MINI PROJECT REPORT

On

On Road Vehicle Breakdown Assistance Finder

Submitted By:

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Submitted To:

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Declaration

We hereby declare that the work which is being presented in the Mini Project "**OnRoad Vehicle Breakdown Assistance Finder",** in partial fulfillment of the requirements for Mini-Project, is an authentic record of our own work carried under the supervision of **Dr. Anand Prakash Gupta,** Technical Trainer, Dept. of CEA, GLA University, Mathura.

Name of Candidate1:

Signature of Candidate1:

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Signature of Candidate2:

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CERTIFICATE

This is to certify that the project entitled **"*On Road Vehicle Breakdown Assistance Finder*"** carried out in Mini Project is a bonafide work done by ***Shashank Shakya (Univ. Roll no. 171500312) Saurabh Tyagi (Univ. Roll no. 171500306),*** are submitted in partial fulfillment of the requirements for the award of the degree Bachelor of Technology in Computer Science & Engineering.

Name of Supervisor:

Dr. Anand Prakash Gupta

(Mini Project Mentor)

Signature with date:

ACKNOWLEDGEMENT

It gives us a great sense of pleasure to present the report of the B. Tech Mini Project undertaken during B. Tech. Third Year. This project in itself is an acknowledgement to the inspiration, drive and technical assistance contributed to it by many individuals. This project would never have seen the light of the day without the help and guidance that we have received.

Our heartiest thanks to ***Prof. (Dr.) Anand Singh Jalal,*** *Head of Dept., Department of CEA for providing us with an encouraging platform to develop this project, which thus helped us in shaping our abilities towards a constructive goal.*

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We also do not like to miss the opportunity to acknowledge the contribution of all faculty members of the department for their kind guidance and cooperation during the development of our project. Last but not the least, we acknowledge our friends for their contribution in the completion of the project.

Shashank Shakya
Saurabh Tyagi

CONTENT

Abstract

The Road Assistance application was developed with the aim of providing emergency road side assistance services round the clock to ensure a pleasurable and uninterrupted journey virtually anywhere. The application is designed to enhance the user experience and ensure that users get immediate and hassle free service in the event of any vehicle breakdown. Our application shall make all possible efforts to locate and direct the nearest service provider to user's location.

The application doesn't just assure a prompt service in the rare event of a car breakdown, but it also helps with the mechanical breakdown towing, fuel delivery, flat tyre change and car collision etc. The application helps you to find your nearby service centers as well as the fuel stations in case of emergency situations like insufficient fuel on vehicles and un-avoided incidents like puncture, break failure, doping etc. The exact locations with the distance from your place with the directions using Google Maps let you to know with ease to access with the help of this application on your smart mobiles.

CHAPTER-1

INTRODUCTION

This vehicle management system is fully customized desktop application where company staff can view each customer order and give a solution to those vehicle problems. The locating system allows you to search Mechanics from different locations. Admin handles and can access the user details as well as the Mechanic details. Admin has the access to allow/block and view the mechanics. This online mechanic locator reduces your work and can easily find the mechanics from various areas. Reduces your time and cost.

CHAPTER-2
PROPOSED WORK TO BE DONE

The proposed application helps to find mechanics easily and quickly. It is difficult to find mechanics nearby area wherever you are travelling. This system helps to overcome this issue by providing mechanic details in one click. Here the locator allows you to search mechanics from different locations. Admin is allowed to access and manage mechanic details. This online mechanic locator reduces work and can easily find the mechanics from various locations. Reduces your time and cost. The main objective is to provide a better service and to make the process easily and finally appointing a mechanic quickly. Proposed system is accessed by three entities namely, Admin, Mechanic and User. A mechanic can perform task such as viewing request received from users and can also send feedback to the admin. User can send a request and can appoint a mechanic on respective date-time.

CHAPTER-3
MODULES

Admin:

- **Login:** Admin need to login with valid login credentials
- **View Mechanics:** Admin can view the registered mechanics with their details has the access to allow or block a mechanics.
- **View Users:** Admin can view all the registered user details.
- **View Feedback:** Admin can view all the feedback given by the user and mechanic.

Mechanic:

- **Register:** Mechanics can register with all their information.
- **Login:** Registered mechanics will be provided access to Login only if the Admin will allow or block.
- **View Request:** Mechanics can view the request which is sent by the user.
- **Feedback:** Mechanics can provide their own feedback.

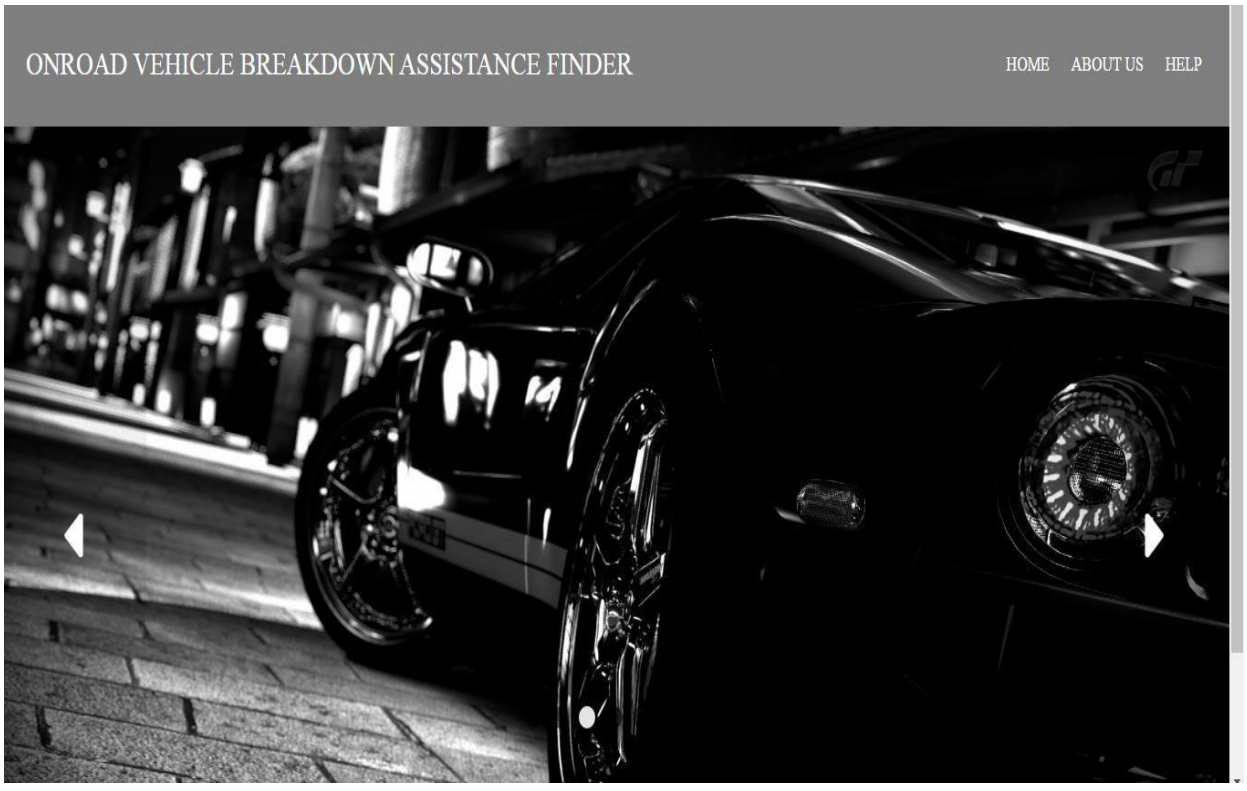
New User:

- **Register:** User can register with all their details.
- **Login:** Registered user can Login with their credentials.
- **Search Mechanics:** User can search for local mechanics on the basis of their locations.
- **Send Request:** On selection of the mechanics, the user can send the request to the respective mechanic.
- **Feedback:** User can give their feedback accordingly.

