**CHAPTER -1**

**INTRODUCTION**

**1.1 Project Defination: - Mobile Automotive Technician**

­ Developing Android clients & Java Enterprise (Server) applications to help people especially those who faces auto / motor dysfunctions and seeks assistance of motor mechanics badly and for those motor mechanics who wish to provide better solutions with competitive charges and of course to earn more & expand their businesses.

The main reason to develop an application which brings automotive servicing to home, work, jobsite, roadside or wherever your vehicle happens to be. This app is a gateway for all kind of automotive technicians and people who own automobile and faces issues with them. This app should include detailed information of all kind or types of automotive technicians, workshops, automotive shops, dealers, Govt. offices and other services including towing vehicles.

A person can search automotive technicians or Automotive shops around or near to his/her location and send request for services or register the appointment by describing issues vocally or filling issue forms. A person can asks or know the charges for different services of different technicians and compare them based upon the feedback of people who have got quality services from them.

The app should offer appointment scheduling, problem diagnosis, estimating, repair, verification of repair, computer invoicing, and customer follow-up and many other things that we should include as we understand them.

## Project Summary

Developing Android clients & Java Enterprise (Server) applications to help people especially those who faces auto / motor dysfunctions and seeks assistance of motor mechanics badly and for those motor mechanics who wish to provide better solutions with competitive charges and of course to earn more & expand their businesses.

## 1.2 Purpose

1. To help out those people who faces auto / motor dysfunctions in the middle of the road or on remote area where a person has no demography know-how or needs a motor mechanics badly.
2. Motor mechanics post their profile, location details and the services they offer to the customers so anybody can contact & communicate them and tell them what to do or not and offer help in various possible ways.
3. Application provide service to find mechanic, automotive spare parts and gas station any time at any place.
4. A person can search automotive technicians or Automotive shops around or near to his/her location and send request for services or register the appointment by describing issues filling issue forms. A person can asks or know the charges for different services of different technicians and compare them based upon the feedback of people who have got quality services from them.
5. Automotive workshops and individual motor mechanics reminds their customers about when their vehicles need a service.
6. Vendor can stay touch with customers via advertisements and they provide e-shopping of automotive spare-parts.
7. Helpline services - Govt. offices and other services including towing vehicles.

## 1.3 Scope

A system - "Mobile Automotive Technician" 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 facilitate the process of searching, tracking and settling shared vehicles, automotive mechanics and shops detailed data. Potential scenarios include searching locations, emergency contacts, managing requests/orders/complaints, paying charges, and encouraging people etc.

The main component of the project is the software application, which will be limited to the Android operating system (specifically Android 2.2 and above). The application is not resource- or graphics-intensive, so there are no practical hardware constraints. The app will rely on several functionalities built into Android’s Application Programming Interface (API), so ensuring appropriate usage of the API will be a major concern.

Beyond that, the application is a self-contained unit and will not rely on any other Android-related software components. The application will, however, frequently interact with the JavaEE Application server, a virtual dedicated server. The server operates on a Linux/Windows platform with 2 GB of RAM and 100GB of allocated storage space. The database will be stored on the server using MySQL and will be interfaced with a wrapper written in JavaEE RESTful application.

**Existing System**

1. There isn’t such an app, however, individual automotive technicians, workshops and shops businesses may or may not use social media to expand their business - especially using Facebook, google plus business pages.
2. There isn’t a very specific information about individual automotive technicians, workshops and shops businesses in a given area or demography.
3. Rates of technician services, workshops services and spare-parts have significant differences among them.

**Proposed System**

1. Provide detailed information to the customer of automotive technicians, workshops and shops as per his/her given search parameters.
2. Each automotive technician, workshop and shop business must be verified by the app business owner before they can post anything about their business
3. People get immediate response from all internal & external entities of this system.
4. Customer can hire services anytime with smooth pay options
5. Customer can order spare-parts with smooth payment.
6. Automotive technicians and workshops alert customers about the due service of vehicles and keep inform & aware them.
7. Customer compare the charges – automotive technicians & workshops
8. Runs the helpline.
9. Boost the businesses and helps people.
10. Elegant user interface & improved user experience.
11. Assistant Tutorial – How to use the application?
12. Only verified business allowed.

**Limitations**

1. UI language is English. It might not an ease of use for non-English. However, they can use with some sort of assistance.
2. App for Android smartphones.
3. Improper business verification process can leads some issues.

**1.4 TECHNOLOGY AND LITERATURE REVIEW**