

Bus Transportation System On Click

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Abstract—Due to immense development in technology, other systems as we are using inbuilt GPS receiver in a every field is making the best use of technology so why mobile phone instead of a separate handheld GPS device. not our public bus transportation. Today's Bus schedule system is an application of intelligent transportation system still uses the traditional ways mobile devices, mainly GPS. The core part of this for ticketing. Also people need to stand in queues for Android phones. This application uses the GPS function long hours. Therefore user needs a smart system also, available in most smart phones today, to pin point which provides real time information of bus and gives your location fairly accurately. To pin point your location an easy way to purchase a ticket. So we proposed a fairly accurately. With this application installed on your new android application which overcomes the Smart phone, you need to do is to start up your apps when disadvantages of the current public transportation you needed. User has to select the source and destination system. Our application will handle all the data like .This application will show you the bus timings with the current location of bus, punching of bus-passes having accurate fare as per your source and destination It also QR code, On-time ticketing using E-wallet .The real runs in the background so you are free to use your phone time tracking of bus can be done by our proposed for the other activities like playing games, listening songs system and this information is then given to remote etc. This application also gives the users current position. user. Technologies like GPS (Global Positioning And also includes the user's security Transportation System), Cloud, E-wallet are used for development demand in most of the Indian cities has increased purpose. Our system provides an Android significantly, as a result of the natural increase in application, which gives bus pass with QR code, real population as well as due to migration from smaller towns time location of bus to user. and rural areas. As per surveys, the growth of population for the metropolitan areas such as Mumbai, Kolkata, Delhi, etc. exceeded 10 million residents each. Chennai, Hyderabad, Ahmedabad, and Bangalore each have more than 5 million residents. And 35metropolitan areas have populations exceeding 1 million, which is almost twice as many as in 1991. Since large cities are far more dependent on public transport than small cities, the need for public transport services has increased faster than overall population growth. This exponential growth of population results in a high demand on transportation facility and as a result, the number of private vehicles goes on increasing which in turn results in traffic congestion, air pollution, environmental degradation, higher road accidents etc. The only way to reduce the traffic problem is to make the people use the public transportation facility. Among various means of public transportation available, the bus

Keywords— Android, Bus Tracking, Electronic-wallet, Global Positioning System

I. INTRODUCTION

. Android is becoming very popular in embedded market for two main stream reasons. First, source code is completely free; more over there are no royalty fees for Java VM (Virtual Machine). Second deriving from the first, Android is highly suitable for expansion as the developer see fit. This paper presents an approach using Android SDK as to develop application for paper is as follows. The cost of the Bus Timer is low as compared to

transport is preferable because of its door schedules is one critical motivational factors that influence online buying. of the key factors which makes most of the people to thinkIt was found in the study that the motivational factors do the other side. The user interacts with the system through not have significant difference between men and women. the app. Bus Timer is an android application that provides the user with accurate bus schedules between any two places.

II. LITERATURE REVIEW

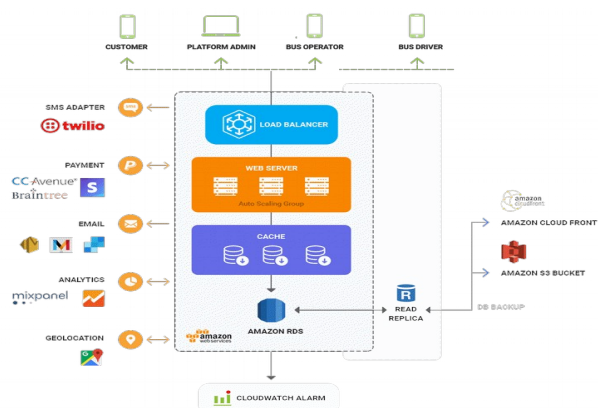
In literature [1], the author Dr. Chaya Bagrecha and Sadiq Alam authors suggested that the online booking companies have to provide the service should be provided as per the desire of the passengers and the companies have to maintain the secrecy in respect of passengers personal information. It is also suggested that the refund must be done as per the period mentioned on the websites.

In literature [2], the author Sujo Thomas, Bharthi Pathak s concluded that redbus has a volume driven business and it plans to expand further into the Indian market by opening regional offices to serve the customers better. The current strategy followed by redbus is to aggregate bus tickets by any means close at hand and later delivering to the consumers through any channel that is accessible by them. redbus has to put forward a growth model in existence which would provide a sustainable growth in the long term. redbus owners have a challenge that maintaining strong relationship with bus operators and gaining the trust of new operators/agents was a challenge right from the inception.

In literature [3], the author R. Ramya undertook the project entitled “customer satisfaction on online bus ticket booking” with an objective to analyze and evaluate the level of customer satisfaction. The main aim of this study was to find out the level of customer satisfaction towards the online reservation of bus tickets. The sample size is of 110 respondents. The study revealed that socio-economic factors like age, educational qualification, occupation, monthly income earnings of the family have direct impact on the level of customer satisfaction of the customers in relation to online reservation of bus tickets.

In literature [4], the author Sulaiman, A., Ng, J., & Mohezar, S. in their research paper entitled “E-ticketing as a new way of buying tickets” try to focus on the motivational factors that influence online buying. According to I.A.M.A.I., India has a big pool of techno savvy population that is not only browsing the internet but also purchasing products that are available online. Using internet as a medium to attract the customers and sell products or services is the basic concept of online marketing. This paper theoretically attempts to connect

III. EXISTING SYSTEM ARCHITECTURE



The above Project Application will be useful for the Local People as well as Bus Organization. The Passenger will be able to save his time as he will get the current location of the bus of his required destination. Also our Application provides cash- less transaction. As all the information will be stored on a cloud it will be helpful for the Bus Organization. Our application provides many facilities that will help to increase public means of transportation. The conductor will first Login to the application. After boarding the bus the passenger is asked for his destination. Then conductor will enter the route details as per passenger’s requirement. According to the route amount would be charged. If the passenger has bus-pass then the QR-Code would be scanned from conductor mobile app. Then the app would check bus pass status and for that particular day the pass will get punched from the database.

