



King Fahd University of Petroleum & Minerals
Department of Information and Computer Science

SWE 312: User Interface Design
Term 201
Instructor: Dr. Mahmood Niazi

**Project: Web based pothole tracking and repair system
(PHTRS)**

Phase #2

Team #2

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CITIZEN

1. Home Page:

Logo	PHTRS	Log out
Report potholes		
Check progress		
Report Damage		
Submit claim		
Update information		

2. Report pothole:

logo	Report pothole	Logout
Report pothole	Location of pothole : <input type="button" value="Upload location"/>	
Check progress	The severity of pothole : <input type="radio"/> High <input type="radio"/> Modrate <input type="radio"/> Low	
Report damage		
Submit claim		
Update information	<input type="button" value="Report"/>	

The Citizen can report the pothole by clicking on the “Upload Location” and uploading the location of the pothole. After that, he can choose a severity from the three options “High”, “Moderate”, and “Low”. If he completes this, he then will be able to click on “Report” to submit his report.

3. Check progress:

logo	Check Progress			Logout
Report pothole	No.	Repair Location	Repair Status	
Check progress				
Report damage				
Submit claim				
Update information				

When the Citizen clicks on “Check progress”, he will be able to see all his reports and how their status. This a view only and the Citizen cannot change anything in this page.

4. Report Damage:

Logo	Report Damage		Log out
Report potholes	Pothole related to damage: Pothole ID, Severity, Location ▼		
Check progress	Type of damage: Car Damage ▼		
Report Damage	Damage Description: <input type="text"/>		
Submit claim	Damage Cost (£): <input type="text"/>		
Update information	Attachments: <input type="button" value="Upload Picture"/>		
	<input type="button" value="Send Report"/> <input type="button" value="Cancel"/>		

To report a damage, The Citizen will choose the pothole from a list. After that, he will choose the type of damage from the next list (if the type is not there he can choose “Other”). He then will have to describe the damage in “Damage Description” and estimate its cost in “Damage Cost” fields. Finally, he can attach a picture if he has one and press “Send Report” to submit the report.

5. Submit Claim:

Logo

Submit Claim

Log out

Report potholes

Check progress

Report Damage

Submit claim

Update information

Report related to claim:

Report number, Pothole ID, Location

▼

Damage Cost (£):

00,00 £

Payment method:

☒ Send cheque to my address.

☐ Send to my bank account:

IBAN:

Submit claim

Cancel

To submit a claim, the student have to choose the related claim from the list “Report related to claim” and the submit “Damage Cost” will appear depending on whether or not the Citizen reported the damage in the previous page and if his request was accepted. Next, he can choose the way he wants the money to be delivered to him either by cheque or a transfer to his bank account. If he wished to have it in a transfer, he will write his IBAN and “Submit claim”. In the case that he wants the money in a cheque, there is no need to write his address because it should be available in his account information, if not, he will get an error message requesting him to update his information.

6. Update Information:

Logo

Update information

Log out

Report potholes

Check progress

Report Damage

Submit claim

Update information

Username:

User123

Phone number:

0123456789

Address:

Neighborhood, Street

Email:

email@email.com

Password:

Change

Save changes

This is the page that is show when the citizen clicks on Update Information on the left menu bar. The citizen is shown a form that contains fields for the Username, Phone number, address, email and password. The citizen can then edit any of these fields by clicking on the icon beside the field and entering their information. Once the information has been entered, the citizen can click on the **Save Changes** button and their personal information will be updated.

REPAIR CREW MEMBER

logo

Update Repair Status

Logout

Update Repair Status	No.	Repair Location	Priority	Status	Update Status
					Update
					Update
					Update
					Update
					Update

This is the homepage for the repair crew member. The repair crew member can view information about the current jobs that have been assigned to them. They also can update the status of a job. This can be done by clicking the **Update** button in the Update Status column.

After clicking the update button, the following dialog box opens.

logo

Update Repair Status

Logout

Update Repair Status	No.	Repair Location	Priority	Status	Update Status
					Update
					Update
					Update
					Update
					Update

No.

##

Repair Location

#####

☐ Work in progress
 ☐ Temporary repair

☐ Repaired
 ☐ Not repaired

Update

Cancel

In this dialog box, the ID number and the location of the pothole is displayed to the repair crew member. The crew member can then select one of four options:

- Work in Progress
- Temporary Repair
- Repaired
- Not Repaired

Once the crew member selects an option and clicks on update, the status of the pothole is updated.

