# CHAPTER 6: IMPLEMENTATION AND TESTING

## 6.1 Development environment.

My tools of development were Visual Studio Code, Figma, Xampp Control Panel, Mozilla Firefox browser and Microsoft Edge browser.

I used Figma, an online design tool, to come up with user interfaces for the project before coding begun. This helped ensure the user interface and user experience would be as good as possible.

HTML, CSS and Javascript are the languages I used to code the user interfaces, that is, the frontend side.

MySQL and PHP are the languages I used as the server-side / backend technology. I also used Google Maps Javascript API to show the locations of mechanics on maps.

## 6.2 System components.

### 6.2.1 Landing page

This is a page which depicts a brief overview of some of the functionalities offered by mechLocator. The navigation bar contains a several links that help the user navigate to various parts of the website. Navigation bar is also present in every page. The links include:

Home – A page which contains all functionalities in one place.

Mechanic near me – This page maps out locations of mechanics and a user can view the ones nearest to their position.

Our mechanics – This is a page which contains all registered mechanics on the platform.

Contact us – This has a contact form through which a user can contact us.

Log in – One can log in to a registered account.

Sign up – This page is used to register a user.

It then has brief details and advantages on some of the features offered. Below this is a testimonials section. User have listed how mechLocator has helped them to achieve something.

It ends with a footer which has quick links, vision and mission of mechLocator, and links to social media handles.

### 6.2.2 Motorist homepage

This page contains 6 buttons and the standard navigation bar. This page was made to ensure one can access all functionalities in one location easily. The buttons added are;

1. My repair history
2. Our mechanics
3. Add new car
4. Add repair record
5. Mechanic near me
6. Apply to be a mechanic

### 6.2.3 Add a new car pop up

This is a pop up window in which a user can add the number plate of his/her car.

### 6.2.4 Mechanic near me page

This page maps out locations of mechanics and a user can view the ones nearest to their position.

### 6.2.5 My repair history page

This page shows the repair activities which have being recorded for each car registered under a user’s account. The records are sorted per date and per number plate.

For each separate day, it gives the total of the repair cost. It also has a button for adding a new repair record.

### 6.2.6 Add a Repair record page

This page gives a form for adding a repair activity and the cost of the activity. A mechanic can record an activity for any vehicle registered in the system and save the record.

A user is only able to record a repair activity for his/her own car. He cannot record an activity for a car which is not registered under his account.

### 6.2.7 Our Mechanics page

This is a page which contains all registered mechanics on the platform and the average rating they have gotten from users.

### 6.2.8 Apply to be a mechanic page

This page is used to register a user as a mechanic. It gets the users location coordinates and asks for a location name from the user. It then stores this in the database.

### 6.2.9 Notifications page

This page is used to show a user that a new record activity has being added for one of his/her vehicles.

Through this page, the user can view the mechanic who added the activity and also rate the services provided out of 5. He can also leave a review message.

### My profile page

This page outlines the user’s profile. It shows the name, phone number, email and cars registered in his account. For mechanics, it has an additional button for updating their location details.

A user can edit his/her personal details and save the changes. There is also a button for deleting an account.

### Admin panel page

This page is meant for the administrator. Through this page, the admin can view the total number of users, mechanics and cars.

It also provides a list of car owners, mechanics and cars with their respective owners.