



SMART INDIA HACKATHON '17

MECHANIC ON THE GO



Team Name: **BrainWave**

Problem Code: **#RH4**

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Problem Statement: In case of tyre burst/puncture, the nearest mechanic with contact details can be found through the app. The mechanics can be registered on the app and they will receive a notification for a nominal charge.

Solution: Mobile Mechanic is an easy to use app to service and get your vehicle fixed. It's prime objective is to make vehicle repair and maintenance affordable and convenient.

We are working on this app because we believe that the vehicle repair industry is broken, the demand is there but it's unrecognized yet, especially in remote rural and small urbanized areas or national highways where getting a broken vehicle fixed is like an impossible dream come true and thus dealing with an unexpected vehicle break down becomes a time consuming and a frustrating experience.

APPROACH

1. Get details of all the nearest mechanic shops located around the national and state highways.





2. App will be designed with multi language support

मराठी मराठी हिन्दी
गुजराती తెలుగు లిపి മലയാളം
भाषा বাংলা
ଓଡ଼ିଆ ବାଷା ಕನ್ನಡ संस्कृतम्
விக்சிப்பீடியா འཇུག་ འཇུག་ অসমীয়া

3. We have additionally focused on the repair of heavy and large vehicles who are usually the most frequent travelers at the highways



4. 24 x 7 Availability

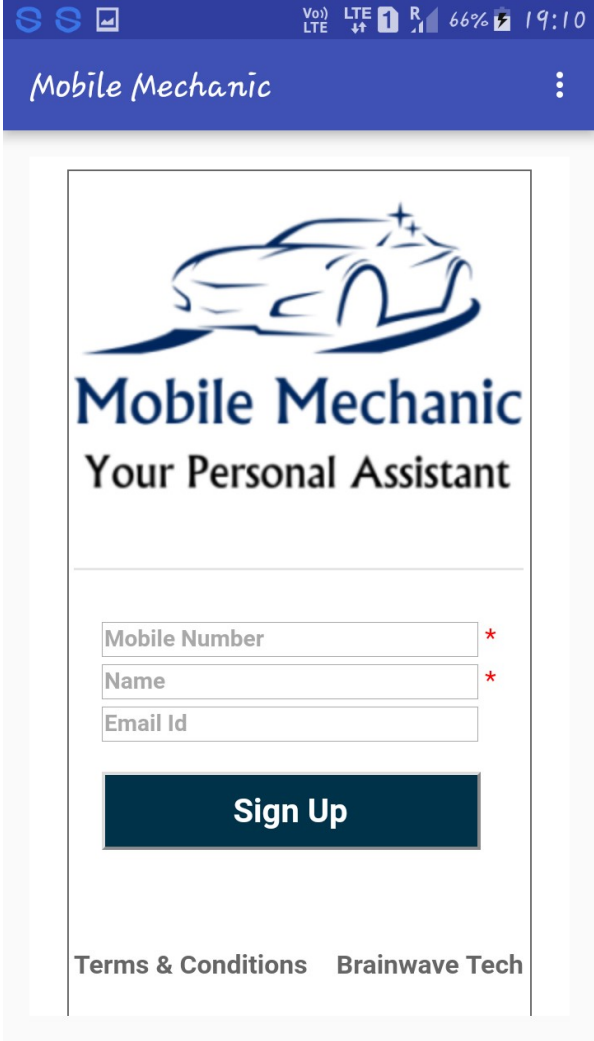
The app is designed taking in consideration the availability of the mechanic and his timing hours, so that if a mechanic is unavailable as per his timings, the user can opt from the next suggestions available.



SERVICES

1. Registration and Sign In

User can register on the app with his contact details i.e. name, email and mobile number and can get an auto generated password .