GENERAL MANAGER

1. Home Page / Daily report

The screenshot shows a web application interface for a General Manager. At the top, there is a header bar with a circular logo on the left, the text "Daily Report" in the center, and a "Log out" button on the right. Below the header, there is a sidebar on the left with two menu items: "Daily Report" (which is highlighted) and "Repair Jobs". To the right of the sidebar, there are two dropdown menus: "Report Type:" and "Sort By:". The main content area below these elements is currently empty.

This is the home page for the general manager. It also is the page for viewing the daily reports. As there are two types of daily reports that the manager can view (Repairs Completed and Repairs Requested), the manager can select what report to view through the Report Type menu selection.

2. Repairs Requested Report Page

Logo

Daily Report for 13th March, 2019

Log out

Daily Report

Report Type: Sort By:

Repair Jobs

Total Repairs requested: xx

Pothole ID	Pothole Location	Requested By	Estimated Repair Time

Once the general manager selects **New Repairs** from the Report Type selection, this page is shown. It shows the total number of repairs requested along with some information accompanying these new reports. The general manager can sort the report through the **Sort By** menu selection.

The date of the report is also displayed at the top of the page.

3. Repairs Completed Report Page

Logo

Daily Report for 13th March, 2019

Log out

Daily Report	Report Type: Repairs Done ▾	Sort By: ▾		
Repair Jobs	Total Repairs completed: xx			
	Pothole ID	Pothole Location	Requested By	Completion Date

Once the general manager selects **Repairs Done** from the Report Type menu selection, this page is shown. It shows the total number of repairs requested along with some information accompanying these completed reports. The general manager can sort the report through the **Sort By** menu selection.

The date of the report is also displayed at the top of the page.

4. Repair Jobs Page

Logo

Repair Jobs

Log out

Daily Report

Assign New Job

Repair Jobs	Pothole ID	Location	Size	Repair Crew	Repair Status	Total Cost	Priority
	ID number	Location x	Large	Members	In progress	\$ xxx View Breakdown	High Change

By clicking on the **Repair Jobs** button in the left bar, the general manager can view this page.

The table contains information pertaining to the information of each repair job. The general manager can assign new jobs by the clicking the button **Assign New Job** above the table.

5. Assign Job Dialog Boxes

The screenshot shows a web application interface for 'Repair Jobs'. At the top, there is a header bar with a 'Logo' placeholder, the title 'Repair Jobs', and a 'Log out' button. Below the header, there is a navigation bar with 'Daily Report' and 'Assign New Job' buttons. The main content area displays a table with columns for 'Repair Jobs', 'Pothole ID number', 'Total Cost', and 'Priority'. A modal dialog box titled 'Assign Job' is open in the center. The dialog has a close button (X) in the top right corner. It contains the following fields: 'Pothole:' with a dropdown menu showing 'Pothole ID, Location, Size'; 'Add Crew Member:' with a dropdown menu; 'Assigned Crew:' with a list showing 'Member 1' and 'Member 2', each with an 'X' icon for removal; and 'Priority:' with a dropdown menu showing 'Medium'. A 'Next' button is located at the bottom of the dialog.

On clicking the Assign New Job button, this dialog box opens. In here, the general manager can start entering the information needed to assign a new job:

- **Pothole** is a dropdown menu selection that allows the manager to select a reported pothole. The dropdown contains the ID, location, and size of the pothole to allow the manager to identify the required pothole accordingly.
- **Add Crew Member** is a dropdown menu selection that allows the manager to select a repair crew member to assign the repair job to.
- **Assigned Crew** is a list that shows the current members that have been assigned. The manager can remove any preexisting members by clicking on the X.
- **Priority** is a dropdown menu selection that allows the manager to prioritize the repair job.

After the information has been entered and the manager clicks next, another dialog box is shown.

The screenshot shows a web application titled "Repair Jobs". At the top, there is a "Logo" button on the left and a "Log out" button on the right. Below the header, there is a "Daily Report" section with a sub-section "Repair Jobs" and an "Assign New Job" button. A modal dialog is open in the center, titled "Add Equipment:". It contains a dropdown menu with "Jackhammer" selected. Below this, there is a list of equipment: "Equipment 1" and "Equipment 2", each with an "X" button to its right. Underneath, there is a "Filler Material:" section with a text input field containing "Amount" and a dropdown menu with "kg" selected. At the bottom of the modal, there is an "Allot Time:" label and an empty text input field. At the very bottom of the modal, there are two buttons: "Back" and "Next".

In this area, the manager can add available equipment, filler material and allot time for the task.

