**Emergency form**

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*Abstract*

This project will be used by FortisBC clients to report gas leaks or other accidents to the gas company.

We will create a login page that has two options: for users and non-users. Users’ data will be retrieved from the FortisBC’s database while non-users will have to write all their data for the FortisBC emergency group to know.

There will be 2 sets of questions when filling the form: meter hazard and appliance hazard. After answering all the questions, the user will be sent to the final page that has an “additional information” text box and a submit button.

*Customer*

The primary customer for this software is FortisBC. The system aims to provide an efficient and user-friendly platform for FortisBC clients to report gas leaks or emergencies promptly.

*Iteration 1:*

In this iteration we followed an Agile methodology, also incorporating pair programming.

We conducted regular group meetings with our client on Mondays to discuss the week's tasks and ensure alignment. Additionally, we prioritized creating a landing page for non-users to enter their information and proceed to the form filling process.

On the form page users can see personal information they provided such as name, last name, phone number, and address. The form also includes a series of questions related to the type of emergency and the nature of the problem.

The page has a progress bar to indicate the completion status of the form. It features a user-friendly interface with a logo displayed at the top.

The questions on the form are organized into different sections based on the type of emergency, such as fire department/first response or general public, and the type of building involved, such as public use or residential/private use. We also implemented a decision tree that dynamically adjusts the questions based on the user's answers. This means that as users select their responses, additional questions specific to their situation will appear or disappear. For example, if a user indicates a meter hazard as the nature of the emergency, a set of questions related to the meter will be displayed. Similarly, if an appliance-related emergency is selected, specific questions about the appliance will be shown.

The page aims to gather essential information from users to help emergency responders better understand and address the situation. It uses a simple and intuitive design, making it easy for users to provide the necessary details in case of an emergency.

At the end of Iteration 1, we will conduct a retrospective session where we will discuss the progress made, lessons learned, and gather feedback from all team members. This will ensure that we continuously improve our workflow and address any concerns or suggestions raised by the team.

Please note that the attached "mockup.png" file in this folder provides a visual representation of the user interface design for your reference.

*Iteration2:*

* Optimization and debugging of the first iteration
* Users’ logic implementation
* Editing information in the form
* The same set of questions for non-users
* Encrypt customer answers to code numbers in order to make them small and informative
* Pop-up box where we will give customers advises based on combination of answers they provided

*Iteration3:*

* Internal Database
* Send emails to designated teams based on encryption of answers.
* Implement Google and Facebook login options
* Security improvement
* Debugging and optimization
* Design improvements
* API implementation

*Competitive Analysis*

The Gas Leak Reporting System sets itself apart from existing solutions by offering a streamlined and intuitive user interface, personalized login options, and tailored questionnaires based on the type of emergency. By incorporating these features, the system aims to enhance the efficiency and accuracy of reporting incidents to FortisBC.

*User stories*

**User Login**

Actors: Regular User

Preconditions: The user is registered with FortisBC.

Actions: The user enters their credentials (username and password) and submits the login form.

Postconditions: Upon successful login, the user is directed to their personalized dashboard.

**Non-User Information Submission**

Actors: Non-User

Preconditions: The individual does not have a registered account with FortisBC.

Actions: The non-user enters their personal information, including name, contact details, and address, in the provided form.

Postconditions: Upon submitting the form, the non-user is directed to the gas leak reporting form.

**Gas Leak Reporting Form**

Actors: Regular User, Non-User

Preconditions: The user or non-user has provided the required information.

Actions: The user or non-user answers a series of questions related to meter hazard and appliance hazard.

Postconditions: Upon answering all the questions, the user or non-user is directed to the final page containing an "additional information" text box and a submit button.

*Acceptance tests*

**User Login**

Enter valid username and password.

Assert that the user is directed to their personalized dashboard.

Non-User Information Submission

**Enter valid information**

Assert that the non-user is directed to the gas leak reporting form.

**Gas Leak Reporting Form**

Answer all questions related to meter hazard and appliance hazard.

Assert that the user or non-user is directed to the final page with the additional information text box and submit button.