

SMART ONLINE TRANSPORT BOOKING SYSTEM

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Abstract- This project mainly deals with creating an application regarding transport booking and checking the availability of Transport. For this application we will store some modules names like User, Admin and Transport owner. Transport booking system provides reliable online(Android based) Trans- port(pickup, Tempo, etc) booking facility to people. Transport acts like a bridge between the Transport Operator and the customers/users/people who book a Transport. This is the online transport booking service provided to customers. This brings together the registered transport agencies/transport operators/transport owners and the customers. Provide service to the customers/users who go for booking a transport. Tracking System involves the installation of an installed Android App on any SMART phone to enable the Administrator/User to track the vehicle's location. Transport carry GPS devices like mobile to track their positions. It shows where are on a map and provide users the updated information at different time interval as per user request. The transport operator can get flexibility of planning travel using the app, to decide on which transport to take or when to catch the transport. The waiting time of the user can be reduced.

Keywords- Vehicle Tracking System, Real-Time System, Big Data Solution, GPS GSM/GPRS Technology, Vehicle Tracking, Microcontroller, Google Maps API Smartphone Application.

I. INTRODUCTION

If you are responsible person of your feet business then its not easy to manage your fleet without knowing the customer requirement or popularity of our business. So here smart transport booking system comes in use. This gives idea to book vehicle form your Smart-phone at home or any-where and it provides the availability of the vehicles which are nearby to you and you choose among the best vehicle according to review for transferring the different types of luggage's(goods, baggage, etc.). You can also request for current location of the vehicle.

We need the Smart Vehicle Booking system because it has various uses. Some of them are:

First and foremost you know all nearby vehicles from your area by using this application on your smart-phone.

It provides flexibility to customer of booking vehicle for transportation purpose.

Customer can choose vehicle according to their requirements. Also checks better vehicle according to review.

II. LITERATURE SURVEY

- **Title: _ First choice**

It is the application which is providing the service of mechanic to the customer. The problem of the application is that when a customer wants to register there is a registration problem, also the customer who is demanding for the mechanic must have his/her car registration first as there is field in the registration form where customer have to fill car registration number.

- **Title: Meri car**

It is application provides the nearest mechanic location and also provide location of the nearest workshop location. The problem with the application is it crashes after certain time, also it is not that user friendly. Manual searching option that is available in the application do not work properly.

- **Title: 24/7 mechanic**

It is the application allows you to search the mechanic area wise. This is the only application that provides service to two-wheeler. The problem with the application is that the registration timeout before filling the complete form.

- **Title: Wrench**

It is a mobile mechanic service that comes to your home office to work on your car. This app provides scheduled maintenance for vehicle owners. Wrench offers a membership

for hassle free car maintenance - we come to you once a quarter to change your oil or rotate your tires, and perform a thorough safety inspection and fluid top offs. The limitation of this app is that there is no tracking mechanism of your job.

- **Title: Child safety and tracking management system**

It ensures maximum security and ensures live tracking for their kid. This paper proposed a model for child safety through smart phones that provides the option to track the location of their children as well as in case of emergency children is able to send a quick message and its current location via Short Message services. Parents side used SMS and GPS services for communicating with child's mobility and Google maps parent used to view child's location on map and as well as their distance from automatically calculated and displayed mobile screen. At the child side another android phone supports GPS and SMS facilities. Table 1 provides information about different app and website on which we have done survey from 2015. This system depends upon the GPS functionality therefore; its working completely depends upon the cellular network, it will not work perfectly if the cellular network is poorly or not available. In that case, the application fails to provide the exact location. But the application stores the last location which stored in the database server. This system is unable to sense human behavior of childlike-crying etc.

III. PROPOSED SYSTEM

Vehicle booking System is software which is helpful for This project mainly deals with creating an application regarding transport booking and checking the availability of Transport. For this application we will store some model names like user, Admin and Transport owner. Transport booking system provides reliable online(Android based) Trans-port(pickup, Tempo, etc) booking facility to people. Transport acts like abridge between the Transport Operator and the customers/users/people who book a Transport. This is the online transport booking service provided to customers. This brings together the registered transport agencies/ transport operators/transport owners and the customers. Provide service to the travelers/customers/users who go for booking a transport. Tracking System involves the installation of an installed Android App on any SMART phone to enable the Administra-tor/User to track the vehicle's location. Transport carry GPS devices like mobile to track their positions. It shows where are on a map and provide users the updated information at different time interval. The transport operator can get flexibility of planning travel using the app, to decide on which transport to take or when to catch the transport. The

waiting time of the user can be reduced. In vehicle module a user can add a new vehicle details to the database.

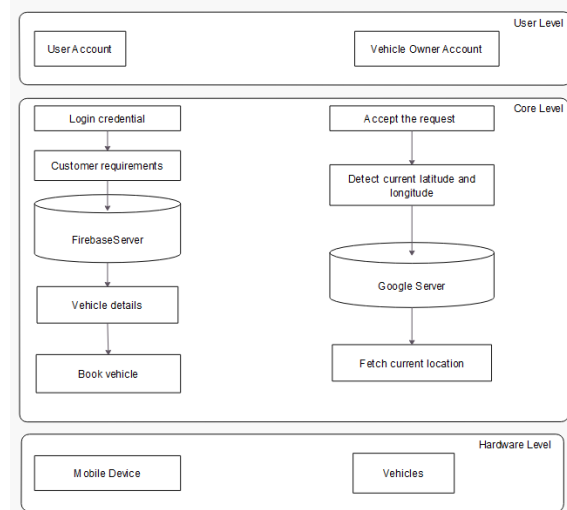


Fig: Architecture Diagram

IV. STATEMENT OF SCOPE

The Vehicle Tracking in India has basic components like mobile vehicle tracing unit which combines with cellular modem which is carry with vehicle. Vehicle tracking system is becoming increasingly important in large cities and it is more faster than other systems. The vehicle can be track only with a simple SMS. This setup can be made more interactive by adding a display to show some basic information about the vehicle and also add..