The image shows a mobile application interface for "Mobile Mechanic". At the top, there is a blue header bar with the app name "Mobile Mechanic" and a menu icon. Below the header, the app's logo features a stylized car with a plus sign on its roof. The text "Mobile Mechanic" and "Your Personal Assistant" is displayed below the logo. The registration form consists of three input fields: "Mobile Number", "Name", and "Email Id". The "Mobile Number" and "Name" fields have red asterisks indicating they are required. Below the input fields is a dark blue "Sign Up" button. At the bottom of the screen, there are links for "Terms & Conditions" and "Brainwave Tech". The status bar at the very top shows various system icons and the time "19:10".

Mobile Mechanic

Mobile Mechanic
Your Personal Assistant

Mobile Number *

Name *

Email Id

Sign Up

Terms & Conditions Brainwave Tech

2. Find Nearest Mechanic

locates the nearest mechanic on the map and get their contact details

3. Find Solutions

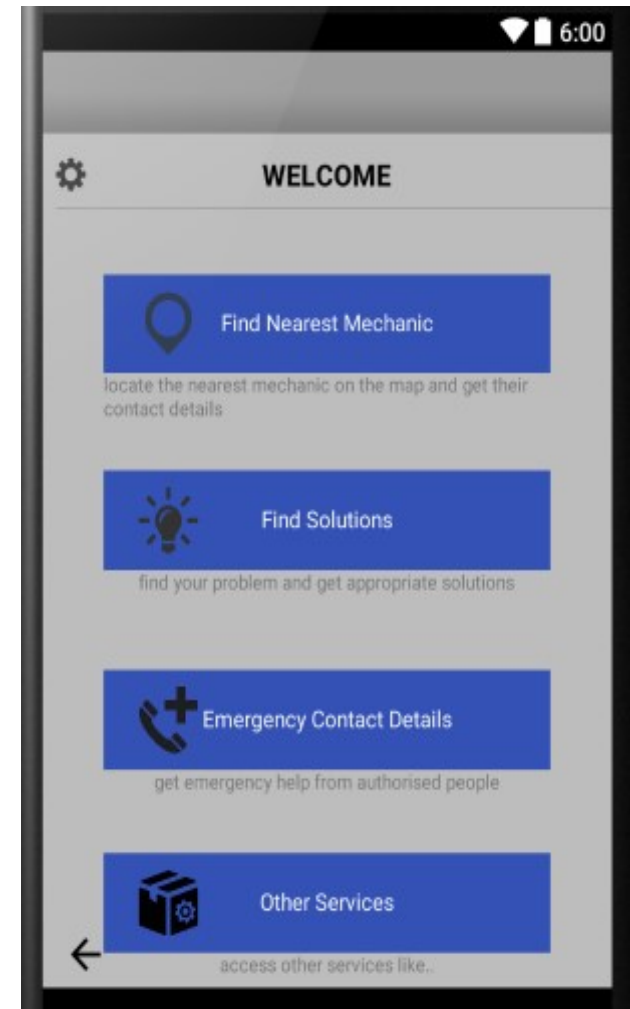
find your problems and get appropriate solutions.

4. Emergency Contact Details

get emergency help from authorized people.

5. Other Services

access other services



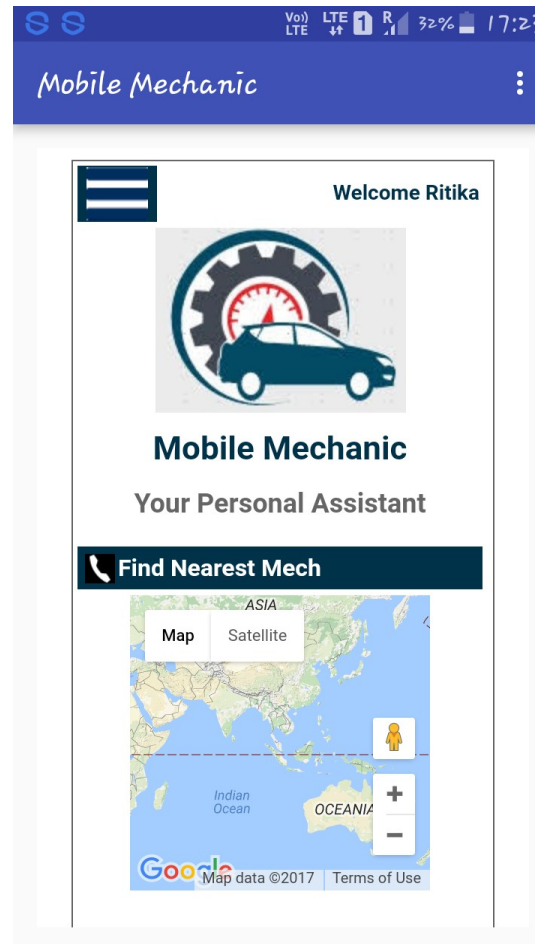
These services are divided into 2 parts:

ONLINE MODE

Find Nearest Mechanic

Through the Find Nearest Mechanic feature, the app will look up for all the nearest mechanic shops and show them on the maps.

The app also has a List View which has all the information of each mechanic in a listed format so that it is easier to read and understand for some people.



Mechanic End Features

The Mechanic End features include a separate registration window for the mechanics which can be accessed through the welcome screen.

The mechanics have to input the service provided by them category-wise like

1. Types of vehicles.

- Two Wheelers
- Four Wheelers
- Heavy Vehicles

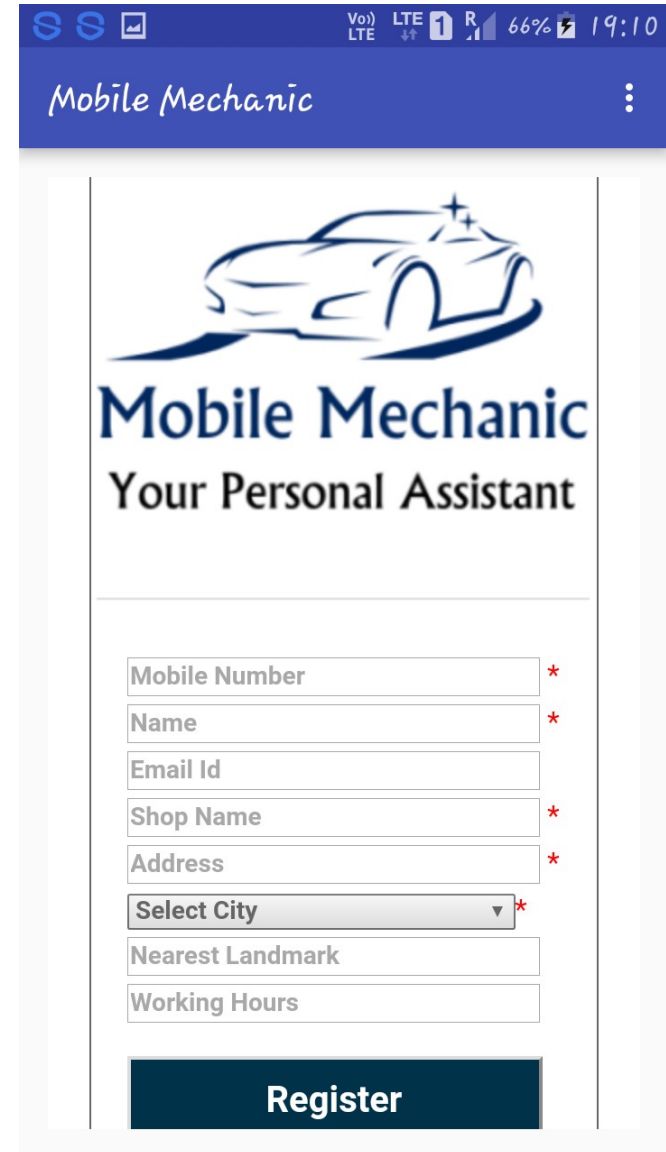
2. Service Types:

- Puncture
- Tyre and Tube Replacement
- Washing and more

3. Unbiased Cost Estimation: all the service costs are predetermined and unbiased.

4. Timings and Availability

All these features further help the users of the app to find the appropriate mechanic more effectively.



