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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.

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

## **III.LITERATURE SURVEY**



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		specific		and expected driving		
		locations on		time.		
		the online				
		map.				
[2]. H.		Google map		Google maps API		Mobile GPS
Li, L.		API is a set of		provides several utilities		navigation system
Zhijjan	-	application	-	for adding individual	-	based on Google
		programming		content to Google maps.		maps.
		interfaces that				
		let us talk to				
		services				
[3]. A M	Working on	GPS-based		Once the receiver		
Qadir P.	Web-based	mobile cross-		calculates its distance		
Cooper	applications	platform		from four or more GPS		
-	by using	cargo tracking	-	satellites.	-	-
	global	system				
	positioning					
	system(GPS)					
[4]. F.	APIs simplify	API		They help business and	Business needs	
Thung	how	recommendati		IT teams collaborate.	often change	
C C	developers	on system for			quickly in response	
	integrate new	software			to ever-shifting	
	application	development.	-		digital markets.	-
	components	<b>^</b>			C	
	into existing					
	architecture.					
[5]. Joao	Due to the	The design of		Weather information	Electric vehicle	
C. Ferreira,	electrical	a system to		based on data mining,	charging should be	
Vitor	power	create and		and simulation	performed in a	
Monteiro,	distribution	handle		approaches.	balanced way taking	
Joao L.	network	electric	-	**	into account	-
Afonso,	limitation and	vehicle (EV)			experience.	
Alberto	the absence of	charging			*	
Silva	smart meter	procedures.				
member	devices.	1				

## **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.

## REFERENCES

- [1] Design and Implementation of an Online Location-Based Service Using Google Maps for Android Mobile Dr. Omar A. Ibrahim 1, Khalid J. Mohsen2.
- [2] The Study and Implementation of Mobile GPS Navigation System Based On Google Maps H. LiL.Zijian.
- [3] GPS-Based Mobile Cross Platform Cargo Tracking System with Web-Based Application. A M Qadir, P. Cooper.
- [4] API Recommendation System for Software Development F. Thung.
- [5] Smart Electric Vehicle Charging System Joao C. Ferreira, Victor Monteiro, JoeoL.Afonso, Alerto Silva Member, IEEE.
- [6] Location Tracking Using Google Geolocation API Monika Sharma, Sudha Morwal.
- [7] Traffic and Mobility Data Collection for Real-Time ApplicationJ.Lopse, J. Lopse, J. Bento E. Huang., C. Antoniou, M. Ben-Akiva.
- [8] Trip Planning Route Optimization with Operation Hour and Duration of Stay Constraints Wai Chong Chia\*, Lee Seng Yeong, Fennie Jia Xian Lee, Sue Inn Ch'ng.
- K. Clement, E, Haesen, and J. Drisen, "Coordinated charging of multiple plug-in hybrid electric vehicle in residential distribution grids," in Proc. IEEE/PES Power System Conf.Expo., 2009, pp. 1-7
- [10] H-J Kim J Lee, G-L. Park, M., -J Kang, and M. Kang, "An efficient scheduling scheme on charging station for smart transportation," in proc. International Conference on SuComs, Daejon, Korea, Sep.2010, pp. 274-278











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