- **Add Equipment** is a dropdown menu selection that allows the manager to assign equipment to be used by the crew.
- The box below Add Equipment shows the currently added equipment. The manager can remove equipment by clicking on the X.
- **Filler Material** is a combination of text fill in and dropdown menu selection. The text fill-in is where the manager can add the amount and the dropdown is where the manager can select the units for the amount of filler material (kg, g, etc).
- **Allot Time** is a datetime selection tool which allows the manager to allot the number of hours for the task to be completed in.

After this information has been entered, the manager can either go back to the previous dialog box by clicking the **Back** button or can move on by clicking the **Next** button.

The screenshot shows a web application titled "Repair Jobs". At the top left is a "Logo" button, and at the top right is a "Log out" button. Below the header is a table with the following structure:

Daily Report			
Repair Jobs	Pothole ID number	Total Cost	Priority
		\$ xxx	High
		ow Breakdown	Change

Overlaid on the table is a "Job Summary" dialog box with the following content:

Job Summary

Pothole: ID, location, severity

Repair Crew: Crew Members

Equipment: Equipment

Material: Amount of material

Hours: Number of hours assigned

Priority: Medium

Back **Confirm**

Once the **Next** button is clicked, the manager is shown a final dialog box that shows a job summary. This is so that the manager can recheck all the information entered.

Once the **Confirm** button is pressed, the job is assigned.

6. Change Priority Dialog Box

Pothole ID	Location	Size	Repair Crew	Repair Status	Total Cost	Priority
ID number	Location x	Large	Members	In progress	\$ xxx View Breakdown	High Change

Upon clicking on the **Change** link in the **Priority** column, the general manager is shown this dialog box:

The dialog box titled "Change Priority" is displayed over the "Repair Jobs" table. It contains the following elements:

- Title Bar:** "Change Priority" with a close button (X).
- Current Priority:** Medium
- New Priority:** High (with a dropdown arrow)
- Confirm Button:** A dark button labeled "Confirm".

In this area, the general manager can change the priority of the already created job.

- **Current Priority** shows the current assigned priority of the job.
- **New Priority** is a dropdown menu selection that allows the manager to select what new priority needs to be assigned to the repair job.

On clicking confirm, the priority of the job is changed.

7. View Cost Breakdown Dialog Box

Pothole ID	Location	Size	Repair Crew	Repair Status	Total Cost	Priority
ID number	Location x	Large	Members	In progress	\$ xxx View Breakdown	High Change

Upon clicking on the **View Breakdown** link in the **Total Cost** column, the general manager is shown this dialog box:

The screenshot shows the 'Repair Jobs' interface with a 'Total Cost Breakdown' dialog box open. The dialog box contains the following information:

- Equipment:** Equipment 1, Equipment 2
- Filler Material:** Material
- Time Allotted:** Time
- Total Cost:** \$ xxx

The background interface includes a 'Logo' button, 'Daily Report' and 'Repair Jobs' tabs, an 'Assign New Job' button, and a 'Log out' button. The 'Repair Jobs' table is partially visible behind the dialog box.

In this area, the general manager is shown the equipment assigned to the job, the filler material used, the time allotted to the job and the resultant total cost of the entire repair job.

PUBLIC WORKS DEPARTMENT STAFF

1. Home Page / Damage reports

Logo	Damage reports						Log out
Damage reports	N	Report number	Damaged person	Type of damage	Amount of damage (£)	Verify / Decline	
Verified claims	1					Verify / Decline	
Claims history	2					Verify / Decline	
	3					Verify / Decline	
	4					Verify / Decline	
	5					Verify / Decline	
	6					Verify / Decline	
	7					Verify / Decline	
	8					Verify / Decline	
	9					Verify / Decline	

This is the home page for the public work department staff. It also is the page for viewing and verifying the damage claims. The user can view the damage claim by clicking on (Verify/Decline) button.

Logo

Damage reports

Verified claims

Claims history

Damage Report Number: 00000

Damaged Person: Person Name

Address: Neighborhood, Street

Phone number: 0123456789



Type of damage: Car damage

Amount of damage (£): 99,99 £

Reported damage location: Location x

Damage description:

Attachments:



VerifyDecline

Log out

Verify / Decline

Verify / Decline

Verify / Decline

Verify / Decline

Verify / Decline

Verify / Decline

Verify / Decline

Verify / Decline

After clicking on (Verify/Decline) button, a window will pop up containing the information of damage claim and the public work department staff can verify or decline the claim.