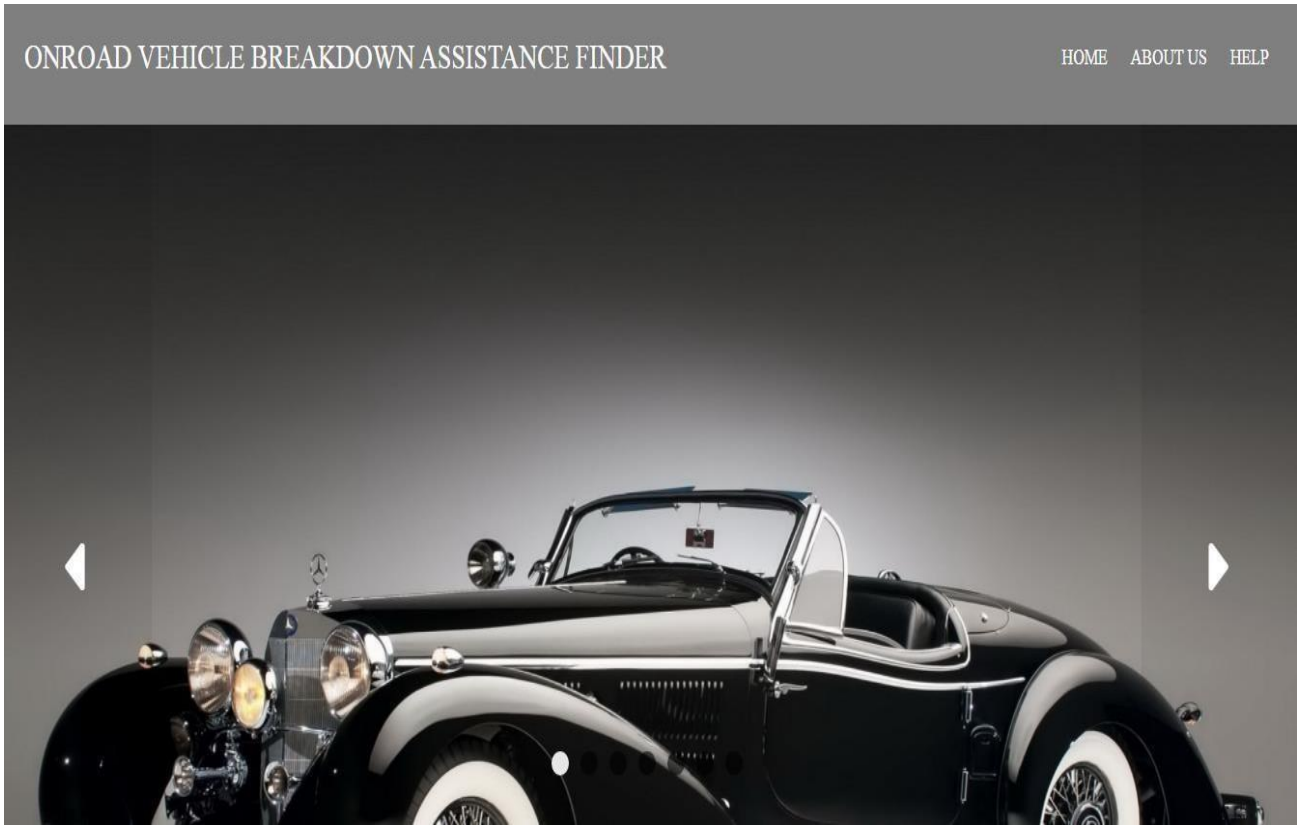
CHAPTER-4
PROGRESS REPORT

We have created the front end of the project which will be seen by the users who are using this application. In this we are creating the front page of our application in which we are showing the cars and we show three menu buttons of home, about us, help with the help of these buttons the user who is using this application will be able to use this application. This is the front page of our project.

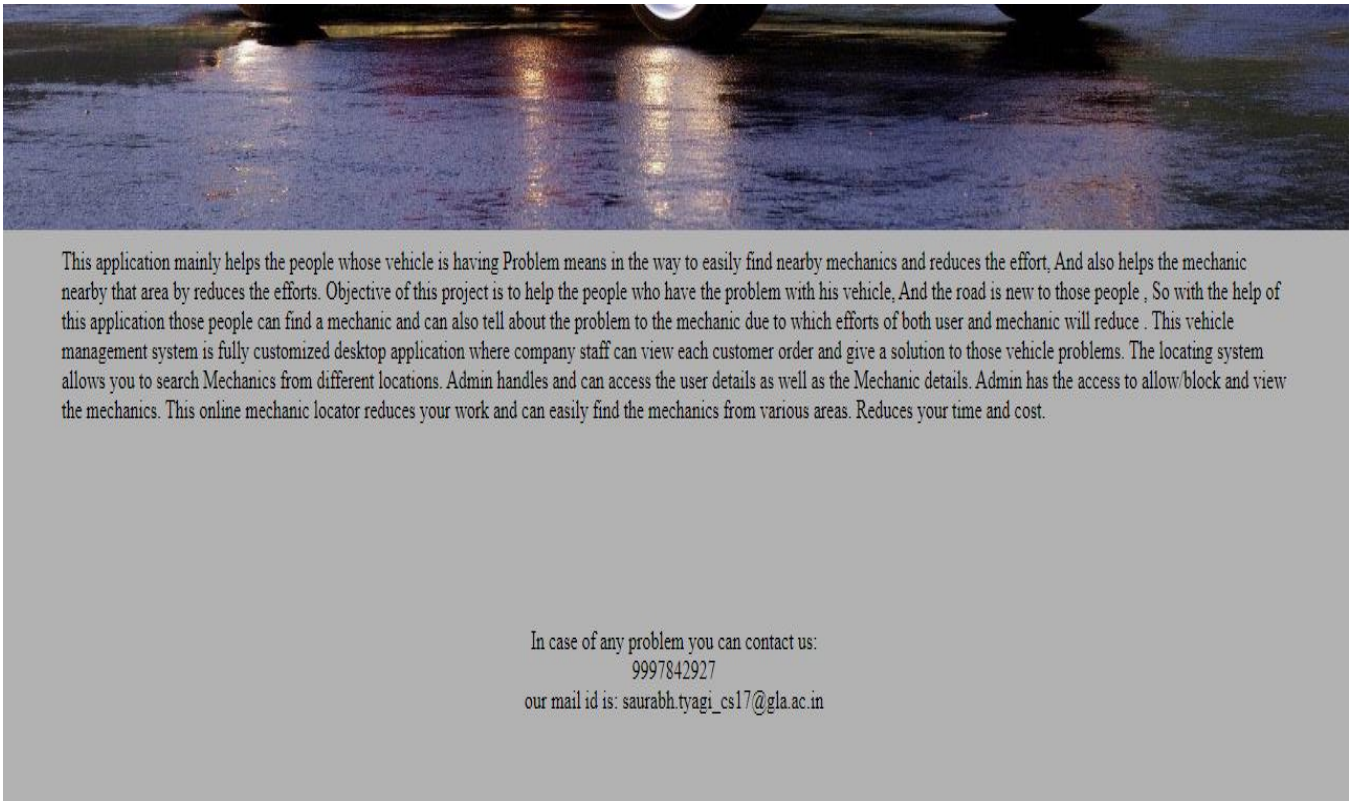
In this we have defines three menu buttons



This is another page of our project

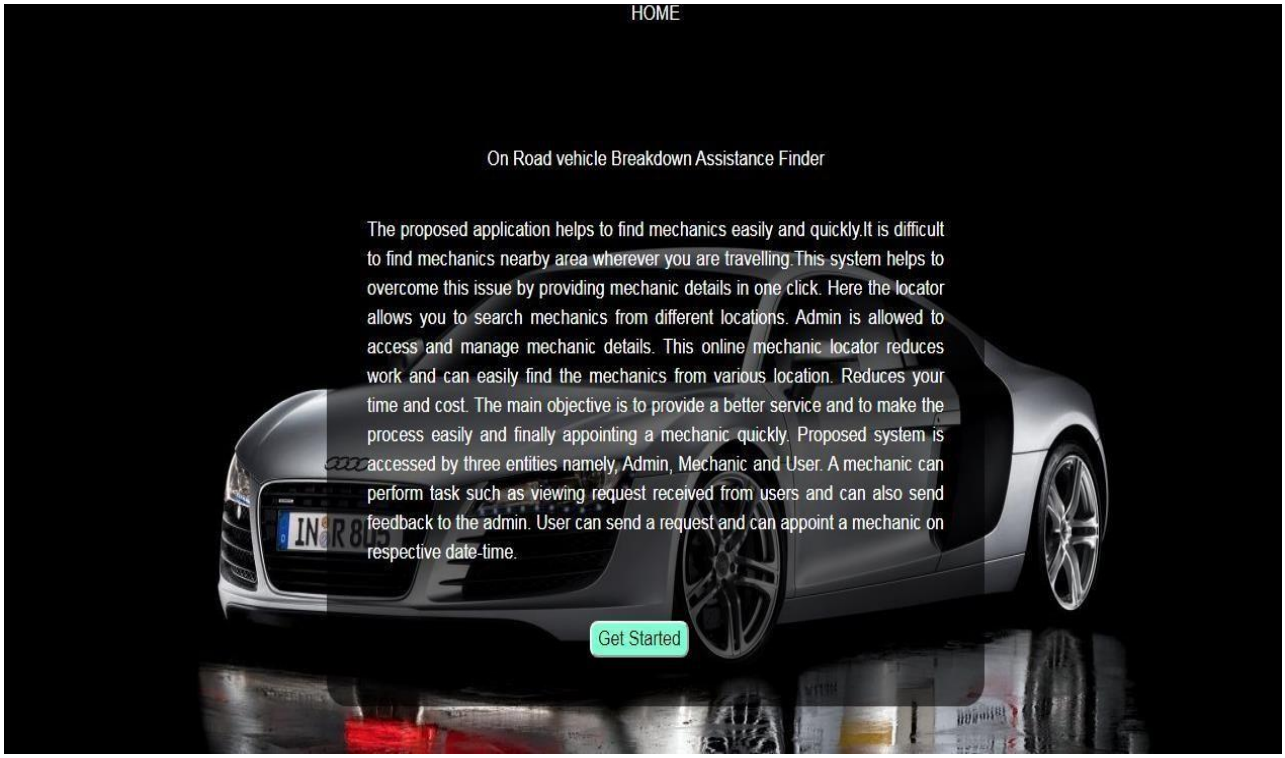


In this page we upload another page of front page in front page we create a slider in which we take some car images and add those into slider.

