



Real Time Bus Tracker Application to Reduce Demand Supply of City Buses

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ABSTRACT

The main purpose of this paper is to develop a true time bus tracking system to boost current public-service corporation system and reduce the workload of bus management team. The poor services provided by public-service corporation providers are because majority of them are still implementing manual work. Moreover, passengers are impatient while they're waiting in stop because they're unable to grasp exactly how long to attend and where the following coming bus is. We are acting on the project to bridging the demand-supply gap, i.e. the demand means what percentage people using the town bus and provides is what percentage buses are required to satisfy the demand for his or her safe transportation. the important time bus tracking are provided to user source stop and destination stop therefore the user can conveniently manage his/her Work. Logic used for our project are as follows: (Supply of buses=demand of individuals /capacity of bus) So, in step with the demand of peoples bus are provide on particular time.

Keywords

GPS, GSM, Android Studio, City Bus Tracking, Google Map.

1. INTRODUCTION

Public transportation service like public-service corporation is that the major transportation employed by public. Especially in a very busy town or city, bus is that the most easy, convenient and cheaper transportation. Various reasons that folks take bus rather than driving own vehicle like tie up, heavy parking fee and lack of parking find time for destination. However, bus transportation service has very poor transportation system nowadays. Bus user doesn't know the exactly time of arrival for a bus, but only know the scheduled time of arrival. Compare to coach or flight facility, bus transportation service doesn't have a correct system to trace all buses position and also the actual time of arrival in every bus stops. These problems occur because current public-service corporation system failed to apply real time tracking technology to trace on each buses on the road and also lack of a platform to update latest vehicular traffic information to bus users. At that point the people are worry about the buses and also the bus supplier is additionally not known about any information like where is that the need of supply at a selected time. The proposed system deals with overcoming the issues stated above. The system is an Android

Application that provides necessary information about all the buses travelling in Nagpur. This information overcomes the matter faced within the previously built application "Aapli Bus". The platform chosen for this type of system is android, reason being Android software has come au courant very large scale and is owned by almost every person. Also, Android may be a user friendly platform, thereby enabling easy access for the complete user. Variety of applications made for the Android software is increasing on an outsized scale ever since its advent. Android is an open source mobile software environment. Observed by Google, the software has been made Linux based and uses Java programming language. It's a virtual machine that's wont to optimize memory usage yet as resources. This application has been developed using IDE (Android Studio 3.3.2) with ADT (Android Development Tools) and SDK (Software Development Kit). There are variety of constraints that require to be satisfied.(Supply of buses=demand of individuals /capacity of bus) So, consistent with the demand of peoples bus are going to be provide on particular time.

2. PROBLEM STATEMENT

Management of buses of public facility is that the main problem now days. Supported to the present system there's no such system which provides information about the bus, its expected point, the expected waiting time and what's the present location of the bus. Efficient and safe transport system within city is that the need of the hour. This might be possible by bridging the supply-demand gap.

3. LITERATURE SURVEY

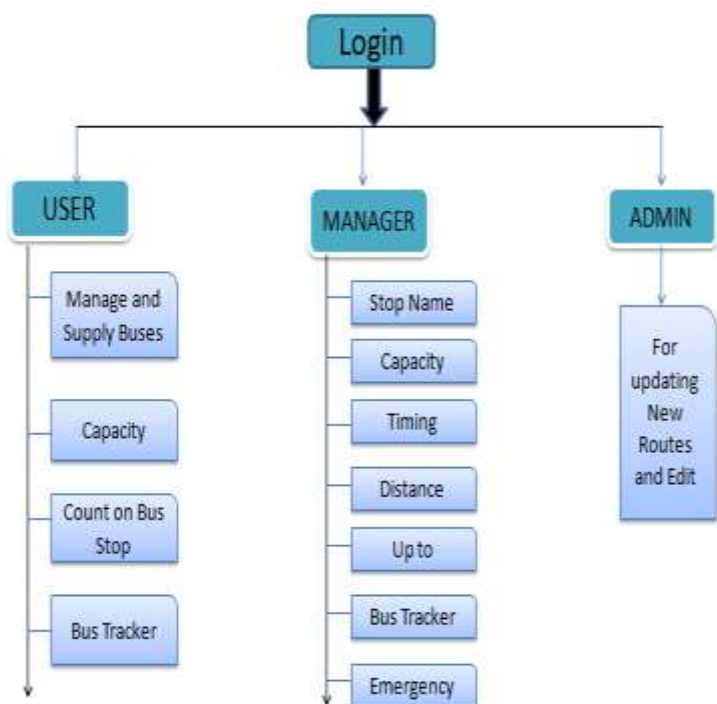
Public transportation service like public-service corporation is that the major transportation employed by public. Especially in a very busy town or city, bus is that the most easy, convenient and cheaper transportation. Various reasons that folks take bus rather than driving own vehicle like tie up, heavy parking fee and lack of parking find time for destination. However, bus transportation service has very poor transportation system nowadays. Bus user don't know the exactly time of arrival for a bus, but only know the scheduled time of arrival. Compare to coach or flight facility, bus transportation service doesn't have a correct system to trace all buses position and also the actual time of arrival in every bus stops. These problems occur because current public-service corporation

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4. PROPOSED SOLUTION

In today’s world, man struggles to make his life easier. The proposed solution provides an application, to reduce the supply-demand gap for efficient and safe public transport. We are creating an application where user have to enter his ,Name ,route name ,mobile number ,time to reach the stop , on the app by analyzing the demand, the order of supply of buses will be provided the destination and Email-id. So, when number of peoples enters their data according to the time demand by the bus department.

5. SYSTEM OVERVIEW



Basically this project is divided in three modules. Which are given below.

1. Manager.
2. User.
3. Admin

MANAGER:-

Manager will have the task of manage and supply of buses, will provide the capacity of bus to the user, count of the passengers who have registered and can track the bus.

USER:-

In the users application people will sing up the application and if they are already sign up then they will sign in it. At the time of signing up peoples have to fill some basic information like name ,mail id ,phone no, and main thing is the start bus stop name, timing at what time they have to catch the bus and the destination name, unique user name and password will be created by which they can again sign in the application.

ADMIN:-

Admin will have the access of updating like if there is new route found, so the admin can make the editions.

6. CONCLUSION

The conclusions of this study suggest that knowledge of specific domain improves the results. This Project has been implemented on Android platform. Also, different attributes are added to the project which is during a footing to encourage be advantageous to the system. the necessities and specifications are listed above. This project is implemented using Android and also the SQL domain.

7. FUTURESCOPE

The application will prove beneficial for each bus traveller, or perhaps tourists. Not just buses, but these applications are useful for each person travelling by any means of transport.

8. REFERNCES

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