Android Bus Pass Project

Anita .S. patil.\textsuperscript{1}, Swathi .M.R .\textsuperscript{2}, Nandini .K .\textsuperscript{3}, Chaitranjali .N.P .\textsuperscript{4}, Roshni .B .\textsuperscript{5}

Assistant Professor\textsuperscript{1}, UG Student\textsuperscript{2,3,4,5}
Department of Computer Science and Engineering
Ballari Institute of Technology and Management, Ballari, Karnataka, India

Abstract:
A bus pass project is an android application system that helps passengers to get their bus pass related information in an android phone. Using this system users can apply for bus pass renewal option or cancellation option and make payment online. This excludes the need for going to bus station for utilizing pass services. Also the app provides a brief description of all the routes along with bus numbers. It also shows appropriate schemes for various routes for quarterly, monthly and yearly passes. Admin can view user’s details and all the transactions being made online. Thus the system is user-friendly and flexible to be used. This project intended to propose an Android mobile application that gives information about bus timing, bus numbers and also bus routes – both online and offline. 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. 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. 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.

Keywords: MYSQL, JSP, J2EE, HTML, CSS, XAMPP, Android Eclipse.

I. INTRODUCTION

OVERVIEW
These days technology is everywhere in our lives. It affects how we shop, socialize, connect, play, learn, etc. All our daily activities are encircled with the use of technology in some or the other form. The large amount of growth in India’s population has increased the demand of the public transport. In the areas of public transport, it has become essential to consider effective technologies that will ease the travelling of customer. 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 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.

1.1 Problem Statement
The main goal of this paper is to design a system for collecting online bus passes. This excludes standing in long queues for issuing passes. Tidious procedure for issuing/Renewing passes. Passes are still physical slips of papers not digital cards.

II. SYSTEM ANALYSIS

2.1 Existing System:
Travelling would require the passengers to buy the ticket during the course of travelling. This may be sometimes difficult due to the crowd in the bus and people may not buy the ticket for travelling. Also, the people may require to travel longer distances and the cost of the ticket may be higher. For this reason, the government provides the bus pass facility to the people so that, they can avoid buying the ticket each time they use the bus services for travelling. The bus pass issue system that is currently in existence has the following drawbacks. 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 tedious process, which requires the people to stand in long queues to get their passes. This results in a lot of time wastage for the commuters. 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. The commuters may not be able to acquire their passes once the depots at the bus stands, once the counters are shut down in the evening.

2.2 Proposed System:
The proposed system is intended to overcome the major drawbacks of the currently existing manual system. This system is easy to design and implement. The project is designed to provide an effective solution of maintaining bus pass information using android application. The system has two logins one for user and other for admin. It will work in all the configurations.

Benefits of Proposed System:

- You can find all the bus pass related information online without going to the bus station.
- This online bus pass software system will help students and passengers get bus passes online and eliminate the need of standing in queues for passes or collecting a ticket for each journey.
III. SYSTEM DESIGN AND SPECIFICATION

Bus pass android project is an android application for public & students as well to get bus passes through online. Before this application implementation the manual process is used to do the process of issuing the bus pass to the students. This manual process requires man power and more time consuming. To avoid such difficulties we have implemented this system. Buss Pass Android system is a web application designed to provide an effective solution of maintaining bus pass information using android application. The system has two logins one for user and other for admin. User can refill their account and extend the validity every time the pass expires. Every user pass will be having android application that contains user information and validity of pass.

Module Description

Administrator:

1. Manage Profile: Manage profile of user
2. User Rights: change or modify user rights
3. Manage Pass: Manage the different pass scheme
4. Verify Passes: Verification of online registration for passes.
5. Pass History: He/she can check the history of pass of any user for verification.

Student or Public

1. Member Registration: User can create his/her account for pass registration.
2. Login: user login for pass registration or renewal or for manage account.
3. Manage profile: User can manage or change in his/her profile.
4. Pass Registration: User can register for pass.

3.1 Software & Hardware Requirements

3.1.1 Hardware Used

Machine configuration
- Processor : Intel core
- RAM : 1GB RAM.
- Hard Disk : 40GB Hard disk and above.

Peripheral specification
- Monitor : At least a 15” B/W/COL Monitor.
- Mouse : Standard 2/3 Button.
- Keyboard : Standard US 104 keys.

3.1.2 Software Requirements

- Operating System : Window’s 7 and later.
- Back End : My SQL.
- Front End : JSP, J2EE.
- Browser : Internet Explorer
- Web server : tomatc-6.0.14Server
- Development Tool : Android Eclipse

3.2 Functional & Non-Functional Requirements

Functional Requirements:
These are the core factors those have direct impact on the functioning of the system.
- Registering user

Non-Functional Requirements:
- Updating Information
- Generating Pass
- Renewing Pass
- Authentication of user
- Log In
- Online Payment

IV. IMPLEMENTATION

Registration module In this module, the user registers for the pass, by submitting the basic details online initially. After this, the reference identification number is given to the person using which, the person can login and submit the required documents that are mandatory. User Login In this module, the user would login to the agency portal with the help of the reference identification number to submit the required document. Apply once the login is completed, the online application form would be filled and submitted by the user online. Verification In this module, the online application submitted by the user is verified by the administrator and the pass would be generated only if all information is found to be correct. Online payment once the verification is done, a notification would be sent to the user after which the online payment can be made by the user. The payment can be made by using credit card or master card and would eliminate the need of cash payment that is currently in existence in the manual process

Benefits:
- 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.
- Supposing if the student or any other type of commuter does not require the pass service anymore, he/she can cancel their registration.

4.2 Snapshots

Figure 1. Admin login
4.3 Advantages
- It avoids the need of standing in queues for passes or collecting a ticket for each journey.
- Easy to use.
- Efficient and reliable.
- You can find all the bus pass related information online without going to the bus station.

4.4 Application
- This project is helps passengers to get their bus pass related information in an android phone.
- The users can apply for bus pass renewal option or cancellation option and make payment online.
- It can be also implemented in metro cities.

V. CONCLUSION

At the completion of this project we come to know that this is system is useful for students and passengers who want to generate the pass from online. This is useful for city bus pass systems and metro trains pass systems for metro cities. Using this system user can apply for bus pass renewal option or cancellation option and make payment online. This excludes the need for going to bus station for utilizing pass services. Also the app provides a brief description of all the routes along with bus numbers. Thus the system is user-friendly and flexible to be used.

VI. FUTURE ENHANCEMENT

For project demo concern, we have developed a Android mobile application. In future, this project can be developed using bar code and also automatically update the rout details. To make this project as user friendly and durable, we need to make it compact and cost effective. Going further, this application can be used in railway system.

VII. REFERENCES

[1]. Development of an Effective Online Bus Pass Generation System for Transportation System for Transportation Service in Karnataka State.