The screenshot displays the registration interface of the 'Mobile Mechanic' app. At the top, a blue header bar contains the app's name and a menu icon. Below this, a logo featuring a car with a plus sign is shown, followed by the text 'Mobile Mechanic' and 'Your Personal Assistant'. The registration form consists of the following fields:

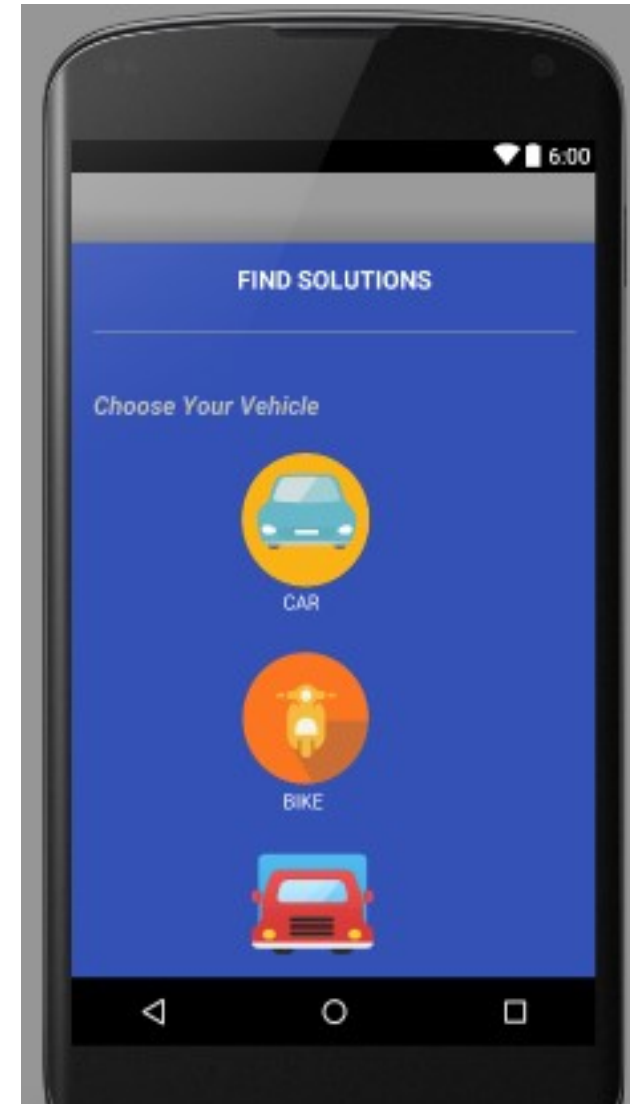
- Mobile Number *
- Name *
- Email Id
- Shop Name *
- Address *
- Select City *
- Nearest Landmark
- Working Hours

A dark blue 'Register' button is located at the bottom of the form.

Find Solutions

Under this feature, the user can choose the type of his vehicle and then get appropriate solutions to the problems that get listed below in the drop down menu.

