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On Road Vehicle Breakdown Assistance

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Abstract: *On Road Vehicle Breakdown Assistance (ORVBA) goes to be an honest solution for the people who seek help within the remote locations with mechanical problems with their vehicle. it'll be the registered public and that they are getting connected with the actual mechanic through the trustworthy application system. In an existing system there are users who have their own mechanic database which is incredibly minimal. And also, they need no idea if their vehicles are breaking down or had any mechanical issue in remote locations or any long distant locations from their known mechanic shops. in a very proposed Here the users of On Road Vehicle Breakdown Assistance (ORVBA) system can hunt for list of mechanic at any location or the nearby locations which can help them in an unexpected situation raised by the mechanical problems with their vehicles.*

Keywords: Deep learning, Social Distancing

I. INTRODUCTION

A lot of individuals face difficulties getting help when their vehicle breaks down on the road. Many of them do now not have any automobile restore provider carriers touch range and couldn't get assist because the auto restore provider middle is perhaps far away from their place This venture to help folks who are in want whilst their automobile breaks down alongside the roads to make this viable, we expand Android Application for consumer help which affords help to the passengers at some stage in their street trips. We recognize how many a sway Android has imparted to the arena of technology. The very truth that Android is open supply has resulted with inside the OS being imparted in smartphones with essential hardware. This in flip has resulted with inside the world of net being accessed via way of means of humans even with inside the remotest of locations and henceforth we are going to use this utility which can be utilized by humans below misery of a breakdown and mix the various feasible help that will be furnished at some point of the trip.

II. METHODOLOGY

Travelling to extraordinary locations at a stronger distance creates a controversy of coping with mechanical or unintentional issues. While travelling to unknown places travellers or drivers might not know nearby services centre or hospital. to resolve the scenario be proposed or road driver assistance system to resolve certain issues for a above problems. Following are the methods to resolve problem.

2.1 Proposed System

The assistance provided to the travelers are in big selection where they will enjoy in all-in-one manner. The services provided are made available with the knowledge of the service provider with which the traveler can have access. The access to and therefore the presence of services are made to known to the travelers with Google API for map services.

2.2 Advantage of Proposed System

The traveler is given more services with more services and support to confirm that they need a decent travelling experience. The traveler will have smooth get an admission to the offerings based totally at the cutting-edge area the employment of Google Maps Navigation System. The offerings are supplied during a huge variety so as those travelers experience the foremost gain out of it.

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2.3 List of Modules

Road Assistance system project comprises of 3 main modules which are listed below:

- ADMIN
- MECHANICAL
- USER

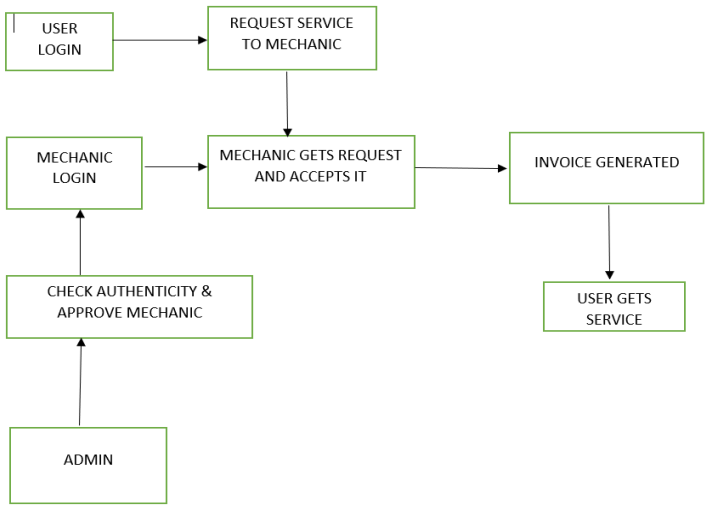

Figure: System Architecture

III. MODELLING

3.1 Description Modules

A. Admin

- In this module admin can login to view the updates and information about the system.
- Service center send request for approval to the admin after registering on this application.
- Admin can give approval to service center. after that service center will start using this app.
- In this module admin view all about the user and mechanical details.