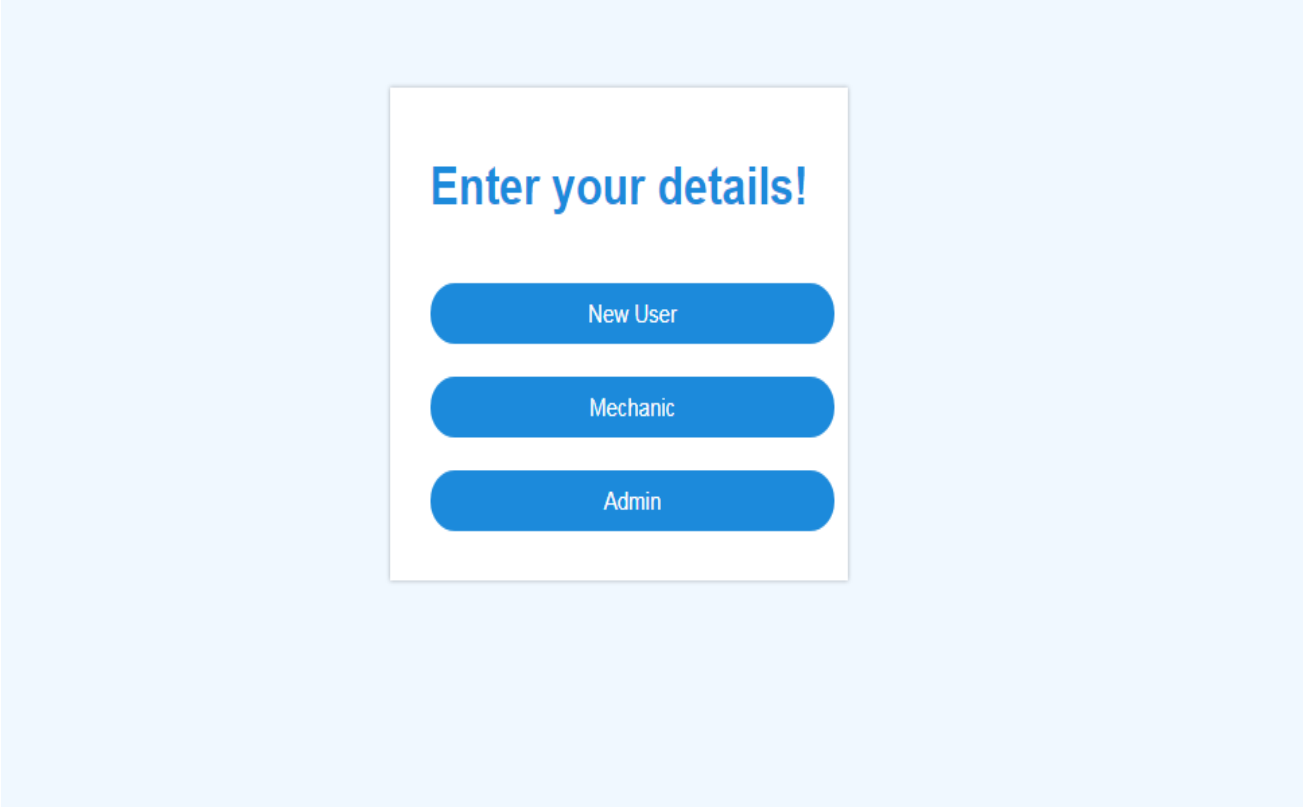


This is our home page of our project in which we describe the details about the application that basically for what purpose we can use this application.

And in this home page we also create a get started button with the help of this button user will reach the selection page in he will choose for what purpose he/she want to use our application like new user, mechanic, admin. By clicking on this button he will go to selection page.

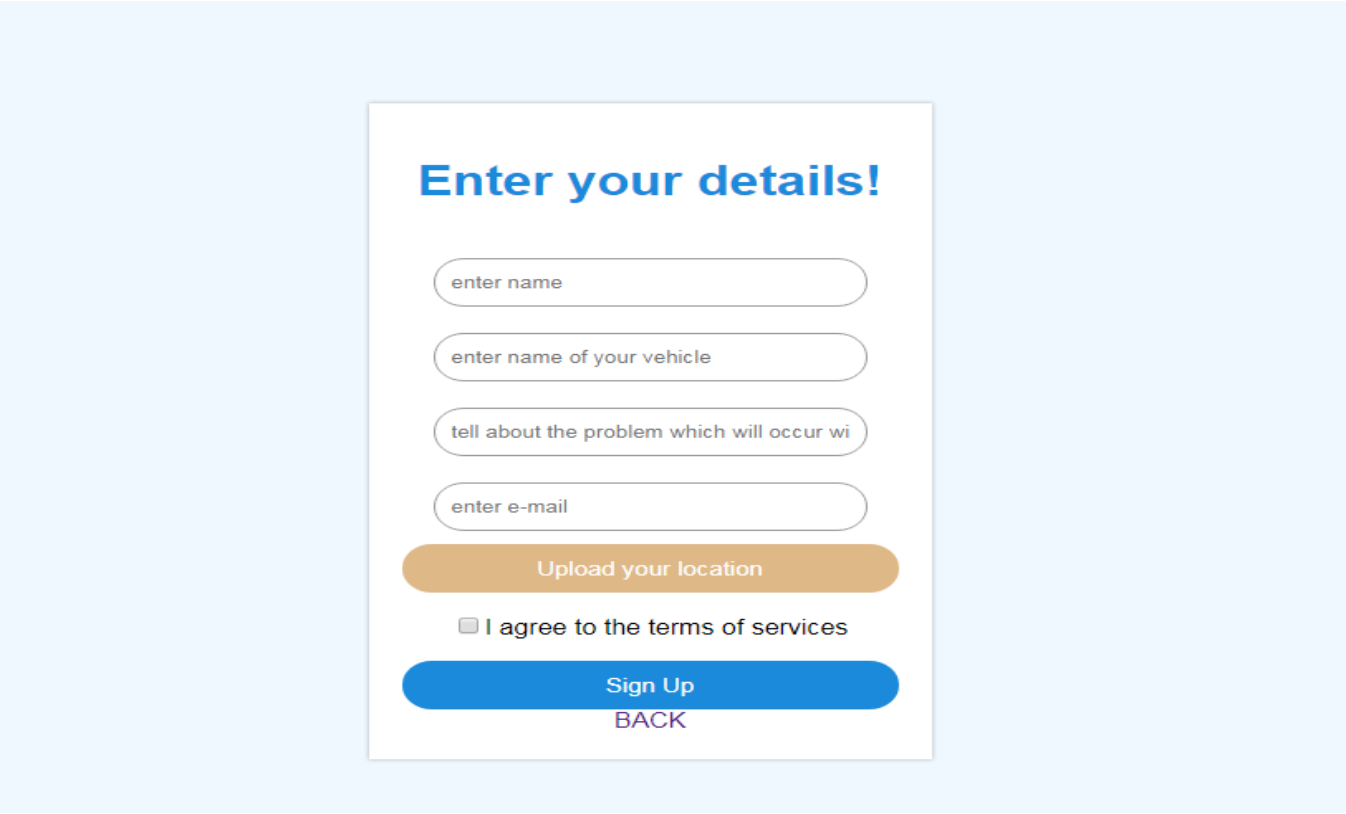


After clicking on the get started button the user will go to our selection page. In this page three separation fields are given.