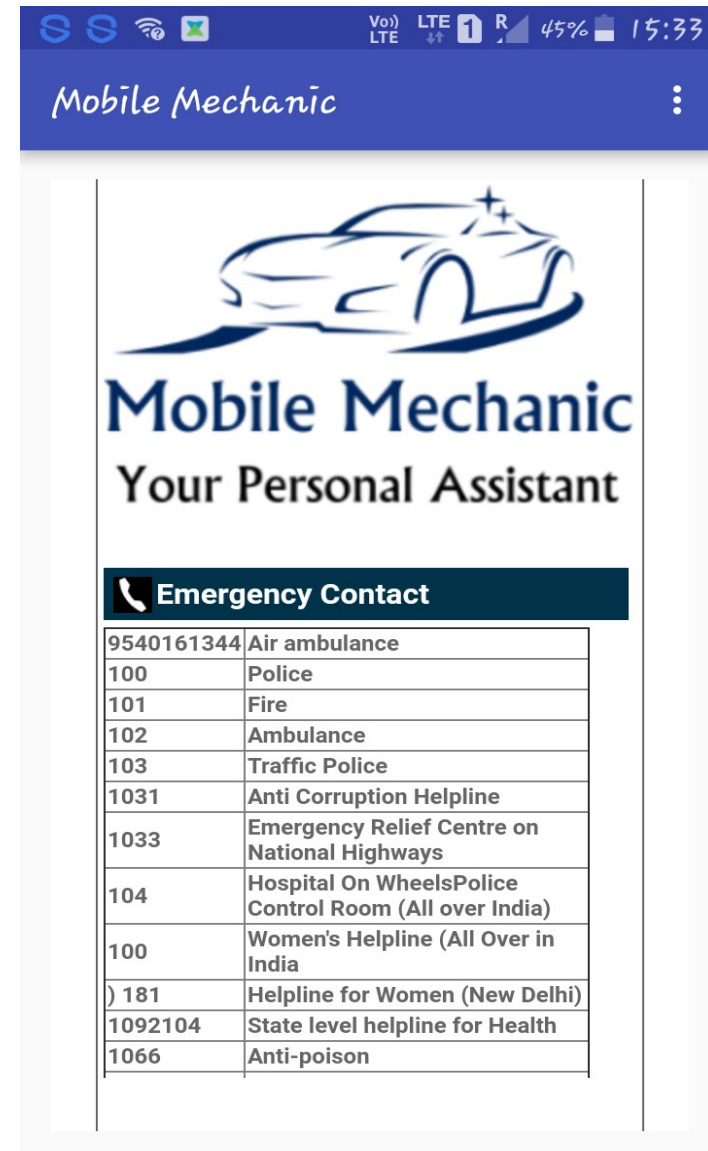
We have dealt with almost all the major vehicle problems and tried our level best to list them and be used by the users.



OFFLINE MODE

Emergency Contact Details

Emergency Contact Details include all the major SOS and Roadside Assistance numbers that a user might need at the time of a vehicle breakdown or maybe an accident. It also has other contact details like Women Helpline Numbers, Towing Trucks, Ambulance and Highway Emergency numbers that can be reached out to, even when there's no network.



