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Project Proposal prepared by Prop & Tee Pty Ltd for a "Surveying App"

Abstract:

This project is programmed to be a surveying app that contractors can use to quickly size up a property and determine how much it would cost to construct. This project contain features that can determine the acreage, perimeter, and approximate quantity of fence required to surround the property. Surveying App can be advance programmed so it will include things like the dimensions, elevation, calculation of expandable areas, look up of local zoning laws, etc. The prototype software will run on a desktop computer rather than a mobile device, and users may use a mouse to click on the map to enter their position. So the main aim of this project is to develop an app to aid with property surveying for this project. When someone uses your app to walk along a property's or area's borders, it will show them the property's area and perimeter as well as an estimation of the amount of fence that would be needed to surround it.

Prop & Tee Pty Ltd will utilize HTML, CSS and JavaScript to build the website and will provide maximum flexibility towards the users.

Project Purposes:

So the main purpose of this project is to develop an app to aid with property surveying for this project. When someone uses your app to walk along a property's or area's borders, it will show them the property's area and perimeter as well as an estimation of the amount of fence that would be needed to surround it.

Target Audience:

The main target audience for this project are architectural contactors and companies. This is because before constructing a building for example they will want to know the quantity of items required for the process and this surveying app satisfies by giving the area and the perimeter of the property so these workers can guess the quantity.

The reasoning of how the web page demonstrate creativity:

In order to enhance the creativity of this project Material Design Lite is being used. Using MDL different style effects and styled buttons can be added. For example for each button, a ripple effect is added once it is clicked. Toggles like switches can be used as well. Furthermore, colourful images, headings with a standardized font will be added to entertain the public while being informative. As the creativity of the web project increases, it will attract a wide range of users and this will be an

advantage for the company hence this part of the project will be categorised to be an important section.

Explanation of 3 main pages:

Index Page / Home page:

- This page mainly Includes CSS and html
- This page will contain images and will have a “About” part which describe what the website is about.
- This page will specifically contain coloured fonts in order to attract more users.
- User Story:
    1. As a user, I should know what the website is about so that I have a clear idea how it works and its purpose.
    2. As a user, I should have good first impression on the appearance of the website. (Attractive)

Record region Page:

- This page will mainly include html and JavaScript
- This page will also contain a map which is programmed using APIs in order to get the current location.
- Contains MDL components to make it more attractive, consistent and more functional.
- User Story:
    1. As a user, I should be able get the current location without any issue so I can proceed with the surveying app.
    2. As a user, I should not face any issue during the process it should function properly as programmed.

View Region Page:

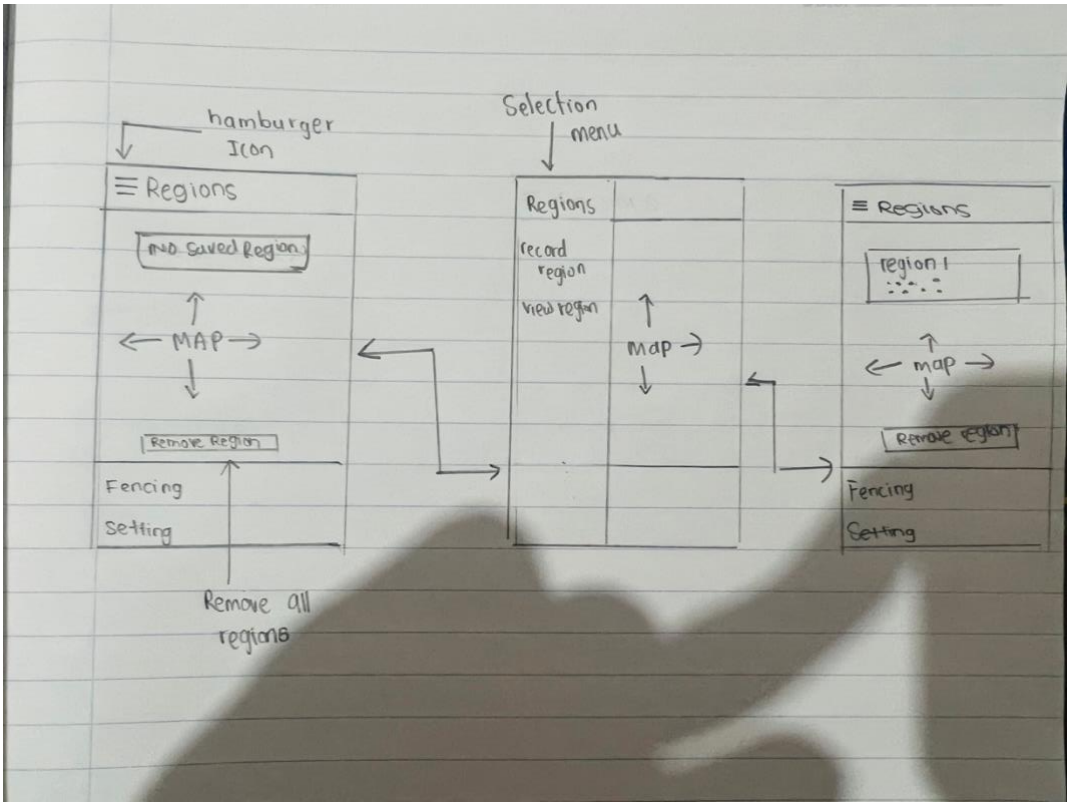
- This page will also contain html and JavaScript mainly but will also have CSS
- Will contain a map to move around and it allow the user to look at the region selected.
- This page allows the user to view the region selected.
- Allows to calculate Area and perimeter
- User Story;
    1. As a user, I should be able to view my selected region easily without any issue and making it complicated.
    2. As a user, it should be easily move around the website and all the buttons should perform its required task.
    3. As a user, I should be able to get the calculations done easily and it should be at least approximate.

Summary of how web systems will function:

So now I would take a quick tour on how similar the web project will look like and how it will work. Basically the below images represents the UI of the web site and how it will perform its function.