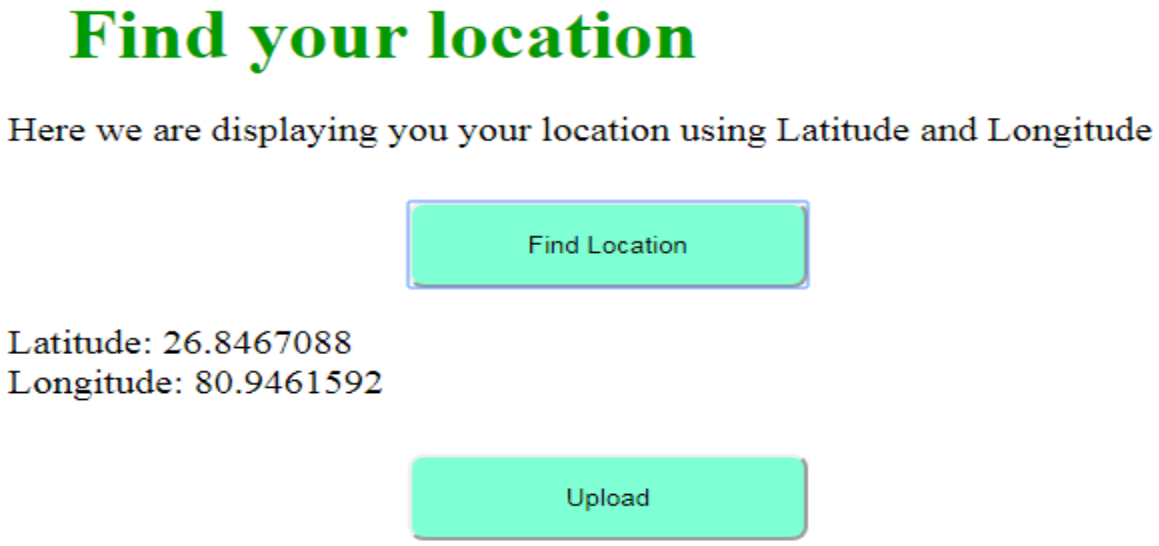


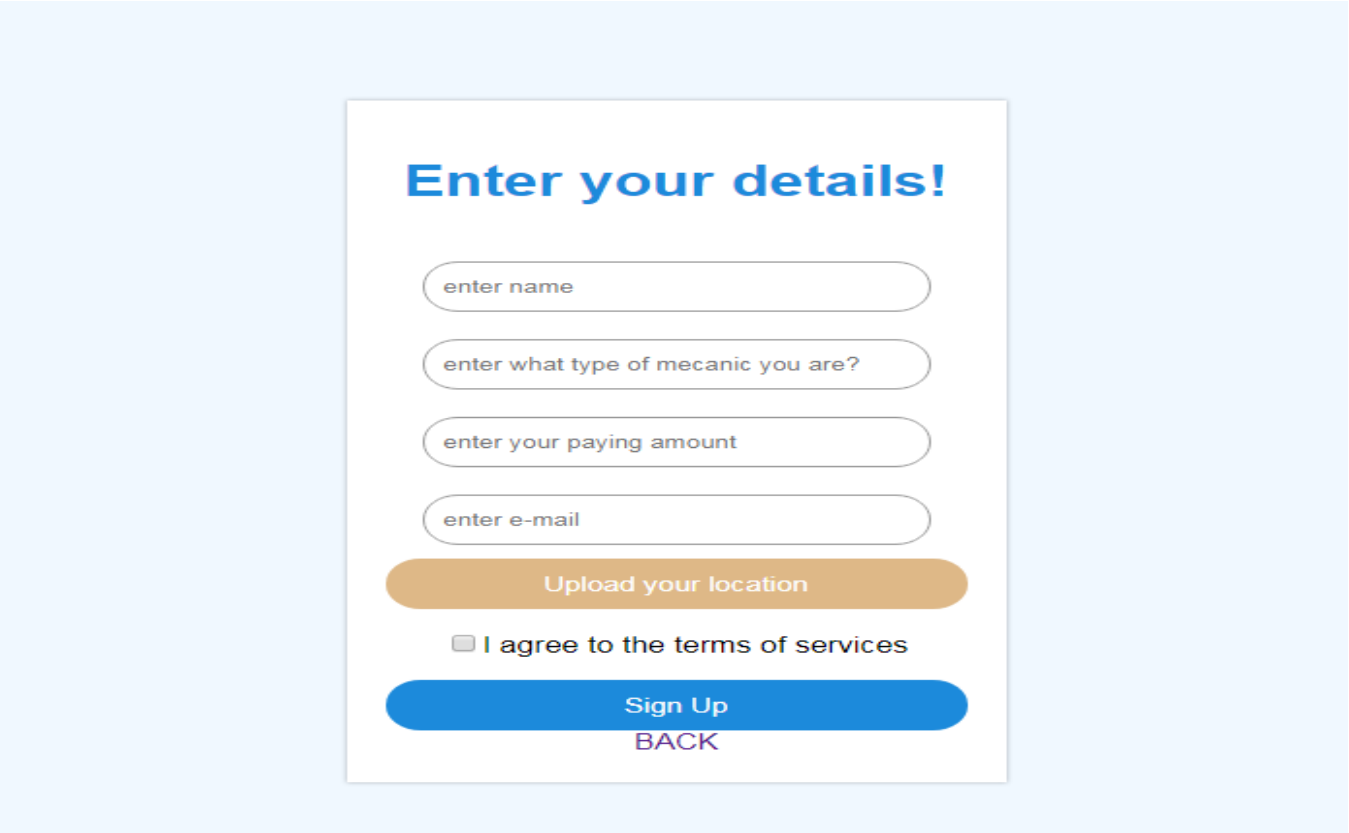
After clicking on new user button the user who is using this application will go to the new user page where he/she has to fill the details about his/him vehicle.

And after filling all the details he/she can sign up his/him. And in this we also provide a back link if he/she does not want to signup then can leave.

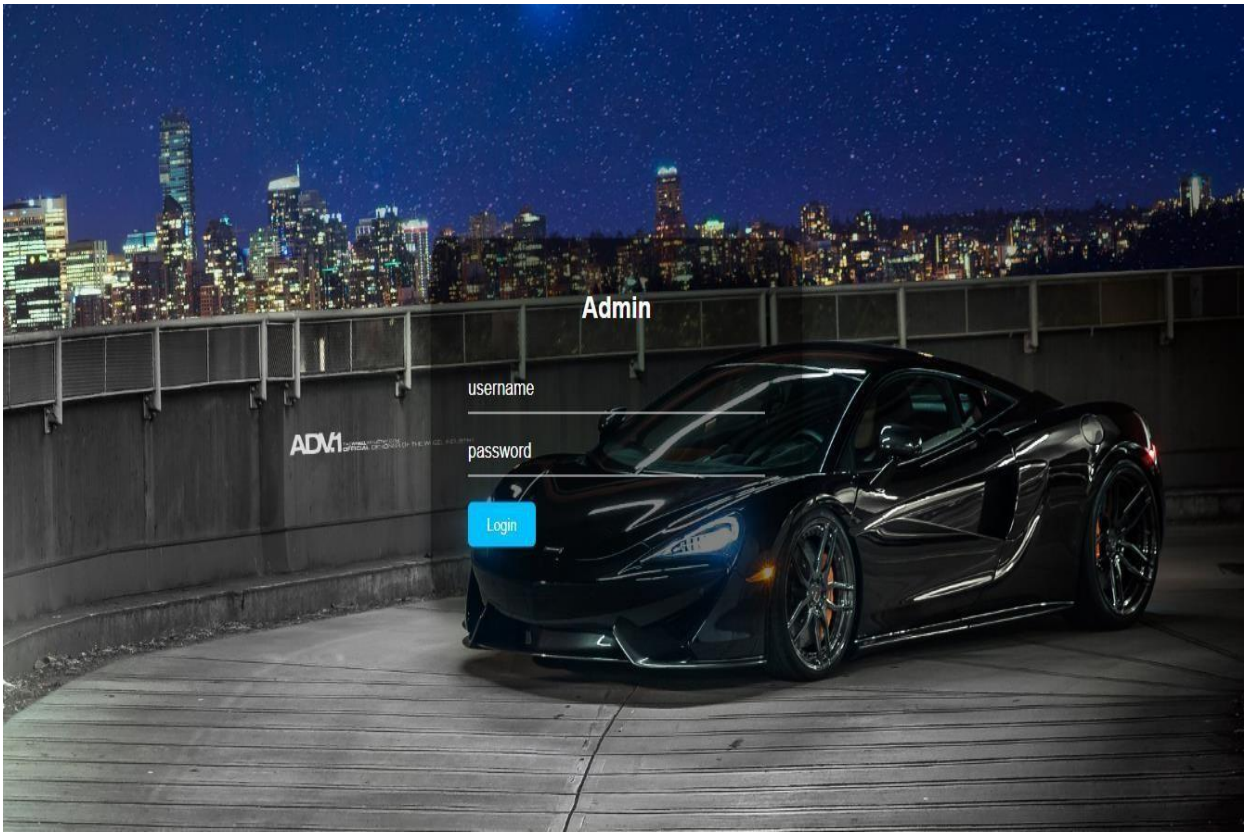


And after clicking the mechanic button he/she will get the form to fill in which he/she have to fill their details.

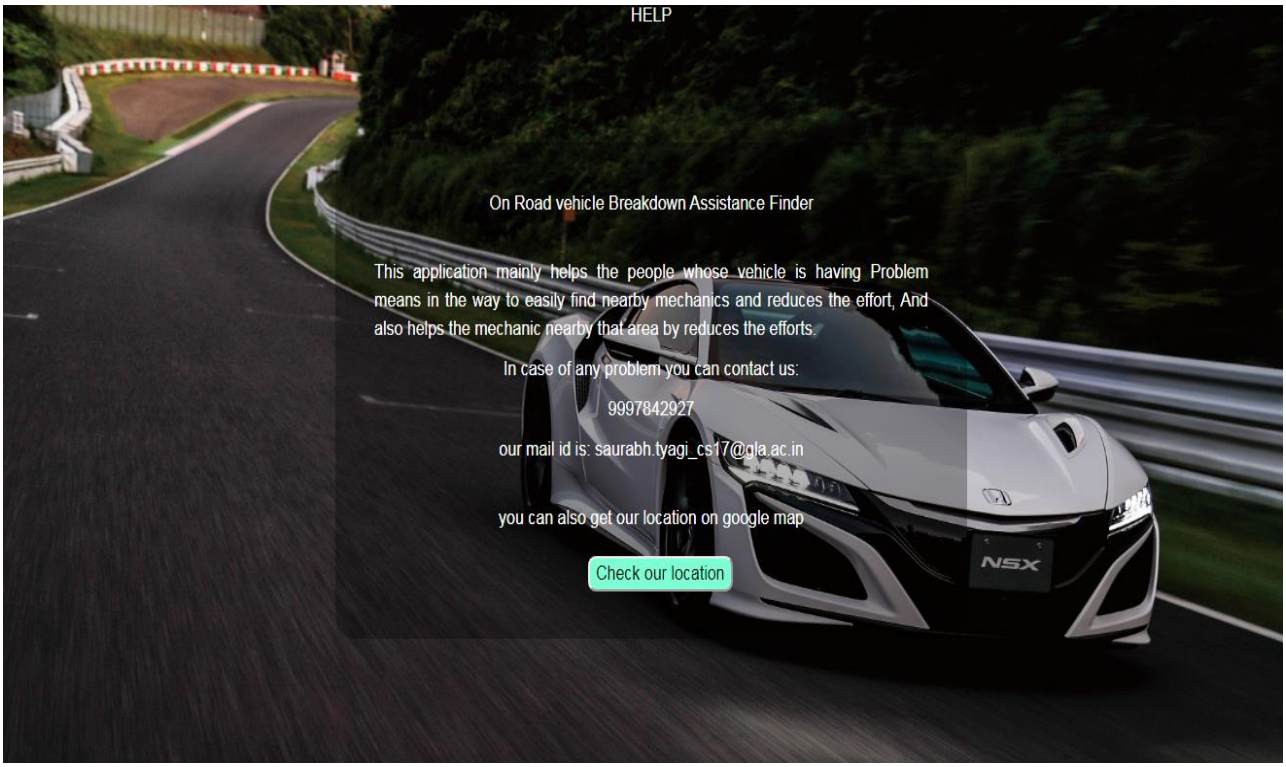




After the mechanic button in the form there is a admin button by clicking on that button he/she will go to the admin log in page where the user first verify that he/she is a correct user then only he/she can go further.