V. USER PROFILES

Actors and Description of Actors:

1. Administrator:
 - Administrator responsible for manage the Smart Online Transport Booking Application.
 - Admin checks for the service provided by transport in the form of review and rating.
 - Their responsibility is that manages all database.
 - Also responsible for Approve the transport users.
2. Transport Owner:
 - Transport owner is responsible for entering valid details of vehicle.
 - It also responsible for sending the current location when customer request.
 - It provides the different service location.
3. Customer:

- First Customer is responsible for the registration in application.
- They must select the source and destination and enter the approximate capacity.
- Customer should press the book option for conformation.

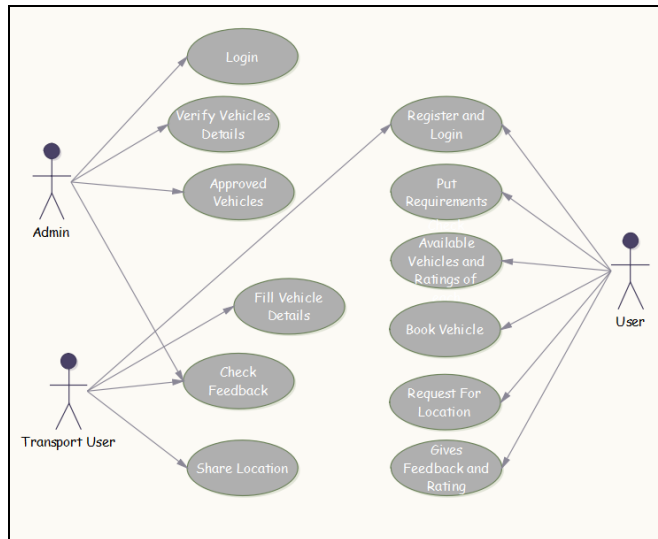


Fig: Use-Case Diagram

VI. CONCLUSION

This paper describes Smart Online Transport Booking System which is completely automated, unbiased and online for booking vehicle, increasing reliability and reducing the time of booking process the project is divided mainly into two section first one is Customer registration phase of customer and second one is of Transport vehicle registration. Project contains smartphone device which will verify the identity from the database saved in repository by the communication and if respective transport user is identified then authorization will approve to that respective user, also it will prevent the duplication and falsification of vehicle details. The main focus of the proposed system is customers are not necessarily come for booking office for booking vehicles, whereas our application provides online service for vehicle booking through smartphone.

VII. FUTURE SCOPE

The Smart Online Transport Booking System can also be implemented with another kind of GPS tracking system like Live tracking. System can be integrated with more secure algorithms while registering vehicle into database System.

REFERENCES

- [1] Brahim Hnich, Ozkan Sayin, Amine Lamine, "Smart Online Vehicle Tracking System for Security Applications", 978-1-4673-9005-7/16/\$31.00 ©2016 IEEE.
- [2] Nusrath Jahan, Kamal Hossen and Muhammad Kamrul Hossain Patwary, "Implementation of a Vehicle Tracking System using Smartphone and SMS service", 978-1-5386-0869-2/17/\$31.00 ©2017 IEEE.
- [3] Chen Chen, Qingqi Pei, Member, IEEE and Xiaoji Li, "A GTS Allocation Scheme to Improve Multiple-Access Performance in Vehicular Sensor Networks", 0018-9545 (c) 2015 IEEE.
- [4] Khairul Shafee Kalid, Nabihah Rosli, "The design of a schoolchildren identification and transportation tracking system", 978-1-5090-6255-3/17/\$31.00 ©2017 IEEE.
- [5] Saad Mohamed, "Empowering vehicle tracking in a cluttered environment with adaptive cellular automata suitable to intelligent transportation system immunity".
- [6] Y. A. Quintero, G. Patiño and J. E. Aedo, "Path-Tracking Algorithm for Intelligent Transportation Systems", IEEE LATIN AMERICA TRANSACTIONS, VOL. 14, NO. 6, JUNE 2016.
- [7] Muruganandham, "Real Time Web based Vehicle Tracking using GPS", World Academy of Science, Engineering and Techonogy, 37, 2010.
- [8] SeokJu Lee, Girma Tewelde, Jaerock Kwon, "Design and Implementation of Vehicle Tracking System Using GPS/GSM/GPRS Technology and Smartphone Application", 978-1-4799-3459-1/14/\$31.00 ©2014 IEEE.
- [9] Chien-Chung Wu, Kai-Wen Weng, "The detecting and tracking system for vehicles", 978-1-5386-2761-7.
- [10] Mironov K., "Transport by robotic throwing and catching: Accurate stereo tracking of the spherical object", 978-1-5090-5648-4/17/\$31.00 ©2017 IEEE.