to the User that is currently logged into the system does not have authorized access to the requested resource. Please contact the system administrator to rectify this.
"The entered details already exist in the database. Please try again with different details."	The unique identifier (Username, Bicycle Code, Tag Serial Number etc.) for the object you are trying to create already exists in the database. Please input unique details and try again.

2020/10/20

#Bikes4ERP_VVS – GROUP 17

"No matching resources were found for the request. Page not found."	The requested resource cannot be found or doesn't exist. Please contact the system administrator.
"The thing you seek is not within reach."	The requested resource cannot be found or doesn't exist. Please contact the system administrator.
"The details of your request were incorrect. Please validate the details entered and try again."	This indicates a bad request; the requested resource cannot be accessed at the current moment. Please try logging out and logging back into the system and try again.
"Server under maintenance. Try again later."	This indicates an internal server error; the server is either under maintenance or the server is down. Please contact the system administrator.
"You have done some odd stuff that our system cannot comprehend at this present juncture."	This is a default error message; the system is down, or something is fatally wrong. Please contact the system administrator.

7 System Implementation Procedure

7.1 Introduction

This will serve as a guide for the deployment of the web application in the event that it has to be redeployed.

7.2 Pre-requisites

The web application is currently deployed through the Microsoft Azure Hosting environment and you will therefore be required to create a Microsoft Azure account.

To create an account please follow the following link; <https://azure.microsoft.com> and follow the instructions to create an account.

For the deployment you will also have to download Microsoft Visual Studio Community.

To download the application please following the following link; <https://visualstudio.microsoft.com/vs/community/> and follow the installation instructions.

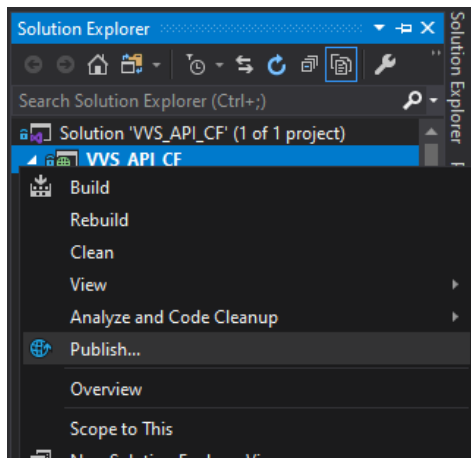
When you have successfully created your Microsoft Azure account please follow the implementation process instructions bellow.

7.3 Implementation Process

7.3.1 Step 1

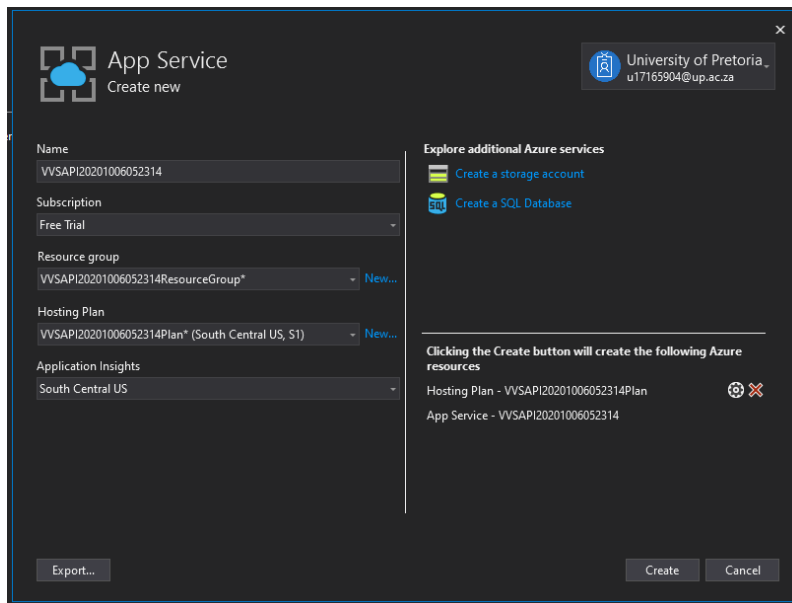
You will be required to open the web applications source code in Microsoft Visual Studio, to do this; right click on the source code Open With > Microsoft Visual Studio.

When the application opens, right click on the applications in the solution explorer and click on **Publish**. Follow the screenshots below.



