**CSIS3380 – 001 – Group 1**

**SHELTERS ACROSS BRITISH COLUMBIA.**

**DO YOU NEED A PLACE TO STAY?**

**SUMMARY**

This is a full-stack web application that provides information about shelters for homeless people in British Columbia. The front-end of the application contains various components such as the navbar, home, about, and shelters, which allow users to navigate through different pages and interact with the database. The backend of the application consists of a server, models, routes, and controllers that handle requests and responses to and from the database.

The application's main functionalities include displaying a list of shelters on the home page with their information, allowing users to search for shelters by name or area, adding new shelters to the database, and showing the current location of a selected shelter on the details page. Additionally, users can add comments about a specific shelter, which are saved in the database and displayed in real-time on the shelter's page. The application provides validation and error messages to ensure that users enter valid and complete information.

**1.2 Structure of the front-end:**

**Components:**

**App:** define routers. Return the navbar component.

**NavBar:** define links to home, about and add shelter components.

**Home:** returns shelter component.

**About:** provide information about the provider of the page and invite user to add shelter by providing a route.

**Shelters:** makes a request to the backend and displays information of each shelter. It returns three more components:

* **Header:** define the title of the page.
* **ShelterForm:** provides a form for the user to add a new shelter. Once the information is submitted the new shelter is shown in the main page. If any of the required fields is empty a message is displayed to inform the user of this error.
* **Shelterfilter:** look for the shelter that matches with the user input.

**Details:** show specific information for the selected shelter. It returns two more components:

* **Map**: show the current location for the current shelter in a map.
* **Comments**: provides a form for the user to add a comment for the shelter. Once the user post a comment it is saved in the database and immediately it is displayed in the selected page’s shelter.

**NotFound:** inform user the page they are trying to access does not exist, and provide a route for them to navigate back to the home page.

**1.2. Structure for the backend:**

**Server:** define the endpoints of the application.

**Db.js:** define the configuration for the database connection.

**Models:**

* commentModel, facilityModel: define the models for each collection.

**Routes:** defines verbs and methods that are executed upon a request.

**Controllers:**

* facilityController, commentController: implement the methods for the request that need to retrieve, update or add data to the database.

**1.3. Structure Diagram:**

Diagram

Description automatically generated

**1.4.1 Technologies used in Back-end:**

Node.js: package

Express

Mongoose

Router

Cors

Doven

**1.4.2 Technologies used in Front-end**

React

Axios

Leaflet Library

Reactsrap Library