Background

[Who is the project for? Describe an opportunity or problem that the project is to address.]

This project would be for my father and his work. He works at the City of Kirkwood Water Department. The problem is the lack of communication between the Kirkwood residents and the water department. For Kirkwood residents it's difficult to report problems/main breaks to the city. This app would address how the residents communicate with the water department.

Benefits

[What benefits will this project provide to the target audience? Explain how your app will improve the lives of your users. Do not list features in this section!]

The target audience (Kirkwood residents) will benefit from the increased amount of communication and response time between them and the Water department. Project would make communication between the Kirkwood residents and the water department easier. This app will allow users to remotely contact the water department about a water main break instead of having to call a representative or even disturb the police, to then pass the information on. This app will allow user to tell the location of a break quickly and efficiently, and other needed details to the department. This would make unsocial people's lives way easier due to just clicking a few buttons compared to talking to a person and describing the situation.

**FEATURES**

1. **LOGIN SYSTEM:** This is the first thing a user sees upon running the application. They can enter t a there provided work username and password if they are employees of the City of Kirkwood Water Department. Upon successful login, it will redirect them to the employee’s main screen where they can see the information regarding breaks and employees working.

1. **CURRENTLY WORKING EMPLOYEES:** Employees once logged in, can see a list of all the current employees working depending on the current date. Depending on the day the application is ran on, the employees working for that day will change.

1. **CRUD - REPORTING A WATERMAIN BREAK:** If the user clicks the Report Water Main Break Button it will direct them to the report form in which they can fill out information. They must enter all fields to allow it to be submitted. If any of the fields are left blank an error will appear showing that all fields must be completed. This is so no “fake” or “false” breaks can be reported. Unfilled fields will appear red. User must enter a name and phone for additional contact if the Water Department sees fit.

**Screen Mockups**

This is the first thing a user sees upon running the form. They can enter either a username or password if they are employees of the City of Kirkwood Water Department. Or if they are there to report a water main break, they can click the button and get directed to a new form that allows them to create a report.

A screenshot of a computer

Description automatically generated with medium confidence

If an Employee successfully logs in, they will see a list of all the water main breaks residents have reported. They can scroll through and see all the breaks that people have submitted. It will give them the person who reported the break, the type of person who reported it, the input problem selected, and the location they chose. Employees can change what type of breaks appear by searching by using the submission number or the user’s name. They can also update and delete breaks. They can also see the current employees scheduled for that specific day. Depending on the day of login, the employees working will change based on their availability.

A screenshot of a computer

Description automatically generated with medium confidence

If the user clicks the Report Water Main Break Button it will direct them to this form in which they can fill out information. They must enter all fields, if any of the fields are left blank an error will appear showing that all fields must be completed. This is so no “fake” or “false” breaks can be reported. Unfilled fields will appear red. Users must enter a name and phone number. A dropdown list of types of people who would be reporting the break is completed next. Followed by What the visible problem is for the reason the user is filling the form out. Then they must choose a location by clicking the button of the corresponding button on the map. Lastly users will submit the form and a message box telling them they have successfully submitted the form appears, then will redirect them to the home page.

A screenshot of a computer

Description automatically generated with medium confidence

**UML**

This is the UML for our project. There will be 2 classes, 1 called Employee and the other called Reports. The Employee class will be for all information regarding the employee side of the project. This being their name, phone numbers, and their login information and ID’s. The Report class will be for database that will store all the information that users will report on the watermain report form. This information being the Report ID, their name and phone number, who is reporting the break, type of problem they see, and the location of the break.

A screenshot of a computer

Description automatically generated with medium confidence