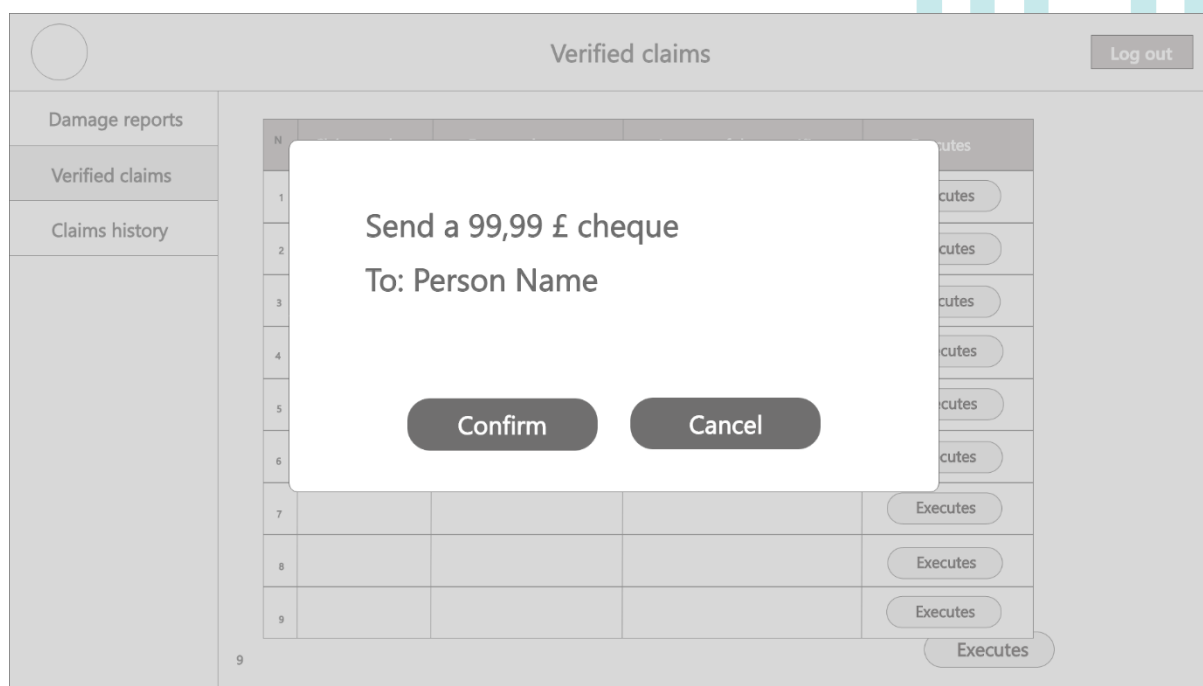
2. Verified claims

Logo	Verified claims					Log out
Damage claims						
Verified claims						
Claims history						
	N	Claim number	Damaged person	Amount of damage (£)	Executes	
	1				Executes	
	2				Executes	
	3				Executes	
	4				Executes	
	5				Executes	
	6				Executes	
	7				Executes	
	8				Executes	
	9				Executes	

In this page, the public work department staff can view the verified claims. The user can execute the damage and send a cheque to the damaged person by clicking on (Execute) button.

[illegible]

After clicking on (Execute) button, a window will pop up containing the information of damage claim. The public work department staff can send the claim to the damaged person by clicking on (Send claim) button.



After clicking on the (Send claim) button, a window will pop up to confirm sending the money to the damaged person. (the purpose of this step is to avoid the error by the user).