IV. PROBLEM DEFINITION

In reality many people prefer to take their own vehicle instead of using public transport. The main reason is that, there is no real time information about the Bus, location along the Bus route, no prior information in case the bus is cancelled or delayed due to traffic. As a result the commuter losses lots of time which can be put to better use. The number of busses running daily is huge to keep track of all the busses are a big challenge before the bus authorities . In the daily operation of bus transport systems, mainly that of buses, the movement of vehicles

is affected by different uncertain conditions as the day progresses, such as:

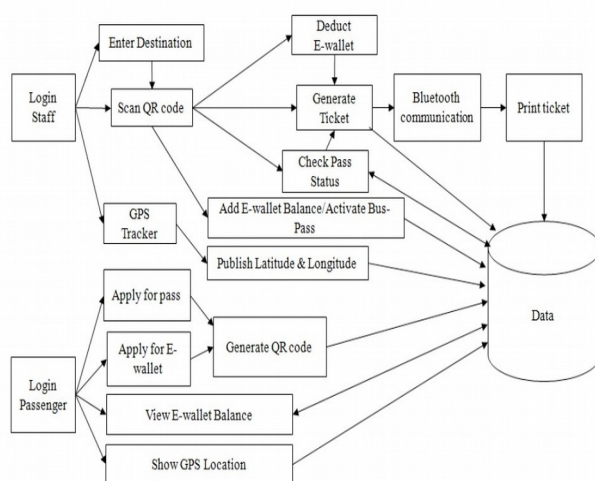
- Traffic jam
- Unexpected delay
- Irregular vehicle arriving timing
- Some other incidents

Objectives :

The main objectives of the project are:

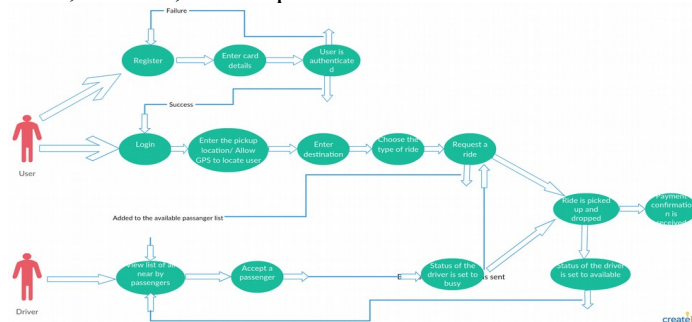
1. To implement bus tracking system to get real time coordinates of bus.
2. To alert the users through voice and notification system whenever the stop is about to come.
3. To show users popular places in real time.
4. To implement android app to provide users with accurate schedules between two places.
5. To Develop a system such that anyone can view the popular places where they are travelling

V. PROPOSED SYSTEM ARCHITECTURE



The Android app provides a location-aware application quickly accessing real-time arrival information for nearby public transit stops. Unlike the interfaces described thus far, the Android has built-in localization capabilities, using a fusion of sensor data from GPS, WiFi, and cell-tower localization to quickly get a location fix on a users phone. This location information can significantly reduce the time it takes to access real-time arrival information for a nearby stop. Beyond the key addition of the location-

aware capabilities, the Android app has a lot of the same features available in the other interfaces: a map view, bookmarks, recent stop view, and search for stops by route, address, and stop number.



This application runs only in android device this application will fetch the current latitude and longitude value by using google map and send that values to the student device as an alert /SMS .In this application GPS system is used. Using this system we can get the details of latitude and longitude. The google map is used to track the current location of the bus and the tracked location is sent to the registered mobile device. The mobile phone which fetches the GPS location communicates with server using General Packet Radio Service (GPRS). GPRS is used in this application due to its low cost. Nowadays mobile devices have inbuilt GPS receiver which is conserved as booming technology. Client has to enter in the application. To search for a bus, client has to enter the bus type(ST, BEST, etc). Then user has to enter source and destination and then available bus number is displayed and after that user can track the location of bus and also book ticket. He can also received an alert notification when the bus came to the nearest stop. It consists of a GPS system to get the current location of the bus and a GPS system to send the location data along with the bus number to the central server. Also we require an interface between the two so that they can interact. So we can use a GPS/GPRS enabled phone to send the location data to Journal of Signal Processing and Wireless Networks 45 2017, 2(1), 43 -46 Journal home page: www.jspwn.com © 2017 Jspwn All rights reserved the central server. So we will need to develop an application for this interface.

VI. CONCLUSION

Bus tracking ticketing system is very useful and important mainly in cities. This system has many advantages like easy to use, wide area range, easy to implement in vehicles, more effective, huge capacity etc. This system is

made of a tracking module containing GPS model to access dynamic vehicle location and send it to server. Then people can access this information from their android mobile phones.

ACKNOWLEDGEMENT

We would like to express our sincere gratitude to A.P shah institute of technology for giving us an opportunity to work under this design. We got an opportunity to learn about the practical working of ansible. We would like to thank our college faculties for arranging the necessary apparatus and guiding us throughout the process. We would like to thank our HOD Mr. Kiran Deshpande for assigning us with such an innovative idea to work upon. In the end we would also like to thank our parents for their emotional support and motivation.

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