# Bus Pass Booking System Using QR Code

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**Abstract:** This project delivers an actual solution for managing bus pass information using a database. The app has three login for user, admin and conductor. This system offers web application as well as android application for people to get their Bus passes online. This system is helpful for users to get their bus pass online instead of standing in long line to obtain their bus passes. This system is helpful to reduce the paper work; time utilization and user get the bus pass in simple and faster way. User can again fill their account and extend the validity of card when the pass is going to expire. This system provides functionality like accessing basic information of user for and provide verification bus pass for the user without placing them in long queues. This system provides security option for user. The conductor in bus would be able to authenticate the pass by scanning the QR code provided by the passenger with a suggested device. The notification generated by the system would be send to the user in form of message such as when where and what time the card was use. This system also provides online payment facility.

**Index Terms:** Android Mobile, QR Code, Privacy, Authentication, Online Payment, Client and Server.

## I. INTRODUCTION

As technology is growing presto, so we need to modernize ourselves to be in touch with new technology. The current process of bus ticketing is very slow and tedious process. Client needs to stand by long line for issuing bus pass in bus Depot which is time consuming and this process is hectic to employees in the Depot as well as user. Existing bus pass system has same drawbacks, like pass is regenerated every time. This is a vapid process, which require to reprint the pass every time. And existence system does not provide any security options. This system provides effective software for maintaining bus pass. Digital bus pass generating system is useful for peoples to get their bus pass online instead of standing in long queues to get their bus pass.

This system reduces paper work, time consumption and makes the process of issuing pass in simpler and faster way. User can use the pass for long time, just need to recharge their account of digital pass and extend the validity of pass every time when pass is going to expire. No need to print the pass every time. This system performs functionalities like accessing basic information of user authentication. This system provides security option for women by notifying their guardian when pass is scanned. The admin and the conductor of the bus would be able to verify the authenticity of the bus pass by scanning QR code which is provided on the recommended device like android mobile and after scanning it will notify to user when pass is accessed.

## II. LITERATURE SURVEY

We will evaluate some things up on the various kinds of writing open transport ticket planning process. GPS Tracking in Public Transportation In a large portion of the nation's population is expanding quickly. So the general population, for the most part, utilizes the general population transport than the private transport and they need greater adaptability. To guarantee that people in general transport must be redesigned with introducing innovation that encourages open transport to pull in the general population. Automatic Fare Collection (AFC) System is generally called as Transit Smart Card System that gives benefits on manual fare collection system towards bringing down the work costs and that expands proficiency of fare collection.

## III. PROPOSED SYSTEM

The proposed system is invented to overcome the downside of the currently existing manual system. This system is web based app and android based app for user to get bus pass online. Smart bus pass consist of seven modules:

1) Registration module To get online digital bus pass user have to go many through procedure for that user have to visit the site where user have to fill registration form. In registration user have to give complete details about him/her to create a new account, details such as first name, last name, email address, mobile number and password generated by him/her only. The email address entered by user at the time of registration is used as unique ID and password to login the system. Only authorized user can have permission to access the system.
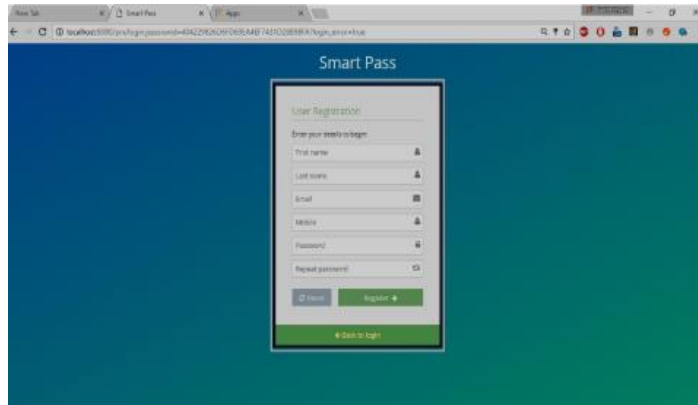
2) Authentication module This system provides protection of information through the mechanism of unique id (valid email address) and password therefore only authorized people can access the database. After successfully registration, user login to system by using the irunique id (email address) and password. If id and password is correct than only he/she will be able to access the system.
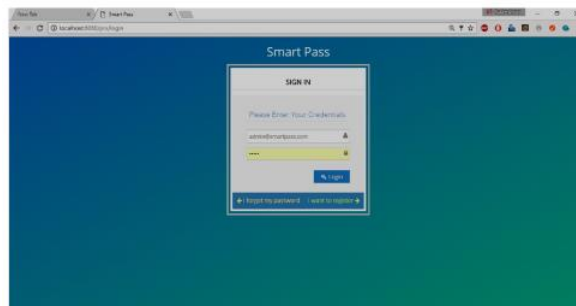