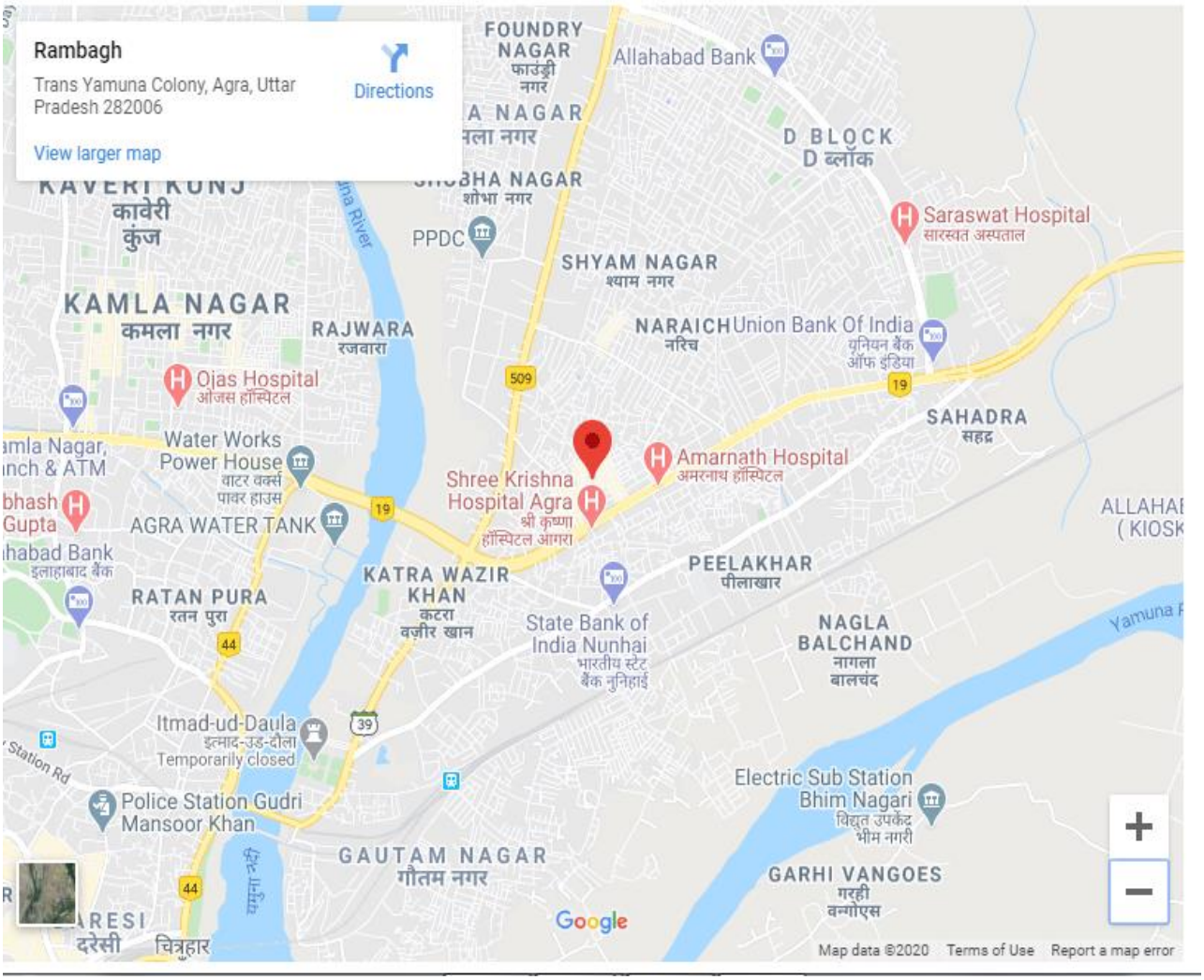


This is our admin page in which admin can login to the website and can check status of all users who are using our application.



This is our help page in which we mentioned the details of our self in case of any problem occur with the use of this application he/she can contact us by this. And in this page we also mentioned our Google map location by which user can access that location.

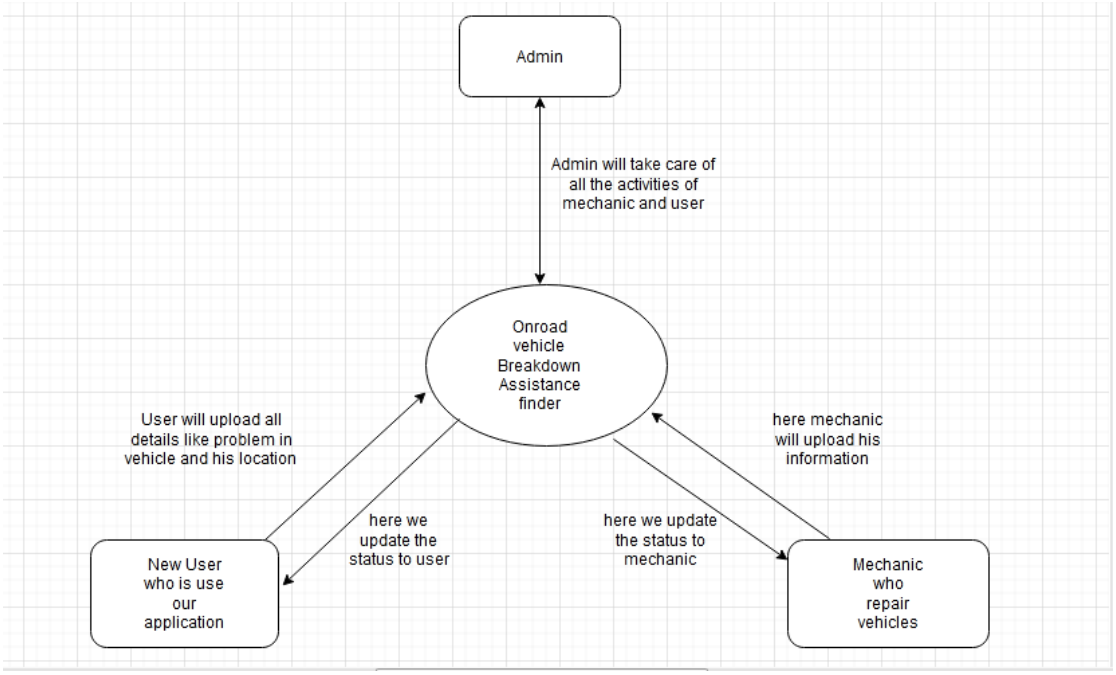
This is our google location from where we are operate. you can contact us in case of any problem



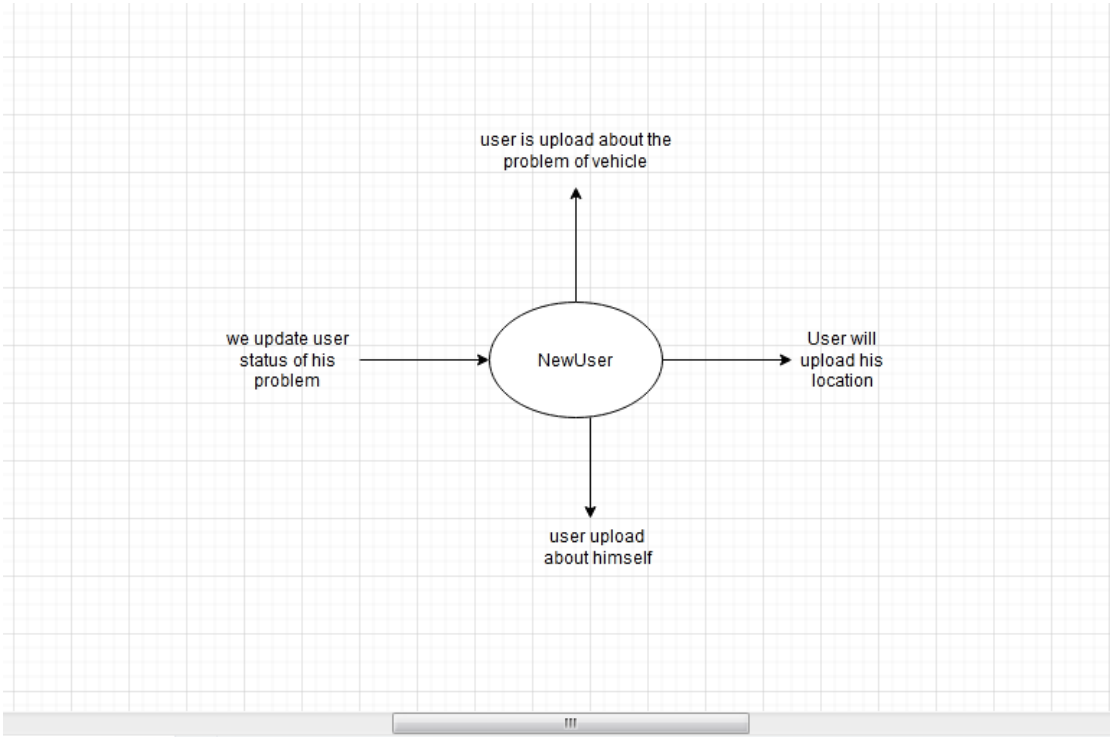
This is our location page.