B. Mechanical

- Interested service centre can applied during this website for earning process.
- Service centre are going to be supplied with secure registration and login.
- After registration done service centre get username and password using this, they'll login.
- A service centre can add the service man.
- During this module, service man are going to be given a secure registration and login An authenticated account is furnished so as that the provider guy and provider centre can easily get right of entry to their account. This helps the user to take care of their patient information.
- Service centre get user request during this module after accepting request service centre send the service man to unravel problem in current location and then user can share there feedback also.
- Mechanical module also contains list of services available and charges for those services .so using this details service centre can generate bill, invoice using this module.

C. User

- User will be provided with a secure registration and login.
- After registration done user get username and password using this user can login.

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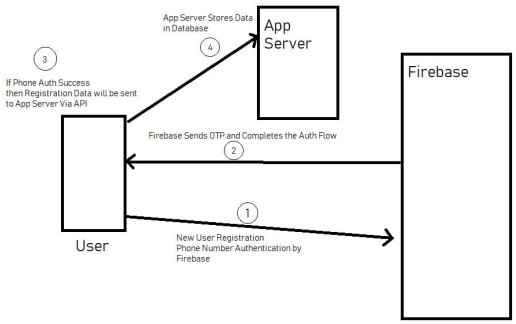
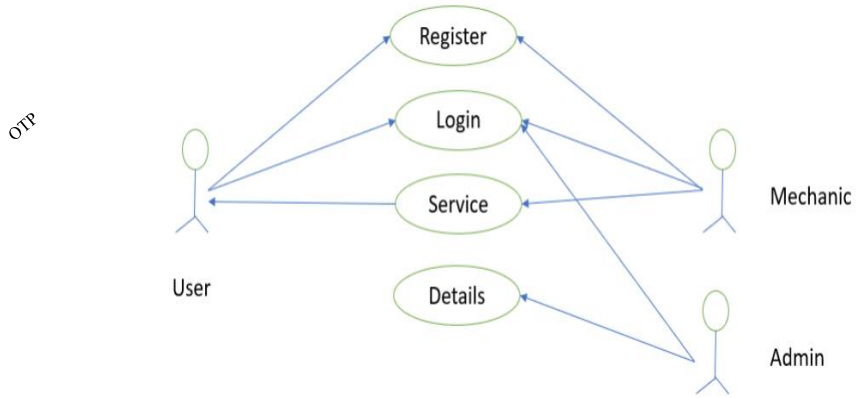
- User can view the nearby service centre list who was approved by the admin.
- Then user select the nearby service centre and send the request for service from current location.
- This helps the user to want to emergency vehicle services

3.2 OTP Verification

We have use firebase for OTP authentication. In this section user first registered their no after that user get OTP on registered mobile no.

