

#### **SYNOPSIS ON**

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**EVRC** (Electronic vehicle rental & charging)

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#### **Acknowledgement**

It gives us a great sense of pleasure to present the synopsis of the B.Tech mini project undertaken during B.Tech III Year. This project is going to be an acknowledgement to the inspiration, drive and technical assistance will be contributed to it by many individuals. We owe special debt of gratitude to Ms. Madhu, Technical Trainer, for providing us with an encouraging platform to develop this project, which thus helped us in shaping our abilities towards a constructive goal and for his constant support and guidance to our work.

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# **INTRODUCTION**

The EV charging station and car booking project is an innovative solution aimed at facilitating the transition to electric vehicles. This project involves the development of a platform that allows users to easily find and book electric cars and charging stations in their area

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The platform will feature a map that shows the location of available charging stations and electric cars, along with real-time availability information. Users will be able to reserve a charging station or an electric car directly from the platform, and receive notifications when their reservation is confirmed.

The project will also include the installation of new EV charging stations in strategic locations, such as shopping malls, airports, and public parking areas, to make it more convenient for electric vehicle owners to charge their cars.

Overall, the EV charging station and car booking project is designed to promote the adoption of electric vehicles by making it easier and more convenient for people to find and use them. This project will also help reduce carbon emissions and promote sustainable transportation.

#### **SOFTWARE SPECIFICATION**

• Application Type: Web Application

• Language Used: HTML, CSS, PHP, Javascript

• Database: Mysqli

• Web Browser: Chrome, Edge, Firefox

# HARDWARE REQUIREMENTS

- Microsoft Windows XP/7/8/10 (32-bit or 64-bit)
- 1GB RAM minimum
- 2 GB of available disk space minimum

# **Project Description**

The EV charging station and car booking project is a comprehensive solution designed to make it easier for people to transition to electric vehicles. The project includes the development of a platform that allows users to find and book electric cars and charging stations in their area.

The platform will be designed to be user-friendly and accessible, even for people who may not be familiar with electric vehicles or the charging process. The platform will feature a map that shows the location of available charging stations and electric cars, along with real-time availability information.

Users will be able to reserve a charging station or an electric car directly from the platform, and receive notifications when their reservation is confirmed. The platform will also provide users with information on the estimated charging time and cost, as well as the distance that the electric car can travel on a single charge.

In addition to the development of the platform, the project will also involve the installation of new EV charging stations in strategic locations, such as shopping malls, airports, and public parking areas. The installation of these charging stations will make it more convenient for electric vehicle owners to charge their cars, reducing range anxiety and promoting the adoption of electric vehicles.

The project team will work closely with electric vehicle manufacturers, charging station providers, and other stakeholders to ensure that the platform and charging infrastructure are compatible with a wide range of electric cars and charging stations.

Overall, the EV charging station and car booking project is a comprehensive

# **Working**

The EV charging station and car booking project will involve several stages of work, including:

**Research and planning:** The project team will conduct extensive research on electric vehicles and the charging process, as well as the needs and preferences of potential users. This research will inform the development of the platform and the selection of charging station locations.

**Platform development:** The team will work to develop a user-friendly platform that shows real-time availability of electric cars and charging stations. The platform will also allow users to reserve electric cars and charging stations directly from the platform.

**Ongoing maintenance and updates:** The team will continue to maintain and update the platform and charging infrastructure to ensure that they remain functional and up-to-date with the latest technology and user needs.

Overall, the EV charging station and car booking project will involve a significant amount of work across several stages. The project team will work to ensure that the platform and charging infrastructure are user-friendly, accessible, and compatible with a wide range of electric vehicles. By promoting the adoption of electric vehicles, this project will help reduce carbon emissions and promote sustainable transportation.

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#### **FUTURE SCOPE**

The EV charging station and car booking project has significant potential for future expansion and growth. Some of the potential future scope for the project includes:

- **Integration with renewable energy sources:** As renewable energy sources become more prevalent, there is an opportunity to integrate EV charging stations with these sources to promote sustainable energy use.
- **Incorporation of smart technology:** The project could incorporate smart technology, such as artificial intelligence and machine learning, to optimize charging times and reduce energy consumption.
- Collaboration with ride-sharing services: The project could collaborate with ride-sharing services to provide electric vehicles for rent, further promoting the adoption of sustainable transportation options.
- **Development of mobile applications:** Mobile applications could be developed to provide users with real-time information on the availability of charging stations and electric cars, as well as the ability to reserve and pay for charging services.

Overall, the future scope for the EV charging station and car booking project is vast, and the potential for growth and expansion is significant. By continuing to innovate and expand the project, we can continue to promote sustainable transportation and reduce carbon emissions.