CHAPTER-5

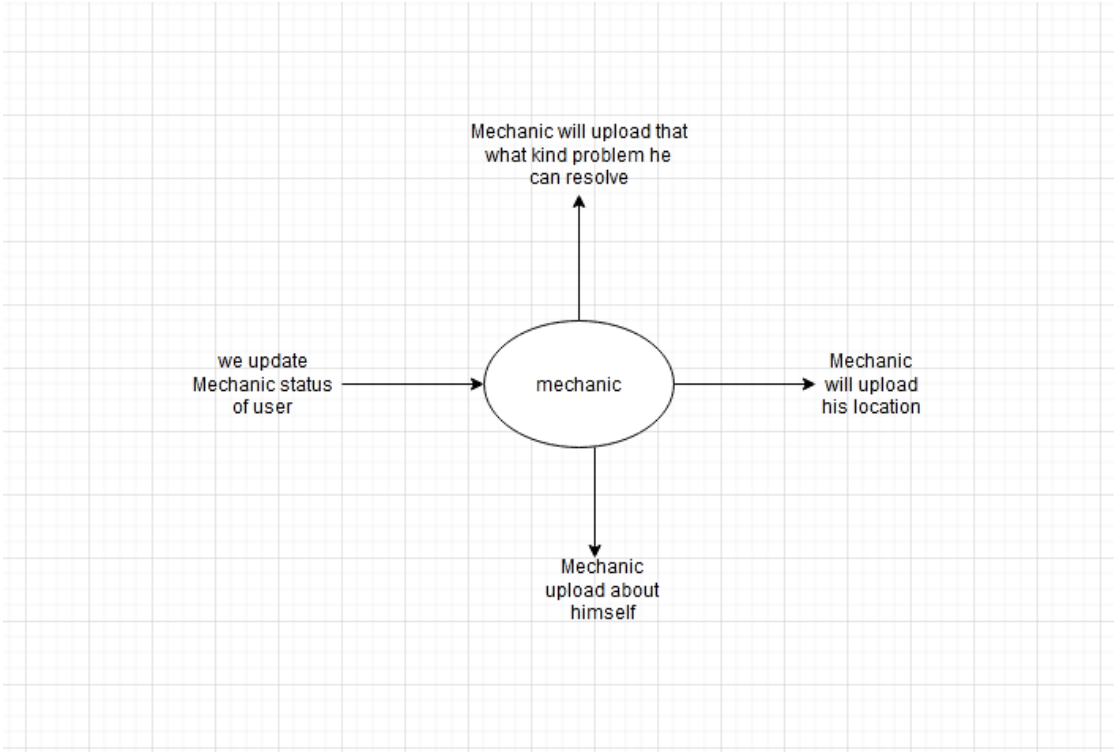
METHODOLOGY



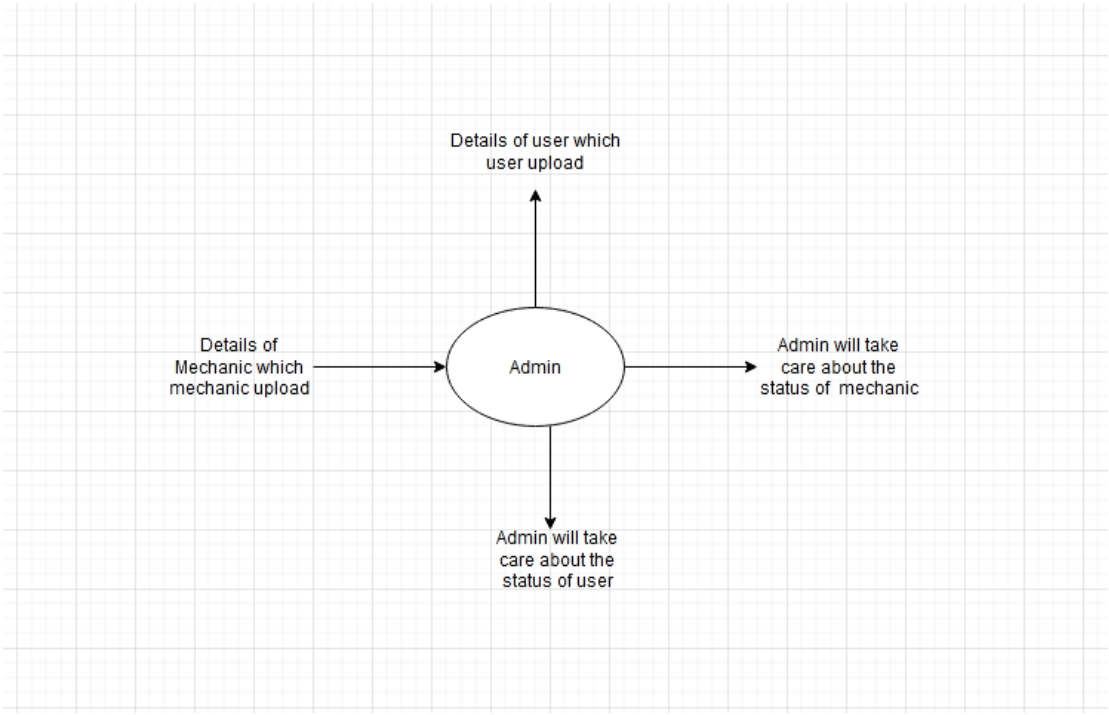
How to communication established between all the authorities