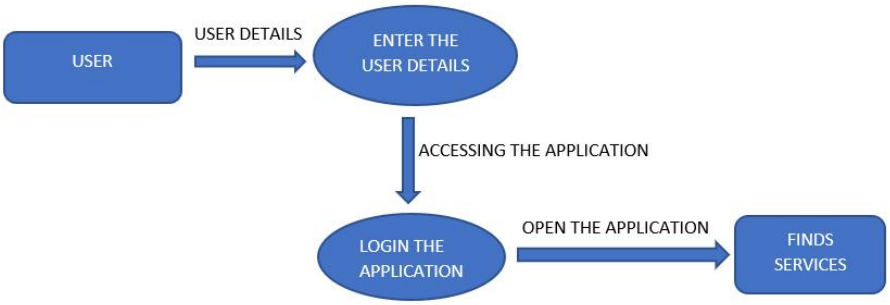


3.3 Use Case Diagram



3.4 DFD (Data Flow Diagram)

A. User Module



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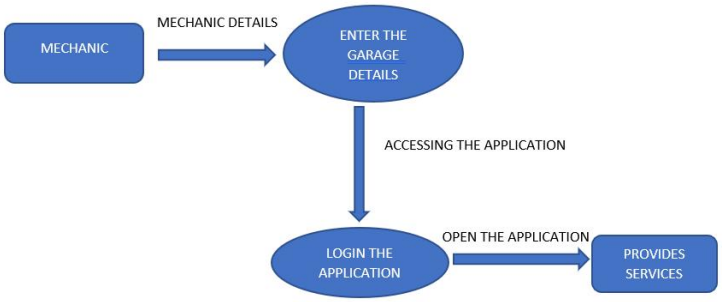
B. Mechanic Module

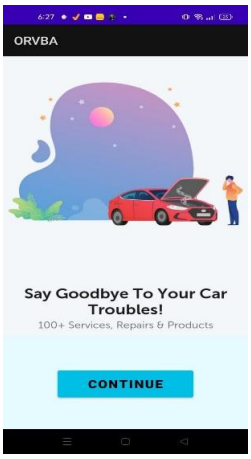


C. Admin Module

IV. RESULTS AND DISCUSSION

4.1 Home Page

This is a home page. user can start using this application after click on continue button. After that user can choose accordingly for what purpose they have to use this application either as a user or as a mechanical.



B. Mechanic Details

Mechanic first register on this application after the completion of registration he get username and password using that he will log in. After completion of log in one approval request goes send to admin, after acceptance mechanic allow to use this application.

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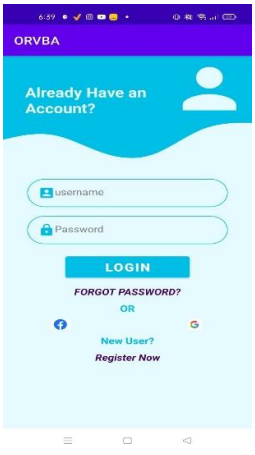
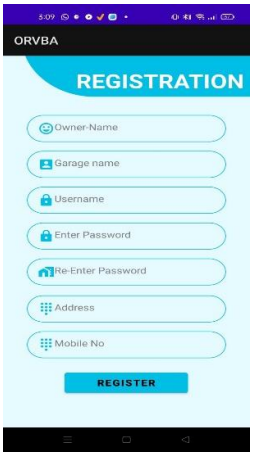
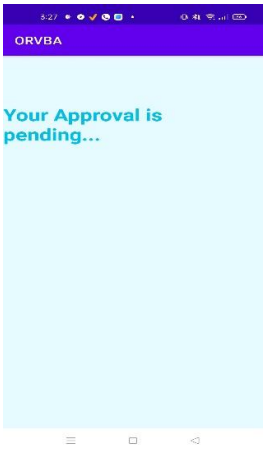


Mechanic login page



Mechanic Register page

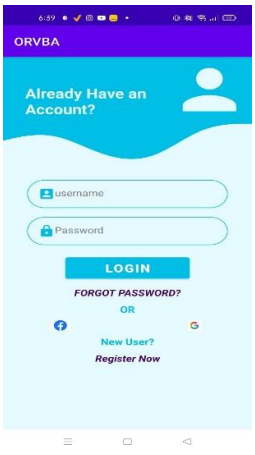


Approval Pending Page

Mechanic Home page

C. User Details

User First Register on this application then only after that they will get username and password according to that user can log in.



User login page

User Register page

After Log in user can select their vehicle and take service from mechanic and also find nearby garage location.