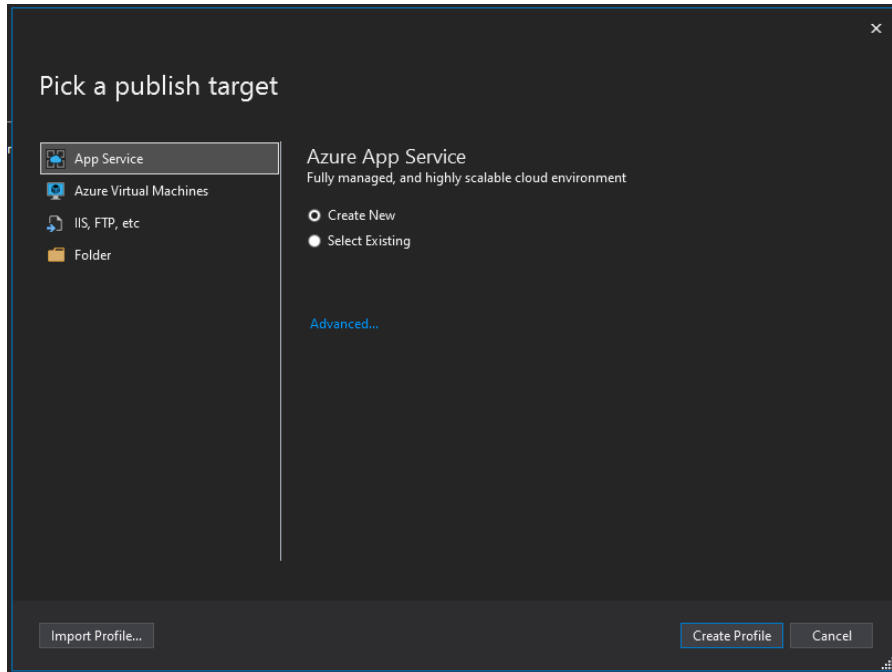
7.3.2 Step 2

Microsoft Visual Studio will proceed to open a page resembling the screen below. Do not change any settings. Click the **Publish** button.



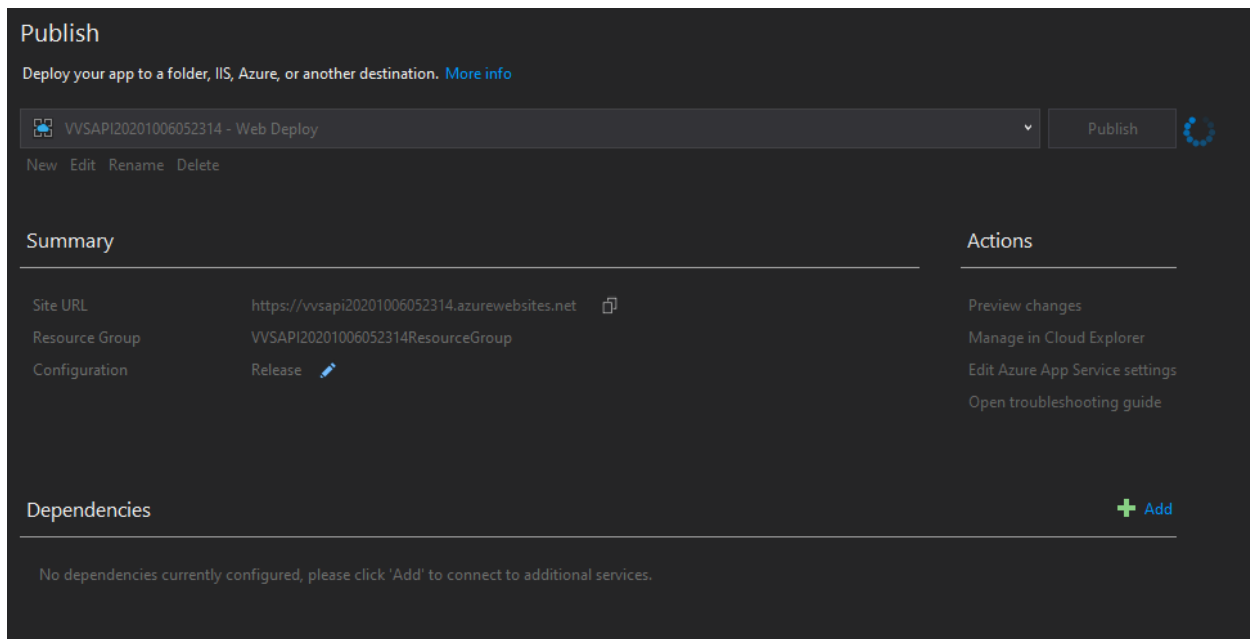
7.3.3 Step 3

Microsoft Visual Studio will proceed to open a page resembling the screen bellow. Fill in the required details and click **Create**.