New user interface diagram and document uploading

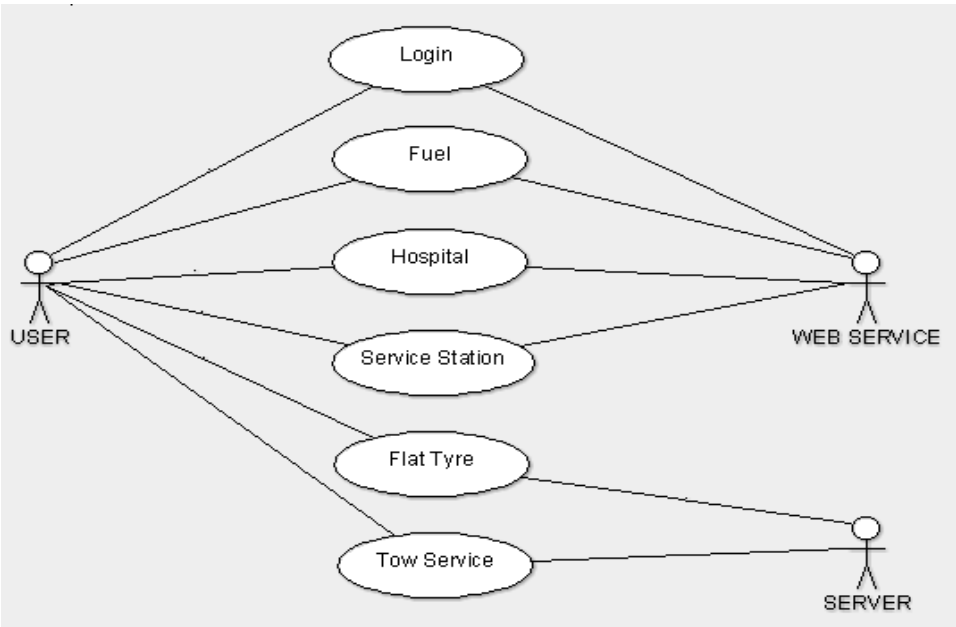


Mechanic interface diagram and his documentation uploading

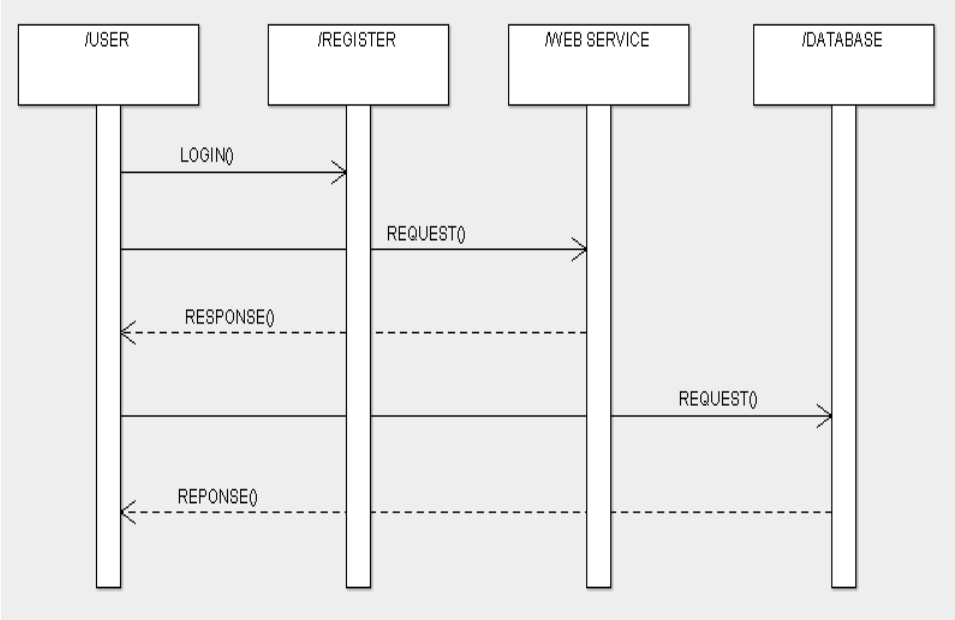


Admin interface diagram and document uploading

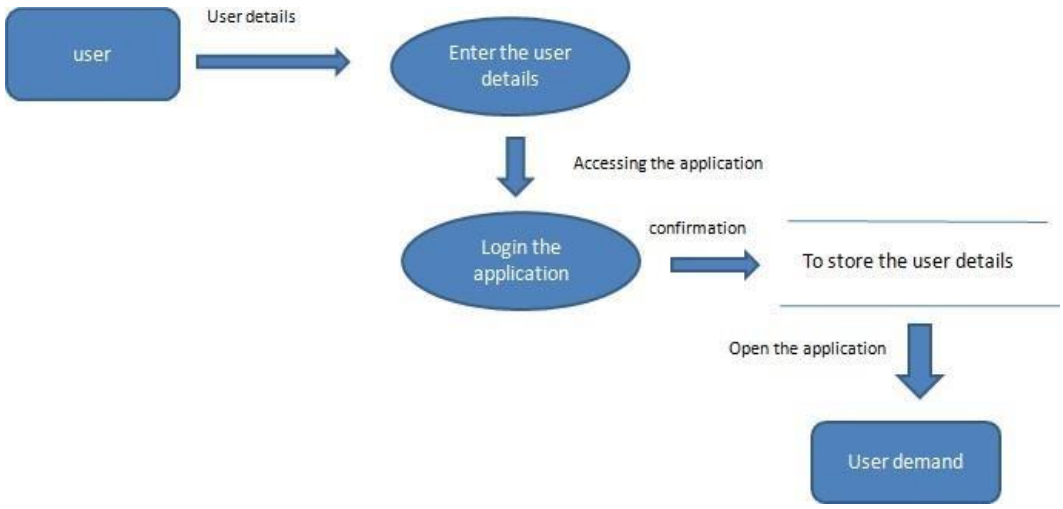
- **Use Case Diagram**



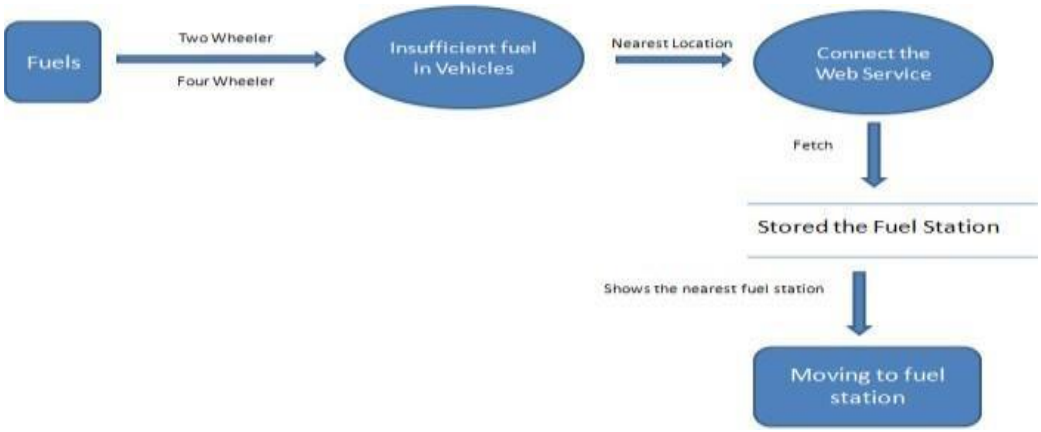
- **Sequence Diagram**



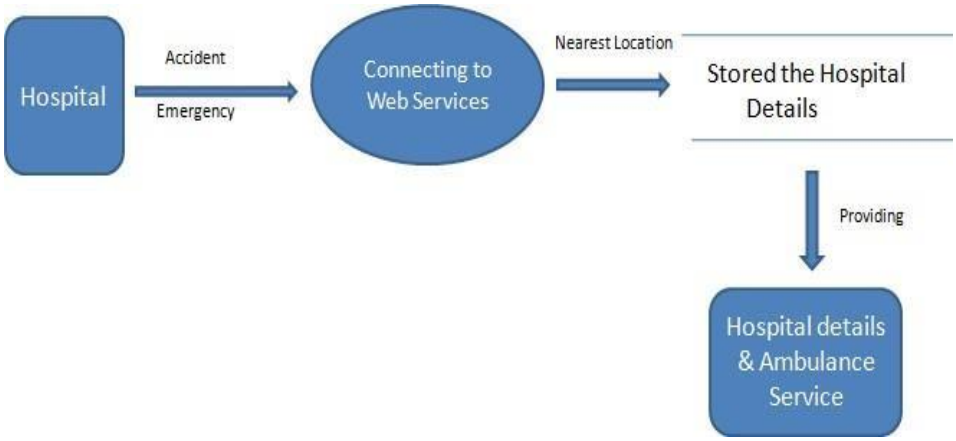
- **User Details**



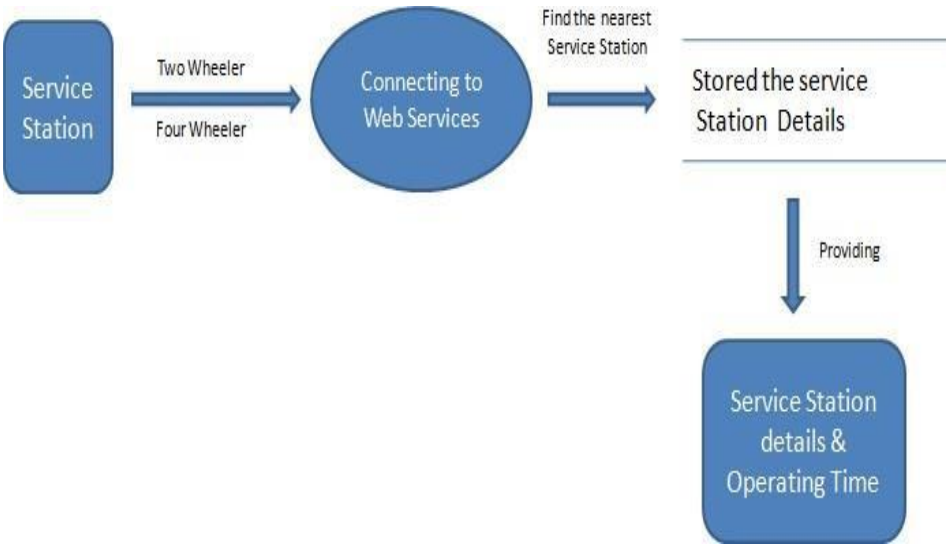
- **Fuel Details**



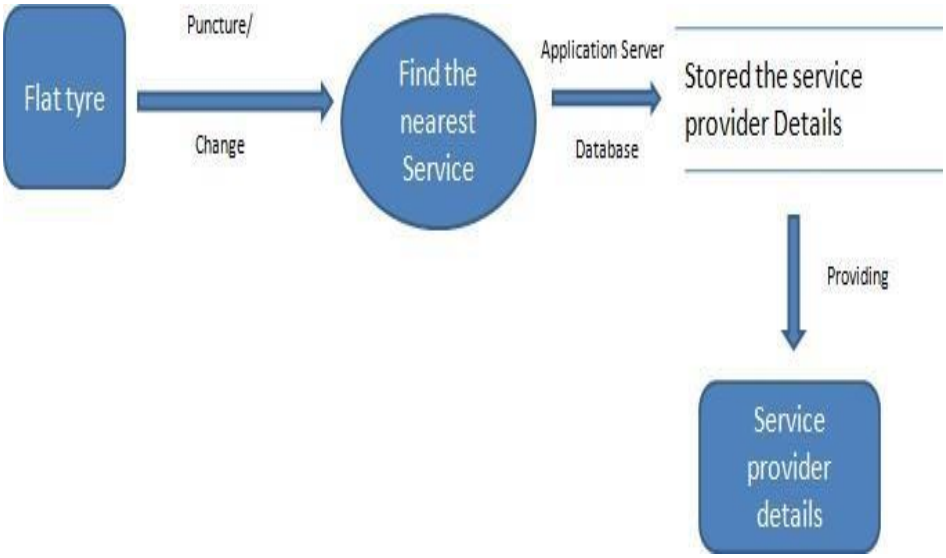
- **Hospital Details**



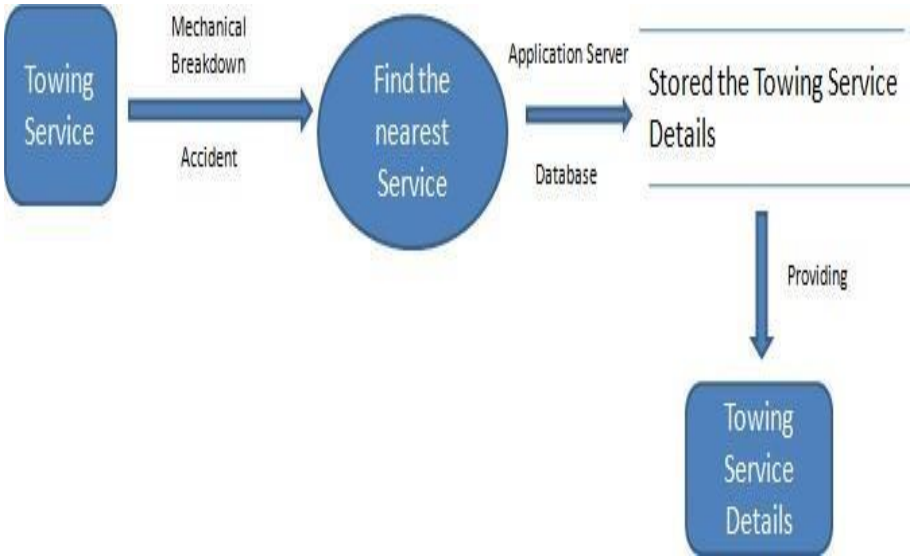
- **Service Station Details**



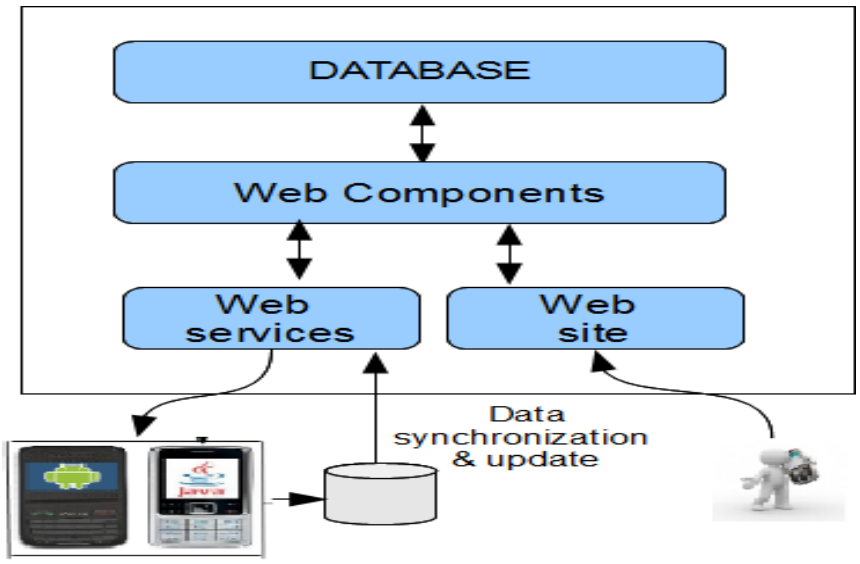
- **Flat Tyres**



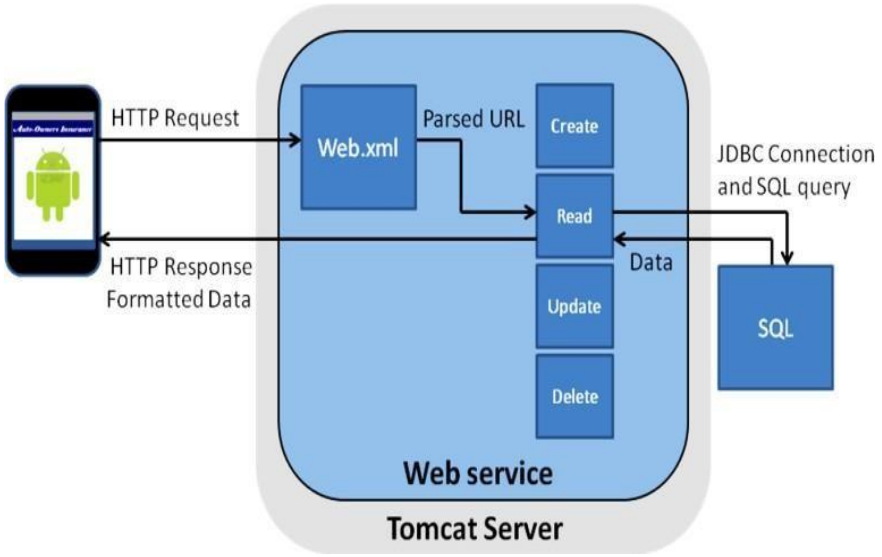
- **Towing Service Details**



- **Service Architecture**



- **Web Service Diagram**



CHAPTER-6

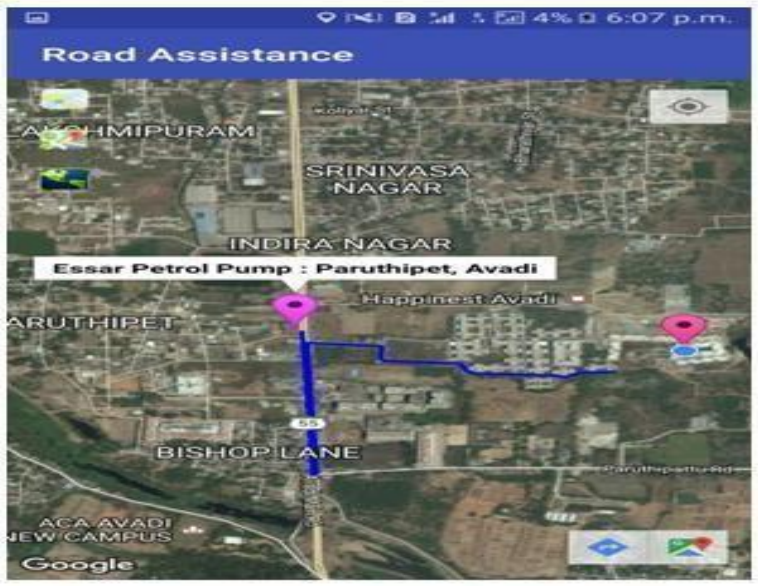
GPS

With GPS data, dispatchers can pinpoint exactly where each vehicle in the fleet is located, and direct the closest available driver to assist the stranded vehicle. This information saves time and increases productivity.

Roadside assistance companies enabled with this technology can give their drivers updates on what is specifically needed for any job. This can include towing needs, delivery of emergency fuel, new tires to replace a flat, a jumpstart for a worn out battery, winching, and even locksmith services

- **Road Details**

It directly connected & linked to the web services like Google which gives the route data based on the user's location. It finds the location, details and distance from user's location.



It directly connected to the web services which fetch the data based on the user's location

CHAPTER-7

ADVANTAGES AND DISADVANTAGES

- **Advantages:**

- Secure registration of user's and mechanics.
- Easy access to the data.
- The new system is more user-friendly, reliable and flexible.
- Reduced manual work.
- Search mechanics based on different locations.

- **Disadvantages:**

- Requires an active internet connection.
- System will provide inaccurate results if data not entered properly.

CHAPTER-8

FUTURE SCOPE

