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Online Buspass and Ticket Generation System with Qr Code

Aakansha Gupta, Beenash Iram, Bharti Samrit, Monika Dhage, Prof. Nazish Khan

Department of Computer Science and Engineering, Sadar Nagpur, Maharashtra, India

ABSTRACT

The aim of this project is to provide online facility of bus pass and tickets system to the daily commuters of Nagpur city. It uses database to store data about passenger, bus, ticket and bus pass. This project has two logins, one for user and another for admin. In this project ticket reservation and bus pass creation as well as renewal system has been provided. It is a web application for people who want to book ticket and get bus pass online. It is very useful as it reduces pressure of manual work. This system was intended to develop a web application to perform functions like accessing data of users for authentication and provide pass to particular commuter. This system is helpful for people to get a pass in time as user don't need to wait in a queue for his/her turn. User can get a pass from our system anytime. The OTP (one time password) will be generated for every user while registering for the first time which will be sent to his email id. The notification will be sent to user's email id which will be generated before the pass expires. This is beneficial for every passenger to get pass in time.

Keywords: passenger, notification, authentication, registration.

I. INTRODUCTION

This online Bus Pass and Ticket Generation System is a constant project which will be helpful for those everyday commuters of Nagpur city who are dealing with troubles of these day's manual system of generation of bus passes. Due to rapid growth in technology people need to upgrade themselves to current fashions and our upcoming ages are searching forward for essential administrations in a single touch. This project is created to provide effective, cheap, reliable, timesaving, efficient and comfortable services for people of Nagpur city. The large crowd causes long waiting instances to apply for the bus passes and collecting them. Bus pass generation would be useful to implement legitimate and better rates for passes and furthermore it would

be valuable for travelers who forget to carry their bus passes with them while travelling. Handling tickets in a bus is a tedious task now-a-days. Giving precise change for tickets to an expansive group is likewise a dull procedure for conductors in the buses. The current system of taking tickets for larger crowd leads to stop the bus for long time and this delay annoys the employees as they have to reach their work place earlier. This system proposes a facility to take bus tickets and bus passes using android mobile application. This system provides a facility by which the user can book the ticket via online transaction. This system also reminds the user that bus pass is about to expire. It can be used to apply/renew the bus pass through smart phone which helps all generation people. This system establishes a connection between users and admin.

Data is managed in android app, which facilitate GUI for the user.

II. PROBLEM DEFINITION

It is a manual process in which students and other commuters are required to submit application forms along with their details filled. These application forms are to be verified and then the bus pass is issued to the concerned person after the application form is verified. This is a time consuming job, that involves people to wait in prolonged line to obtain their passes. This causes in a great amount of time wastage for the passengers. Also, the bus pass issue takes place in the current system, only for a limited period of time during the day that is until evening. This gives the literature survey of the bus pass issue system across the Indian states. The existing online bus pass systems needs the passengers and students to fulfill the necessary details by going in the specific bus depots. Once the documents are submitted, it would be verified by the officials present at the depots. Because of this, an ample amount of time is wasted for the commuters as they have to go to the bus depots for confirmation of tickets. Once the verification is done, the bus pass would be issued on a specified date as communicated to the user. This is a quite difficult job for the consumer to go frequently in bus depots just for the purpose to gain their passes.

III. PROPOSED SYSTEM

It has got the following features: This system will make sure that data is accurate. Records will be efficiently and accurately stored and maintained in a DBMS. Renewal can also be done online with the reference identification that is provided after the registration is done by the user. If the student or commuters is not interested to use the services of

bus pass then he/she can drop their booking. Minimum time would be required for processing the details submitted and to generate the bus pass. Passenger can purchase the bus ticket through the Internet, with the help of this the tickets confirmation is secured. Other than this, the online system helps the commuters to inspect the availability of the bus ticket before consumer can purchase the bus ticket. In addition to this, customers has to pay the amount of their required tickets via online and do not need to pay via cash. Hence, there is a need of reformation of the system with more advantages and flexibility. The Bus pass booking System reduces the manual work. Bus pass system provides bus pass generation, bus pass renewal, ticket booking and payment is done via online transaction, etc. Using this bus pass system we can inspect all necessary details equivalent Bus pass tickets and it provides the guidelines to the customers like how to renew pass how to update it. This system handles every details of Bus pass. Passengers first need to verify themselves by providing the necessary details. Once the user is verified by the admin/system then it allows users to book passes for any route via online.