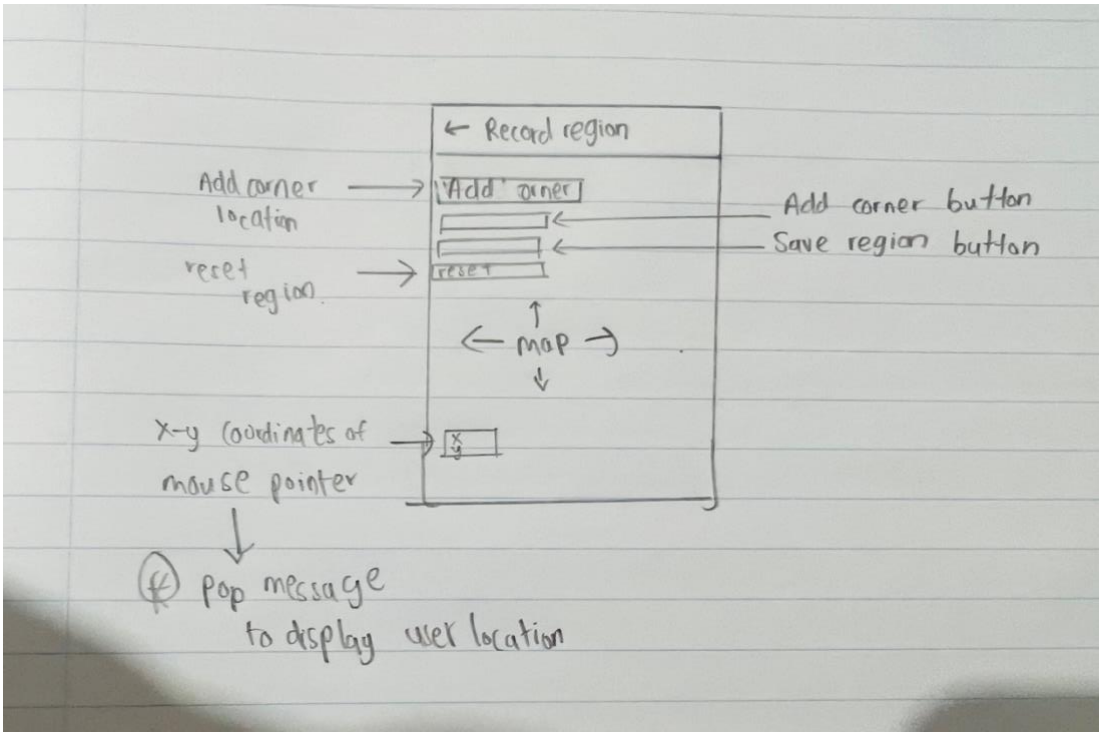
Fencing – Index Page

- Once a user enters the app, they will initially be directed to the index page which is the home page of the app.
- Here the user will have access to all of the features of the app.
- Saved regions are displayed as tiles with the name of the region and the date and time it was saved.
- To visit other pages:
    1. Click on the hamburger icon
    2. From the selection pane choose the name of the page you wish to visit.
- To delete all saved regions, click the “REMOVE ALL REGIONS” button
- Below wireframe represents how similar the website will look.



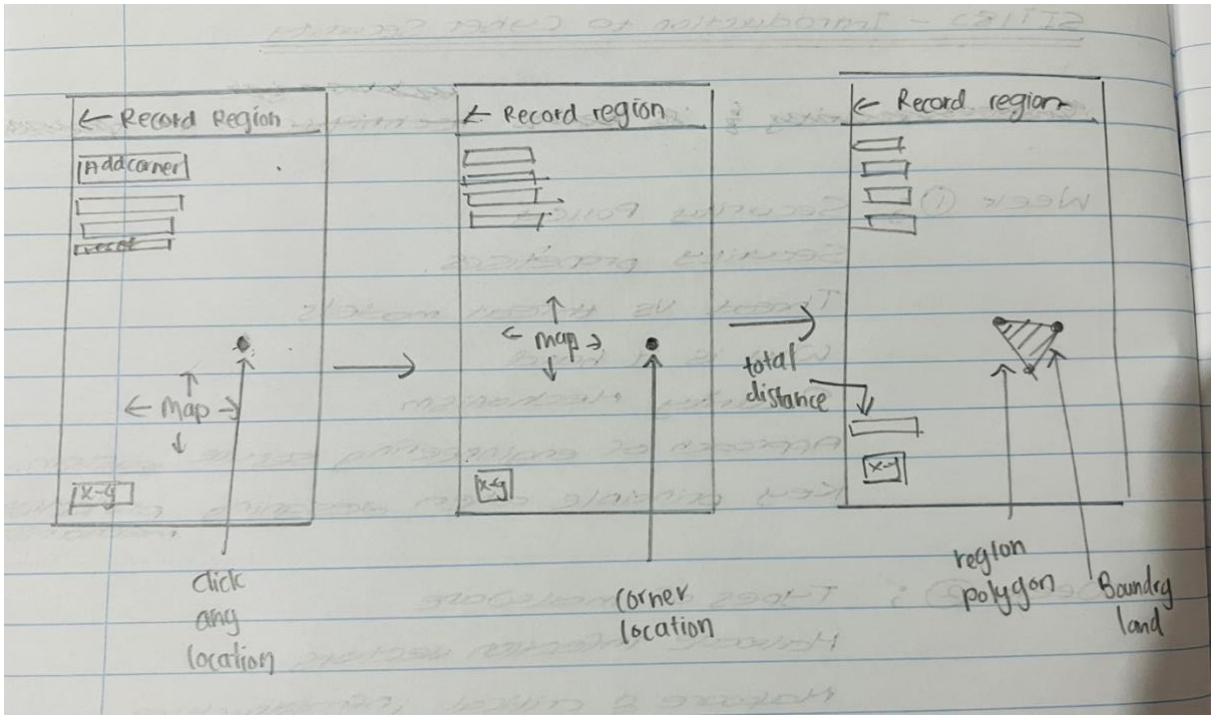
Fencing – Record Region Page.