The goal of this project is to produce an interactive application for the Android marketplace. E-Mechanic Service is composed of two main components: a client-side application which will run on Android handsets, and a server-side application which will support and interact with various client-side features. The system is designed to provide, services provided by mechanics at various places, locations of all the service centers in the vicinity etc. The above proposed model is easy to implement considering the available technology infrastructure. The models are simple, secure and scalable. The proposed model is based on serial communication. Future scope for the project is scaling the system by making use of connectionless system.

CHAPTER-9

CONCLUSION

In this paper, we presented the design and implementation of android application called Road assistance system, with which mobile users can get travel related service information they need anytime and anywhere. The system provide information query of the Fuel stations, Hospitals, Service station details, and the importance services for the travelers like Flat tyre service provider details and tow service provider details based on the user's location. The system is a combination of smart phone and web services and will help tour and life for user. Tow service details can be accessed from the application, which is stored in the server as part of the broader roadside assistance service. Positioning support (GPS), highlights the user's current position on the map. The built application successfully provides ease of access (one-touch access) for locating required services.

CHAPTER-10

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[2] YouTube

[3] Shuiping Wei, Bangyan Ye, Zhiguang Fu, "Research *on GPS Positioning Information Transfer Based on Wireless Network,*" 2007, 28(6): 589-592.
[4] Owens M., "*Query Anything with SQLite,*" The World of Software Development, 2007, 32(12):24-28.
[5] Jianxun Zhao, "*Mobile Location Services Development and Implementation Based on Android Platform,*" Modern Business Trade Industry. pp 271-272. October 2010.
[6] Reto Meire, "*Professional Android Application Development*", Wiley Publishing Inc., 2009.