3) Payment module As we know the world is becoming cashlesssobyimplementing it, this systemis trying to makepeopleuse the different cashless way, and put thereonesteptoward digital India. There is no other waytohavethetransaction another then the online. This systemprovides online payment facility. For onlinepaymentwe use
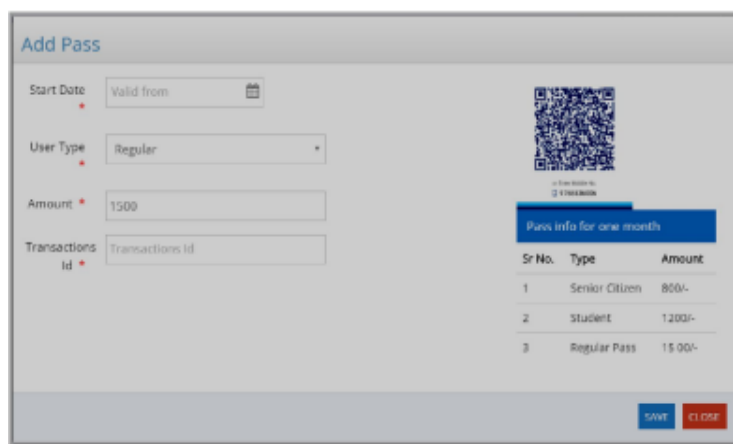


4) Generation of digital Bus Pass In our system, once the pass is generated and after having the payment the PDF copy is generated and it is issued to the commuter. The PDF copy can be used by the user as a hard copy or as a soft copy while travelling. The PDF of the pass generated by the system will contain information that is encoded in the form of a QR code. Smart bus pass consist of: • Name of user • Gender of user • DOB of user • Photo of user • Unique QR-code that contain all the basic information about the user

## IV.     FEATURES

1) Bus pass booking app can be stored in special virtual wallets which is secured with a private key.
2)Fast Deveploment.

## V. SOFTWARE REQUIREMENTS

i. HTML
ii. CSS
iii. JavaScript
iv. Database

## VI. MERITS

i. Greater satisfaction
ii. Manage your portfolio easily
iii. Able to act fast

## VII. DEMERITS

i. Lack of Appropriate Guideline.
ii. Worries about Changing Innovation.

## VIII. FUTURE SCOPE

This project has a broad scope for future development because the users requirements are constantly changing and not static. The technology that is popular today will be obsolete the next day. The system may be refined further to keep abreast of technological advancements. As a result, such a system will be improved in the future. This improvement is carried out in an efficient and effective manner. As a result, we can update the same with further modification establishment and integrate with minimal modification. As a result, the project is extensible and can be expanded at any time with more advanced features.

## IX. CONCLUSION

QR-Code technology would be more easily integrated into existing public transport system infrastructures. QR-Code provides all the features which make it a valid technology for mass public transport ticketing: contactless transactions at high speed, stability and simplicity. The proposed solutions based on combinations of standards and technologies using current contactless infrastructures.

Our proposed application will be feasible for novice users as well as professional users. The proposed application will be used for the booking a ticket without standing in queues for travelling through local trains and it's easy for ticket checker to check whether ticket is valid or invalid. This android application reduces the manual work of both ticket bookers and ticket checkers. It is basically the transition from a manual to digital system for ticket booking of as well as ticket checking of bus. Thus the problem associated with BUS train ticket booking as almost solved

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