ROOM USAGE APPLICATION

USER GUIDE
VERSION 1.0.0

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Introduction and Purpose

This document provides information about how to use the room usage application. By following this guide, users should be able to easily operate the application properly. This document also provides information about the application's features. The application's issues will also be discussed in this document to assist with future development of the application.

This application helps students at Monash College by allowing them to submit a report of a room's current status, and can be used around the whole campus. Students can easily fill out a form in order to give feedback on a room's seat usage, as well as whether the room's lights and heating and cooling systems are on. In addition, the application also can detect the user's location and the current time.

Application Features

- **New observation:** User can create a new observation.
- **Location tracking:** Gets the user's current location.
- **Save an observation:** Stores any new observations to the user's local storage.
- **Display all observations:** Shows all observations in the user's local storage.
- **Search observation:** Looks for a specific observation(s).
- **Delete an observation:** Removes a chosen observation from the local storage.
- **Worst occupancy:** Shows the rooms with the lowest seat usage by hour.

Instructions for Use

This application consists of four webpages. To move between webpages, the menu button in the top-left corner can be clicked to open a list of the webpages available.

The first page is **New Room Observation**, which is used to add a new observation of a room to the database of room observations. To use it, you must first fill out the form with the appropriate (and accurate) details of the room you are entering an observation for. This form can be seen below.

After the form is filled, click the 'SAVE' button to store the observation. The form can also be cleared by clicking the 'CLEAR' button.

The second webpage is **Observations**. It allows the user to see the information for each room such as its address, room number, the date and time it was added, whether the lights were on, where the heating or cooling was on, and seat usage. The user can delete the room by clicking the button with a trash bin icon on it. If the user wants to find a specific room, they can search it by typing the details of the room after clicking the button that has an icon of a magnifying glass.

The third page is **Occupancy**. This page will show the user the worst occupancy of a maximum of five rooms for each hour between (and including) 8am and 6pm.

The last page is **Building Stats**, which details information about each building listed within all observations provided. This includes information such as:

- The number of observations that each building has.
- How many of those observations are considered wasteful.
    - A wasteful observation is one where the number of seats used is 0 and either the lights are on, the heating and cooling system is on, or both. Buildings with at least one wasteful observation are marked in red.
- The proportion of seats used against all seats within the room; the number of observations where the room's lights were on compared to the overall number of observations.
- The number of observations where the room's heating and cooling system was turned on compared to the overall number of observations.

Known Bugs and Limitations

- There is currently no user-friendly way to disable the use of the test data pre-loaded with the application.
    - If one has access to any sort of code-editor (eg. Microsoft Visual Studio, Brackets, etc.), they can do this manually by setting **useTestData** in *shared.js* to **false**.
- The "Automatically determine my address" option in the **New Room Observation** page is somewhat inaccurate, usually showing a location within approximately 1 kilometre of the user.
    - If the automatically determined address is incorrect, the user can manually enter their address instead.
- In the **Building Stats** page, buildings that have been marked red do not have an effect for when the user hovers over a building.
    - As this is just a minor visual bug, no action is required on the user's end.