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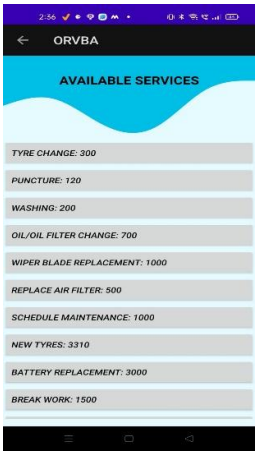
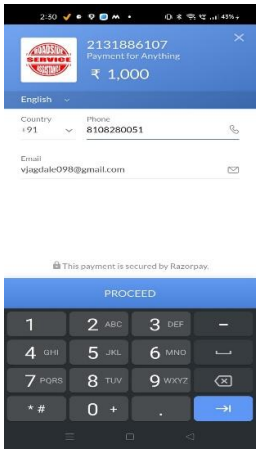
D. User Dashboard

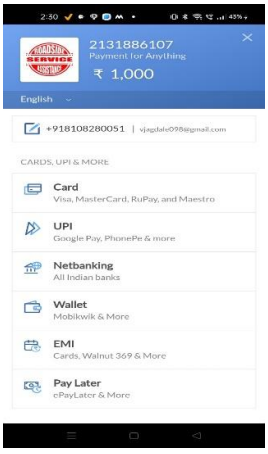
E. Our Services



F. Online Payment

You also pay online money of particular service to the mechanics, just select service transaction page automatically open.





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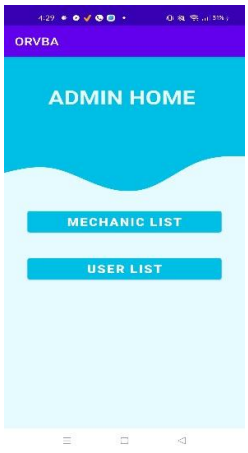
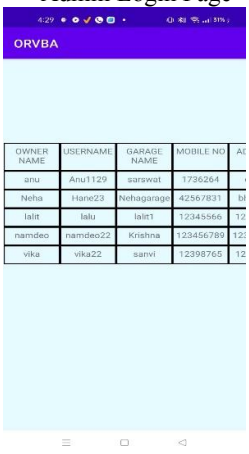
G. Admin Details

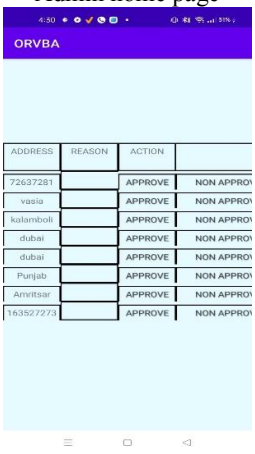
Admin Login Page



Admin home page



Mechanic Approval List

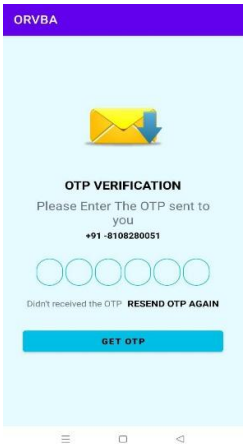


Mechanic Non-Approval List

H. OTP Verification

After user Registration process user needs to verify their mobile no and user get OTP on registered mobile no.

Enter OTP page



OTP Verification Page

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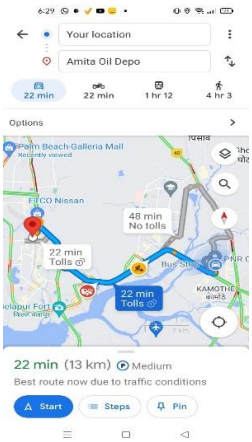
I. Nearest Garage Location

User can find the nearest garage location from the current location.



Location Of garage

List Of nearest Mechanic

V. Conclusion

Thus, our on road Vehicle breakdown assistance give better location result. it's easily identifying the nearby location which is incredibly useful to the user who uses it in emergency needs. the applying provides navigation to the closest emergency service as selected by the user. It also provides contact information of those services. This approach makes the user experience very easy and performs better than the present system in crucial times like this. Our application shall make all possible efforts to locate and direct the closest service provider to user's location. It helps us the user for mechanical breakdown towing, fuel delivery, flare tire change and vehicle collision etc. Service details will be accessed from the applying, which is stored within the server as a part of the broader roadside assistance service.

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