- Page allows the user to record the region that is to be surveyed.
- The position of the mouse with respect to an x-y coordinate axis is shown by the grey box in the bottom left-hand corner.
- Clicking on any location will provide it’s latitude and longitude in the form of a popup message.
- Below wireframe represents how similar the website will look.



Record Region Page – Add corner

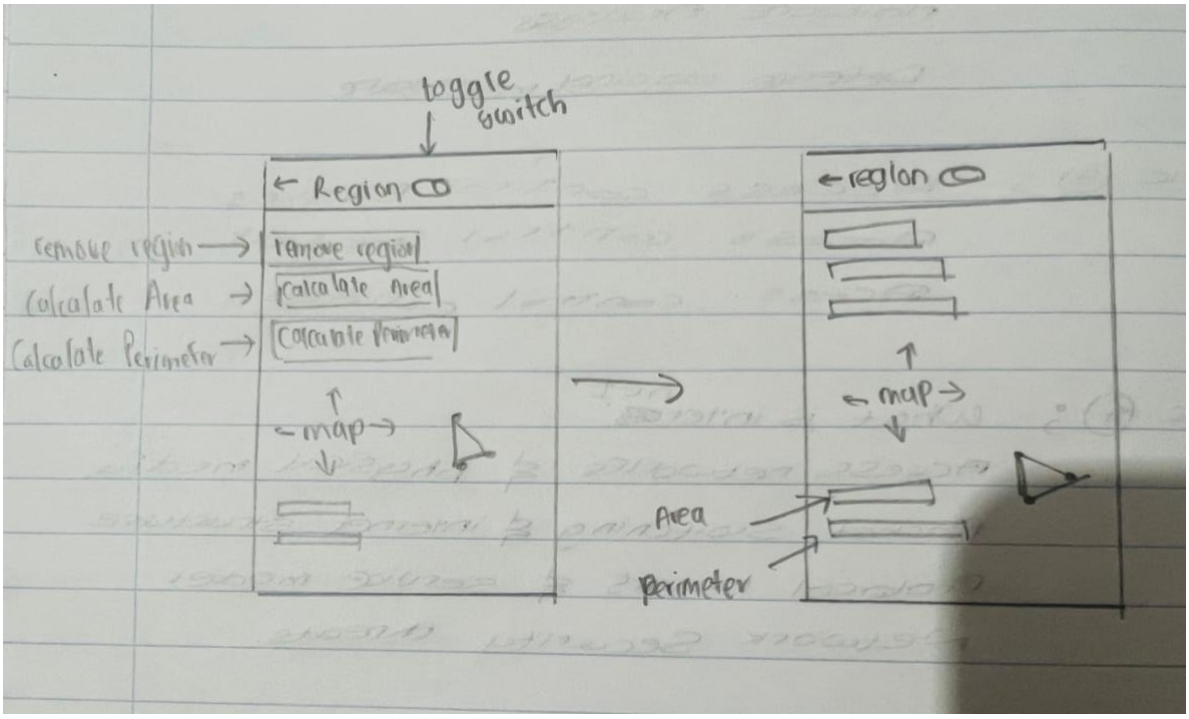
- Corner Locations are displayed as **black circles.**
- Boundary is shown using a **black coloured line**.
- The region polygon is displayed in **green colour** with real time as the user selects the locations.
- The **total distance** between the initial point and the final point is provided within the **blue** box in the bottom left-hand corner.
- To add a corner
    - Click on the Add corner button.
    - Then click on the corner you wish to select.
    - Keep clicking on the map until the last corner for your region is selected.
- Below wireframe represents how similar the website will look.



View Region Page- Calculate Area.

- To calculate Area
    1. Click on the 'CALCULATE AREA' button.
    2. The area will be displayed (in square meters) on the top grey box in the bottom left hand corner.

Below wireframe represents how similar the website will look.



Proof of Concept: https://github.com/sehaxx19/SIT120-.git
Contains a HTML , JS file and 2 images.