7.3.4 Step 4

Click the **Publish** button and wait for the build to finish, when this is done the application will be deployed and the system implementation procedure is complete.



8 Glossary

Term	Description	Pages
Antenna	An electronic device that receives the RFID signals from the bicycles.	2, 5, 16, 49 – 54, 155, 193
Assign	To give a particular thing for someone to do.	3, 12, 13, 84 – 91, 152, 155
Audit Trail	A list of the systems transaction history.	4, 20, 161, 162
Azure	A hosting service used for our system.	202
Bicycle	A light vehicle with two wheels, one behind the other. You make the wheels turn by pushing on pedals.	3 – 5, 10, 11, 13, 15, 18, 45, 56, 62, 78 – 103, 113, 130, 132 – 136, 139, 140, 143, 146, 150, 152 – 155, 158, 172, 174 – 180, 182, 189, 190, 192, 196, 197, 200, 201
Bikes4ERP	The name of the project.	1 - 186
Blueprint	The outline of an object.	4, 132 – 134, 136 – 139
Dropdown	An expandable option field used to select from a list of objects.	9, 11, 131, 15, 16, 18, 20, 32, 34, 54, 60, 66, 83, 86, 87, 91, 97, 111, 117, 123, 129, 154, 186
Fault	An individual instance of an issue that a bicycle can have.	3 – 5, 8, 9, 16, 46, 48, 112 – 117, 130, 132, 134, 136 – 139,

		181 – 186, 194, 199, 201
Guardian	The adult who acts as a guarantor for the student and is the primary means of contact.	66, 140, 198
Log	The list of all the instances of a tag being read by the antennas.	3, 4, 104, 155 – 157, 196
Maintenance	The regular upkeep of the bicycles.	3 – 5, 16, 46, 118 – 123, 152, 195, 201
Modal	A pop-up message that is displayed to provide information.	151
QR-Code	A type of barcode, optical label, that is made to store data and can be scanned to guide certain functions within the system.	83, 130 – 132,
Redirects	When the page sends you to another page after executing a function.	9, 11, 13, 15, 16, 18, 20, 22 – 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 52, 54, 56, 58, 62, 64, 66, 67, 69, 71, 73, 75, 77, 79, 81, 83, 85, 87, 89, 91, 93, 95, 97, 99, 101, 103, 105, 107, 109, 111, 113, 115, 117, 119, 121, 123, 125, 127, 129, 131, 133, 135, 137, 139, 142, 145, 151, 154, 157, 160, 162, 164, 166, 168, 170, 172, 174, 176, 178, 180, 182, 184, 186

#Bikes4ERP_VVS – GROUP 17

Report	A document that summarizes selected information and displays it in various formats to benefit the reader.	4, 5, 8, 9, 14, 130, 132, 133, 135, 137 – 147, 149 – 160, 196, 197
RFID	Radio Frequency Identification – a device that uses electromagnetic fields to automatically identify and track tags.	155
Route	A selection of antennas that are linked to a school that show the path taken to arrive at the school.	3, 15, 106 – 111, 155
Schedule	A plan for carrying out a process or procedure, giving lists of intended events and times.	2, 4, 18, 43, 45, 47, 140 – 145, 154, 196
Search	Try to find something by looking or otherwise seeking carefully and thoroughly.	3, 27 – 29, 37, 38, 49, 50, 55, 56, 61, 62, 68, 69, 72, 73, 78, 79, 84 – 89, 92, 93, 98, 99, 104 – 107, 112, 113, 118, 119, 124, 125, 162 – 164, 169, 170, 175, 176, 181, 182, 196.
Serial Number	A unique number that is linked to an individual object that identifies it uniquely.	56, 60, 89, 105, 155, 192, 200, 201
Tag	A tag consists of a tiny radio transponder, a radio receiver and transmitter. Allowing it to communicate with the antennas.	2, 3, 5, 13, 15, 55 – 60, 88 – 91, 105, 146, 148, 150, 155, 192, 200, 201

9 Client Sign off

I, _____, on behalf of EPI-USE, hereby confirm that I understand and agree to the stated scope of work, specifications, diagrams and requirements set out in this document – #BIKES4ERP User Manual and Deliverable 8.

Date: _____

Signature: _____

10 Group Sign-off

We, as Group 17 Visual Visionaries, hereby agree and declare that each member in the group contributed equally and fully to this document, Deliverable 8 & 9 Final System & User Documentation for INF 370 2020.

Name: _____

Signature: _____

Date: _____

Name: _____

Signature: _____

Date: _____

Name: _____

Signature: _____

Date: _____

Name: _____

Signature: _____

Date: _____

Name: _____

Signature: _____

Date: _____