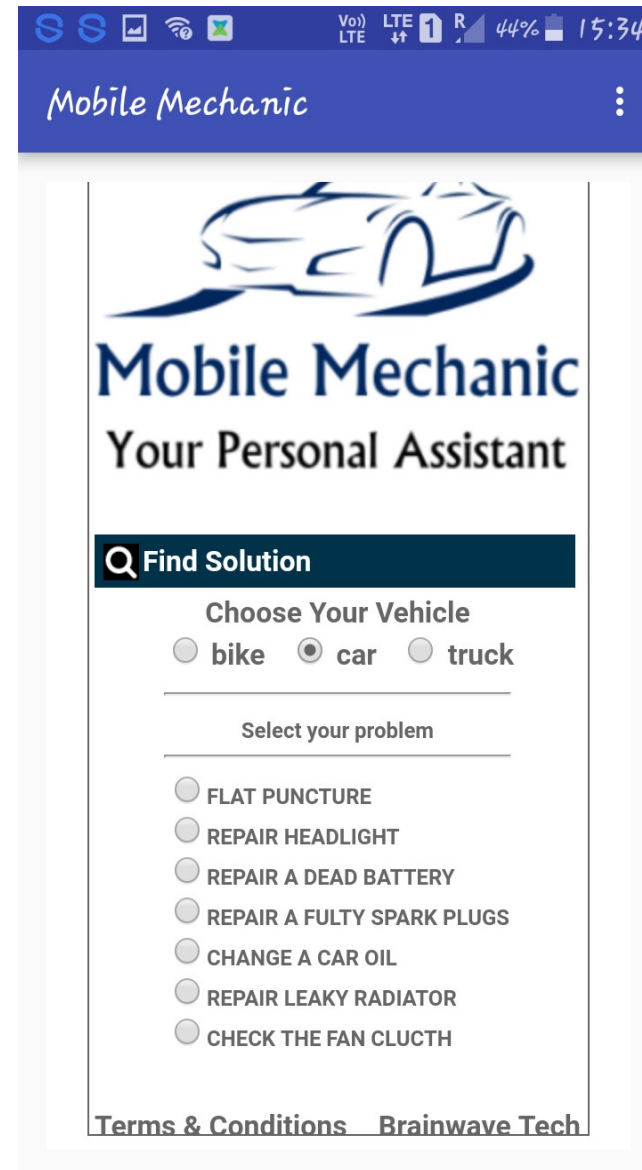
Find Solutions

(also available offline)

Under this feature, the user can choose the type of his vehicle and then get appropriate solutions to the problems that get listed below in the drop down menu.

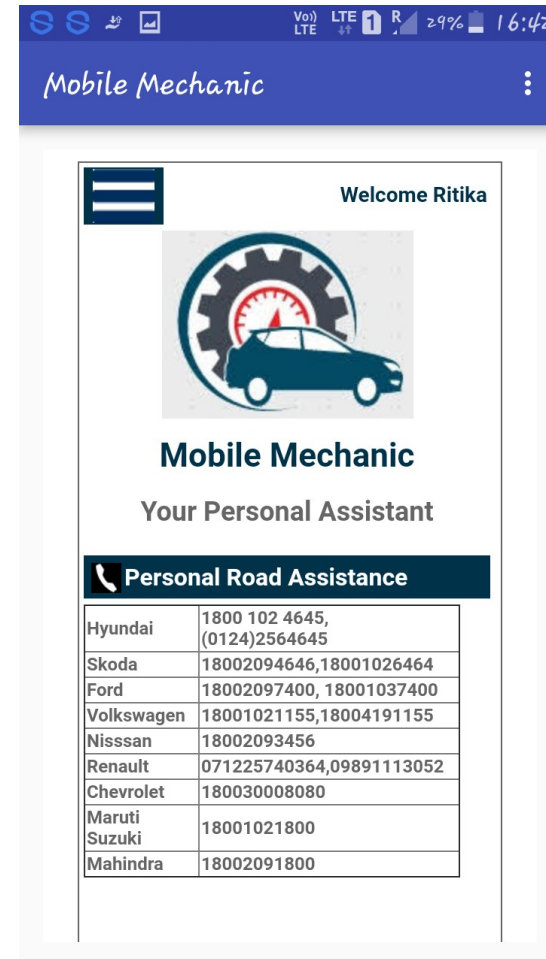
We have dealt with almost all the major vehicle problems and tried our level best to list them and be used by the users.

Additional GIF tutorials are also provided for easy understanding of the user.



Other Services

Other Services include Roadside Assistance and Reader Manuals of various Vehicle Manufacturing Companies and several Youtube links.



Technology Stack- PHP, MySQL, Android Studio

TECHNOLOGY STACK



DEVICES & OS

Android, iOS

PROGRAMMING LANGUAGE

Java, Objective C

DATABASE

MySQL

CROSS PLATFORM DEVELOPMENT

PhoneGap

MOBILE FRAMEWORK

HTML, CSS, jQuery

YOUR SERVER

Back End



UI LAYER

NATIVE APPLICATION

Multi Platform(Android, iOS)

USER'S PHONE

Front End

Commercialization of the Product

This app is designed for commercialization purpose with revenue generation.

The total length of national highways in India is approximately 10 lakhs kms.
A recent survey of National Highway 162 was done by the team-

1. NH-162 length= 89kms
2. Mechanic Shops available= 12
3. Approx 1 Mechanic in every 2km

This means that across all the highways there are approx 5 lakh mechanics.

If we charge the mechanics 100Rs per registration till a sufficient amount of services provided by them till next registration, it will generate around Rs 5 lakh x 100 amount by the registration process.

We can add on points to user's experience as well as mechanic's experience.

THANK YOU