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A Literature Survey Paper on Electric Vehicle Charging Station Finder App

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Abstract: In today's era, EV vehicles are being seen more and more. This is the coming future that most of the vehicles are going to remain electric vehicles. According to this we will get to see mostly EV charging stations. The electric car driver will mostly take the car to the charging station itself for charging. So we are making an app for EV rider which will help to find EV charging station and book charging slot. This app will show all the stations around the rider. Rider can easily access any station information. Like whether there is a slot available at the charging station or not, the rider will know on the app. And rider can book charging slot from this app, they can book charging slot at particular time or any date. And the rider can pay the payment through this. With the help of this app, the rider can save his time and get the right information and stay updated User can use this app easily and improve your journey.

Keywords: Electric Vehicles, Station Finder, Slot Booking, Payments, Location.

I. INTRODUCTION

The electrically-powered machines manufactory is uplifting fast nowadays. Numerous persons scanning for EV charging station finder and slot booking app evolution to encapsulate a broad user base. This app helps users to uncover closer EV supply equipment. Also the users can perform slot bookings previously. The factors of the system permits electric automobiles users to detect and uncover the electric power supply equipment near them and reward respective sum for charging by reserving the intervals. Some EV holders have insufficient space or don't have latent to charge the EVs from home. Even while user is charging the EV at home one can get discharged in between the journey. Therefore the user needs reviving support. Hence using EV charging stations at the condition of emergency is convenient. Eventually the driver does not have to alter their trip to return home. The entry of EVs is the more important enterprise on a way of going eco-friendly and assembling our surroundings cleaner. Among the transformation in an automobile manufacturing the EV's market has skilled up great progress over past years. By establishing an application it gets effortless for EV users to discover the nearest EV charging stations. It is an EV charging station finder and slot booking app which displays closer charging stations in area where the user is present. Over this application users get approach to the instantaneous availability, images, grading & illustrations of the charging points.

II. OBJECTIVE

The goal of EV charging station finder & slot booking app is to minimize difficulties coming to the EV riders in phase of reviving their electrically-powered automobiles. The user can see which recharging points obtainable. The users can easily get the charging stations. The main goal of evolving this kind of application is to provide as many as possible services to electric vehicle users on spot. Once the goal of growing the app for searching EV charging stations and slot booking is achieved user will able to get the services at their location. In the system user have control on all their EVs present in app. As well they have previously book a slot facility.

III. LITERATURE SURVEY

| Authors | Issue Addressed | Propose Work | Query Language | Advantages | Disadvantages | Tool Supported / Implementation |
|--|-----------------|---|-----------------------------------|--|---------------|---|
| [1]. Dr. Omar A. Ibrahim, Khalid J. Mohsen | - | Provide the android mobile user to add, remove and review | MySQL, Google Direction App, PHP. | Showing directions with the optimal path between source and destination and calculating the distance | - | Online location-based services using Google maps for android mobile |

| | | | | | | |
|---|---|--|---|--|---|--|
| | | specific locations on the online map. | | and expected driving time. | | |
| [2]. H. Li, L. Zhijian | - | Google map API is a set of application programming interfaces that let us talk to services | - | Google maps API provides several utilities for adding individual content to Google maps. | - | Mobile GPS navigation system based on Google maps. |
| [3]. A M Qadir P. Cooper | Working on Web-based applications by using global positioning system(GPS) | GPS-based mobile cross-platform cargo tracking system | - | Once the receiver calculates its distance from four or more GPS satellites. | - | - |
| [4]. F. Thung | APIs simplify how developers integrate new application components into existing architecture. | API recommendation system for software development. | - | They help business and IT teams collaborate. | Business needs often change quickly in response to ever-shifting digital markets. | - |
| [5]. Joao C. Ferreira, Vitor Monteiro, Joao L. Afonso, Alberto Silva member | Due to the electrical power distribution network limitation and the absence of smart meter devices. | The design of a system to create and handle electric vehicle (EV) charging procedures. | - | Weather information based on data mining, and simulation approaches. | Electric vehicle charging should be performed in a balanced way taking into account experience. | - |

IV. CONCLUSIONS

With some great features and functionalities, we expect to get many electric vehicles on the market in the future. The rising demand for EVs increases the need for charging stations and station locator apps also. So, if you are planning to create such an app to meet users expectations and win the competition, hire an experienced app development company in no time.

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