3. Claims history

Logo

Claims history

Log out

Damage claims

Verified claims

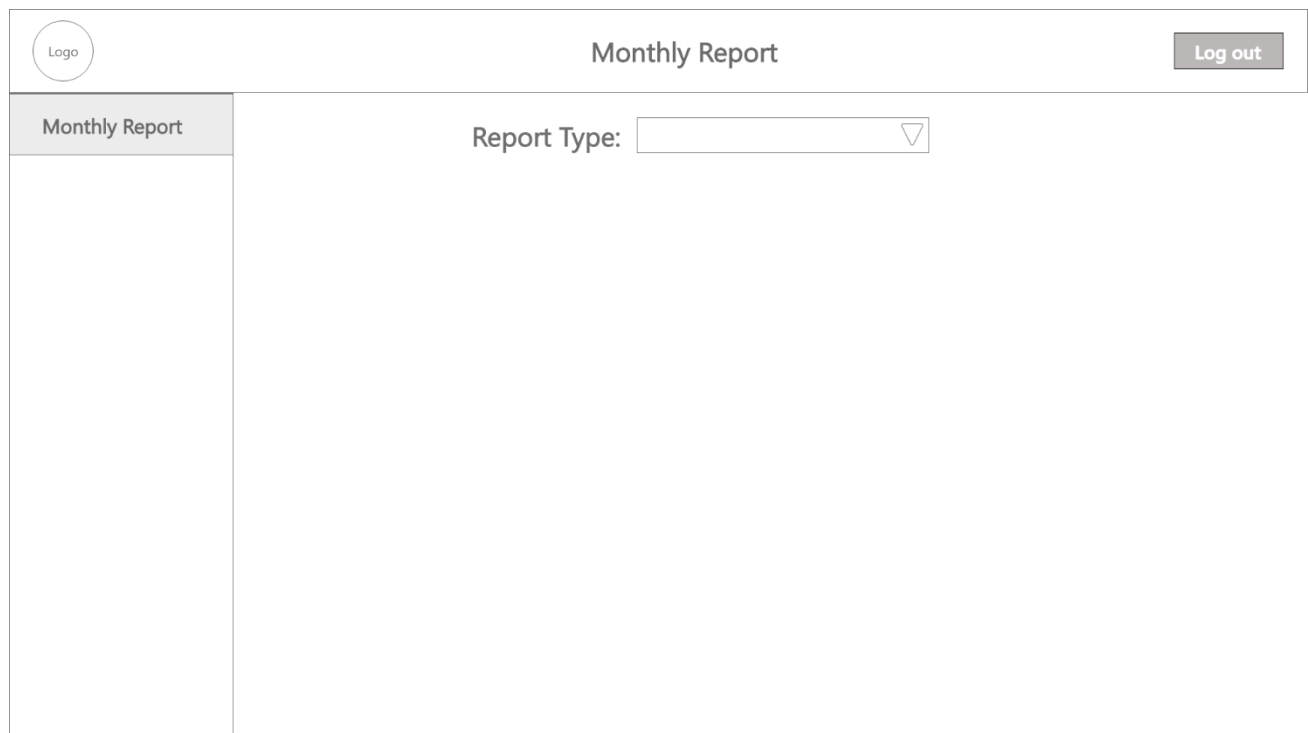
Claims history

N	Claim number	Damaged person	Amount of damage (£)	Status
1				Declined
2				Verified
3				Cheque Sent
4				Waiting
5				Waiting
6				Waiting
7				Waiting
8				Waiting
9				Waiting

In this page, the public work department staff can view the claims history and view the status of each claim.

PUBLIC WORKS HEADQUARTER STAFF

1- Monthly Report Homepage



The image shows a web application interface for the 'Monthly Report' page. At the top, there is a header bar with a circular 'Logo' placeholder on the left, the text 'Monthly Report' in the center, and a 'Log out' button on the right. Below the header, the page is divided into two main sections. On the left is a vertical sidebar with a 'Monthly Report' header and a large empty rectangular area below it. On the right is the main content area, which starts with the label 'Report Type:' followed by a dropdown menu. The dropdown menu is currently open, showing a list of options: 'Repairs Completed', 'Repairs Requested', and 'All Repairs'. The 'Repairs Completed' option is highlighted in blue.

Report Type:
Repairs Completed
Repairs Requested
All Repairs

This is the home page for the public works headquarter staff. It also is the page for viewing the monthly reports. As there are two types of monthly reports that the headquarter staff can view (Repairs Completed and Repairs Requested), the headquarter staff can select what report to view through the Report Type menu selection.

2- Repairs Requested:

Logo

Monthly Report for March, 2019

Log out

Monthly Report

Report Type:

New Repairs

Total Repairs requested: xx

Pothole ID	Pothole Location	Requested By	Estimated Repair Time

In this page, the user can see the monthly report for the requested repairs during the last month. This page will show the Pothole ID, Location, estimated time for repair, and the ID or name of the person who requested the repair (depends on the implementation later). The total number of repairs requested is displayed above the table.

3- Repairs Done

Logo

Monthly Report for March, 2020

Log out

Monthly Report

Report Type: Repairs Done ▾

Total Repairs completed: xx

Pothole ID	Pothole Location	Requested By	Completion Date

Like the page before it, this page shows the Monthly report for the repairs done. The only difference from UI standpoint is the fact that it shows the “Completion Date” instead of “Estimated Repair Time”. The total number of repairs completed is displayed above the table.

WORK CONTRIBUTION

Name	ID	Contribution
Ali Al-Muslim	201755830	20%
Abdulrahman Abdulltif	201744290	20%
Munther Alsayed	201740410	20%
Omar Pervez Khan	201746350	20%
Khalifa Alhomely	201694520	20%