

Electronic Ticketing For PMPML Buses

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Abstract - Transport demand in most Indian cities has increased significantly due to increase in population. Public buses are very full these days in cities like Mumbai, Pune, Delhi, Hyderabad. This has resulted in irregular messes in buses management. Either the buses are there or they are delayed. In sum cities there are less number of buses assigned where there is more of people using buses whereas in some places there are more bus assigned even if there people hardly travel by bus This improper management has incurred loss in the bus management system. Hence we are proposing a system in which the number of passengers in a bus stop can be calculated and the bus service can be regulated depending on the passengers arrival. Also due to our proposed system there would be efficient distribution of the buses on the required routes and this would benefit the bus management system by reducing the loss they are facing nowadays. It would also calculate the time delay a bus may take considering different parameters

Key Words: Management, Tracking, QR Code, Location, Ticket Confirmation, Seat Booking

INTRODUCTION

This management system is developed so as to avoid the mistakes that we human can easily make and the other main motive behind this management system is to reduce the personalize work to a well developed computer system in systematic way. This project will be done by using Microsoft Visual and Microsoft Access Briefly there are two main modules for this system. The main module of this bus management system is the Administration who will look after all the activities through the server. The second in command is the User himself who will be booking his/her Ticket for travelling in the buses and The last one is The Ticket Conductor who will be responsible for scanning of QR Code of the user so that the money is been detected from the card (Cashless transaction). The user will get message on registered mobile no for confirmation as well as for deduction of money. In the management we included functions like source location, destination location, bus tracker for where the bus is, reminder of your bus, registration.

This system is an electronic management system. This system ensure that the management process of bus are smoothly done

Proposed System

Bus Management System is suggested for a small office management tools. Most of express bus company wouldn't invest too much on the electronic management system for their company. Therefore a standalone system is suitable for them because it won't cost them so much. System provides a simple interface for the user. My Sql used as it database which is one of the simplest and efficient Database Management System. The Data is been maintained so that the user can check the required data. The managers of the system will just manger the system and those who are authenticated to him. The one who will access the server will be the manager and the one who is authenticate by the manger.. Bus Management System will include the buses information, drivers' information, maintenance record and reminder. The search option in been inculcate so that the user might check for his bus as per requirements

Existing System

In the existing system, all the work of resource allocation is done manually.

The survey that is done by employees for change in the frequency takes minimum 3-4 days and hence using this system the time is reduced along with efficient use of the man power.

Since no analysis was done even if loss occurred in the system, it was not identified and hence there was worthless money spend.

System Architecture

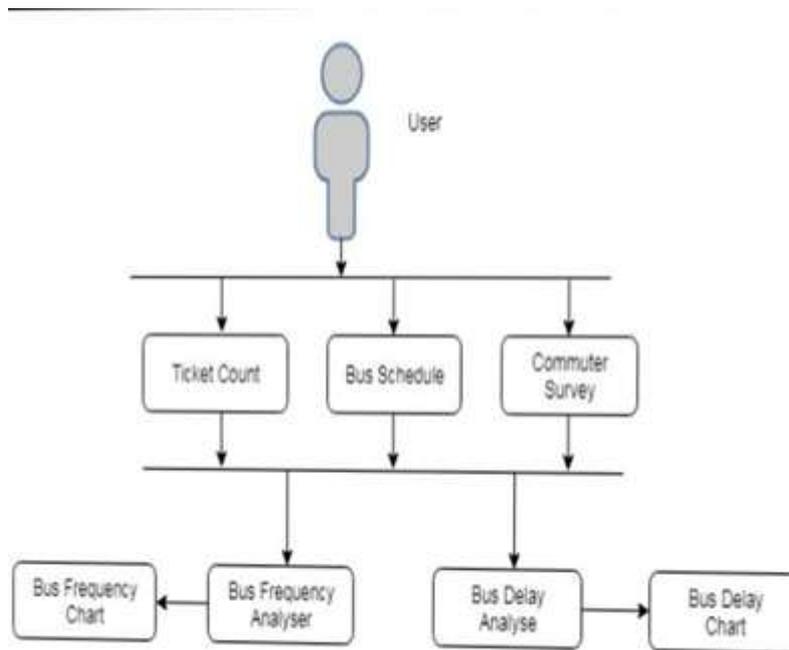


Fig -1: Bus Management Chart

Advantages-

- 1) Reduce operating expenses.
- 2) Save time
- 3) Reduce downtime
- 4) Manage your field staff and drivers effectively.
- 5) Optimize financial management
- 6) Superior route planning

Disadvantages-

- 1) Sometimes the GPS may fail due to certain reasons and in that case you need to carry a backup map and directions.
- 2) Environmental conditions

SOFTWARE REQUIREMENTS

- Operating system : 32 Bit or 64 Bit Windows 7 and on words
- Coding Language : Java J2EE
- IDE : Eclipse Kepler
- Database : MYSQL

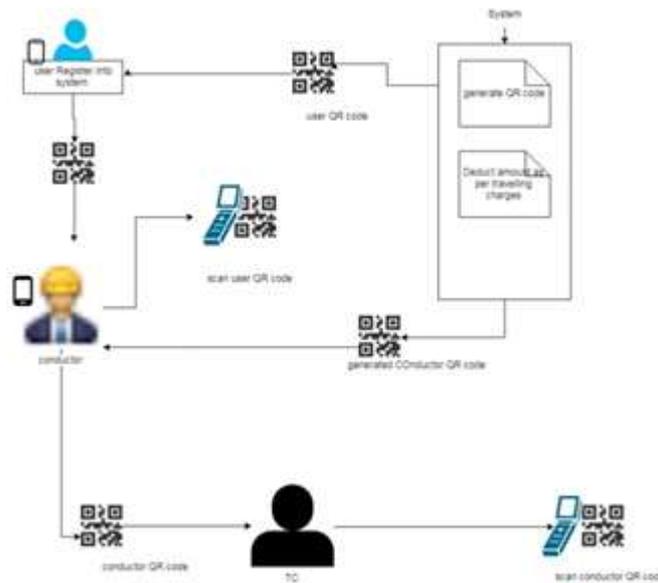


Fig -2 software development process

Conclusion

The survey that is done by employees for change in the frequency takes minimum 3-4 days and hence using this system the time is reduced along with efficient use of the man power. Since no analysis was done even if loss occurred in the system, it was not identified and hence there was worthless money spend. This system would give analyzed output in the form of chart and help the bus management people to know where they face loss and hence need to make decisions on it. Also where they can make more profit and need to introduce more buses in that route. It will also give the time delay that occurs due to various factors and according to the delay an optimized schedule is generated. It will also verify the revenue generated on the particular route.

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Future Scope

Mobile aps ◻ Mobile version ◻ Home Delivery ◻ Call Center Support We also look forward to enhance the system by making it more attractive.