Android Application to Generate Auto Renewal Bus Pass System

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Abstract - The rapidly aging population causes long waiting times for taking bus pass. Diagnosing record of real-time data of each who are all using bus passes, Bus pass automation would be beneficial for government to implement proper and better rates for passes and also it would be useful for people who forget to renew their bus passes. 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 android based 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 doesn't need to wait in a queue for his/her turn.

Key Words: Bus Pass, Authentication, Registration, User Friendly

1. INTRODUCTION

As technology starts growing we need to update ourselves to current trends and our upcoming generations looking forward for necessary services in one touch. The current system of taking tickets in the buses and applying or renewing for bus pass is a tedious process. It takes long time for taking bus tickets and for bus passes it involves a long queue in Depo and it is a time consuming process. The current system of taking tickets for larger crowd leads to stop the bus for long time before the stage closing for a long time. This increases increase in time delay for passengers and it hurts more for employees due to time delay in peak hours. Bus Pass and Ticket Automation System can be used to book tickets on the go and can be used to apply/renew the bus pass through smart phone, which helps all generation people.

This system provides connection between government server, where data is managed and android app, which provides a GUI for the user. This project is created to provide effective, cheap, reliable, time saving, 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 travellers who forget to carry their bus passes with them while travelling. Handling tickets in a bus is a tedious task now-a-days. 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 that will help all generation people. This system establishes a connection between users and admin. Data is managed in android app, which facilitates GUI for the user.

As in the existing system people had to do each and every process manually, but this Application helps people to make the work a bit faster. People can check bus route and bus time offline 24 hours a day throughout the week. In addition, the online system lets the people to apply for bus pass. Furthermore, Handicap person can also apply for their special pass and can check concessions schemes according to their type of disabilities.

The app will contains user profile, bus route, pass schemes, concession schemes, term and conditions, procedure for apply bus pass in detail. User will get a notification when their pass is confirmed and alert message to inform them for the renewal of their passes. This will be free bus pass issuing and renewal app. It will offers quick and secure way to will be free bus pass issuing and renewal application. It will offers quick and secure way to apply for pass. It will allow user to check pass rates for particular distance and to read recent concession schemes for them. They can also check status of their pass.

2. RELATED WORK

The Android application uses Global Positioning System to detect passenger travelling from any source to any destination. It can help the governmental organization to identify thefts, robbers travelling through trains or metros. Map-matching algorithms attempt to pinpoint the vehicle in a particular roadmap segment in spite ofthe digital map errors and navigation system inaccuracies. An asynchronous multi obstacle multi-sensor tracking method that fuses information from radar and monocular vision. The existing online bus pass system needs the passengers and students to fulfil 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

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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.

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.

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3. IMPLEMENTATION

We are creating this project to overcome the problems of existing system. In this project user can generate online form. User can show his/her pass online also, there is no need to take print of that pass. User can do online payment with better security. They can use credit card or debit card for transaction. Steps involved in maintaining the user client information the database:

- Step 1. Login/Signup

- Step 2. User Dash Board

- Step3. Submitting Booking Details

- Step 4. User account database.

- Step 5. Store pass details in database.

Figure 1.Login User

Here existing user can login to his/her dashboard for further process. If the user is new he/she will register himself by using sign up button.
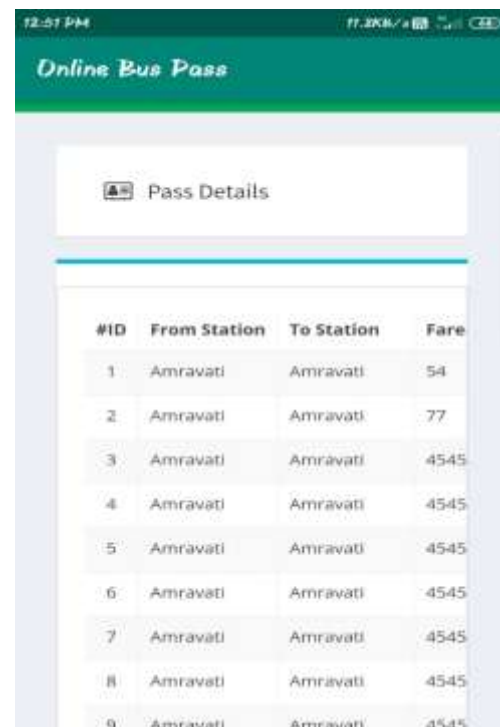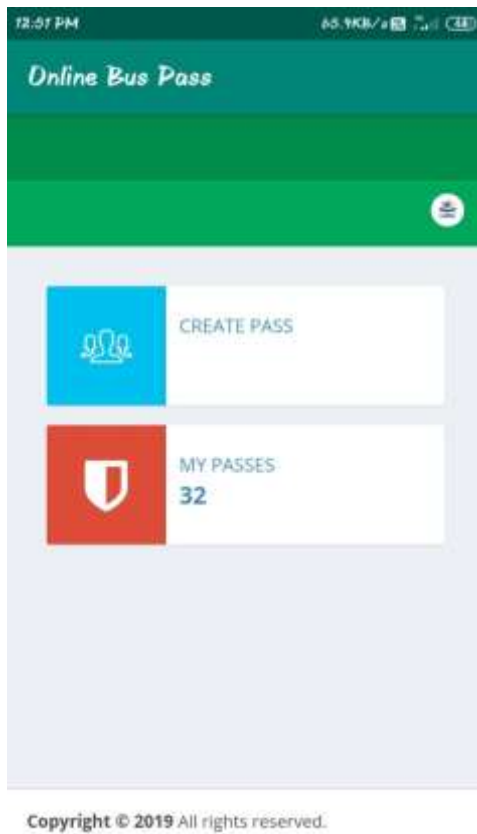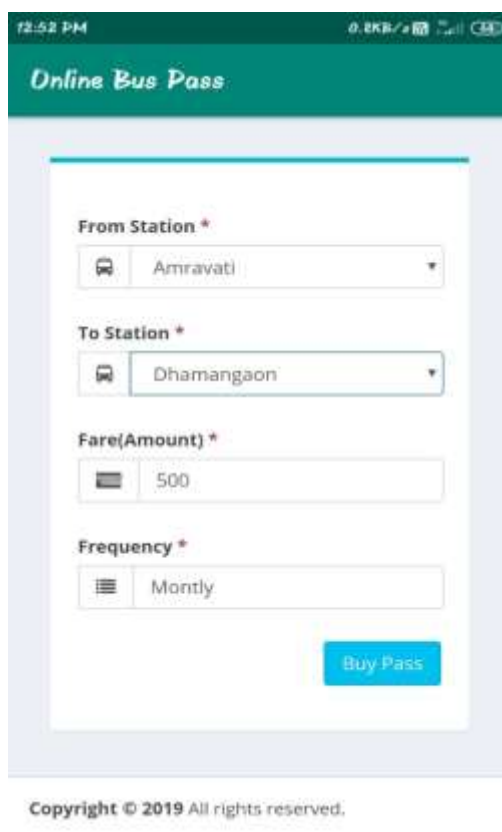

Figure 2.Pass Details Screen

Figure 3.User Dashboard

Figure 4.Source Destination Booking

4. CONCLUSION

It is a real time project which is useful for the public who are facing problems with the current manual work of bus pass. In the current mode of Buss Pass, providing system the passenger has to go and wait in a queue to get the pass and he/she has to remain about renewal but we proposed android application to generate auto renewal bus pass system that makes the process of taking bus pass easier, efficient and secure.

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