IV. REVIEW OF LITERATURE

“Cloud Based Bus Pass System Using Internet of Things”, The Cloud based Bus Pass System Project is a real time project which is useful for the commuters who are facing problems with the current manual work of bus pass system. It makes the passenger easy to travel with the ticket QR code with the mobile. So that even if the passenger loses the ticket at the time of checking he can show the QR code. The TTE can check the QR code with the Admin whether it matches or not. The unique number allotted for one person cannot be the same for the other. It also increases the validity period,

frequently warns to the commuters before completion of his/her pass validity period by sending SMS or mails. His/her pass Renewal or Registration can be done using a credit card/debit card. Initially, commuters need to register with the application by submitting details like photo, address proof and other details and submit it online. They will verify your details and if they are valid they will approve bus pass else they will reject. You can even renew using credit card or otherwise transaction methods. [1]

“SBIS urban -Secure Urban Bus Information System based on Smart Devices”, Bus Information System (BIS) has been developed for networking passengers with bus companies that provides public transportation services. The BIS, also denoted as BIS generalized, supports a passenger with personalized and real time bus information services in all phases of a journey. Today’s BIS generalized encompasses multiple technologies, including advanced visual displays, public address, emergency intercommunications, digital surveillance systems, IP networks, wireless networks, video streaming, coders, decoders and many more. These systems deliver real time bus information seamlessly on vehicles and in stations, while they are controlled and managed from a single control center. However, lots of small bus companies’ services like urban city’s bus company or small organization’s bus could not afford to operate the profound services to the passenger due to the budget of the city, which requires complicated infrastructure. To provide the BIS services with cheap cost, this paper proposes a secure urban BIS, denoted by SBIS urban, based on smart devices and explains the security issues related to the system operation. The SBIS urban is to reduce the cost and to ensure security and privacy from the BIS generalized. The SBIS urban is secure from various attacks, provides

privacy and has good properties compared with the other systems. [2]

“A Mobile Application for Bus Information System and Location Tracking using Client-Server Technology”, Android is the latest and a rapid growing technology available for all the users or customers in today’s market. An enormous increase in the end user acceptance has been experienced in the past few years. This project has been developed on the Bus Information System in Pune. This paper proposes an Android mobile phone application that gives information about buses, bus numbers as well as bus routes – both online and offline. Reason for Android platform - Android requires an open source development which is probably the most feasible and a present user friendly approach. This paper also deals with Location Based Services, which are used to track the current location of the bus as well as give an estimate remaining time for the tracked bus to reach its destination using the Client-Server technology. Also, it displays the required maps with the help of GPS. [3]

“Security Augmenting Scheme for Bus Information System based on Smart Phone”, Bus information system is one of most useful information system these days. This bus information system can be implemented with smartphone APP easily and conveniently without big cost. This BIS system, however, has a weak point that the location information of the bus can be revised easily. For the purpose of augmenting the security aspect of the proposed BIS service, this paper explores the security aspect of the bus information system. [4]

“Bus information system based on smart-phone Apps”, this paper provides Bus Information System (BIS) implementation based on the Smart-phone APPs using GPS information. Nearly all of recent smart-phones are equipped with the GPS feature.

Bus driver's smart-phone can send the position information using its GPS information periodically and on events. On receiving those information, servers can process those into the information that can be used by individual users and bus stop information panel. The proposed BIS based on smart-phone APPs is expected to be used publicly with the special process that enables the smart-phone APPs only in the specific bus. [5]

“Implementation of Real Time Bus Monitoring and Passenger Information System”, this paper focuses on the implementation of a Real Time Passenger Information (RTPI) system, by installing GPS devices on city buses. The Real Time Bus Monitoring and Passenger Information system is a standalone system designed to display the real-time location(s) of the buses in city. This research will enable the tracking devices to obtain GPS data of the bus locations, which it will then transfer it to centralized control unit and depict it by activating symbolic representation of buses in the approximate geographic positions on the route map. Specific software(s) will be used to interface the data received to the map. [6]

“Real Time Passenger Information System”, this paper provides means by which the transport industry can develop innovative near-term solutions to meet demands placed on it. The main objectives of this design paper are: (1) RTPIS display at bus stops – showing time of arrival of buses in real time. (2) Web based interface for admin control room to monitor buses in real time. (3) RTPIS display in the bus-showing next and previous bus stops, time to reach destination, advertisement based on location. (4) Future scope of designing mobile application for home users to find out bus schedules and RTPIS.[7]

V. SYSTEM FLOW CHART

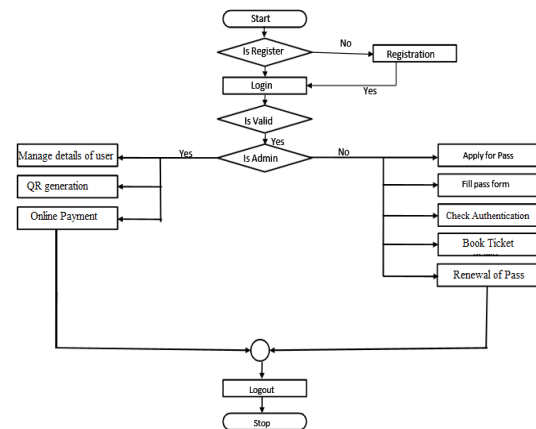


Figure 1

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