



**IJIRCCCE**

e-ISSN: 2320-9801 | p-ISSN: 2320-9798



# INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH

IN COMPUTER & COMMUNICATION ENGINEERING

**Volume 9, Issue 6, June 2021**

**ISSN** INTERNATIONAL  
STANDARD  
SERIAL  
NUMBER  
INDIA

**Impact Factor: 7.542**



9940 572 462



6381 907 438



ijircce@gmail.com



www.ijircce.com

# An Android Based Virtual Bus Pass

<sup>1</sup>M. Naga Raju, <sup>2</sup>G.Vinay kumar, <sup>3</sup>K.Amar Teja, <sup>4</sup>I.N.S.S.Sriram, <sup>5</sup>B.Suseel Kumar

<sup>1</sup>Associate Professor, Department of CSE, KKR & KSR Institute of Technology and Sciences, A.P, India

<sup>2</sup>B.Tech Student, Department of CSE, KKR & KSR Institute of Technology and Sciences, A.P, India

<sup>3</sup>B.Tech Student, Department of CSE, KKR & KSR Institute of Technology and Sciences, A.P, India

<sup>4</sup>B.Tech Student, Department of CSE, KKR & KSR Institute of Technology and Sciences, A.P, India

<sup>5</sup>B.Tech Student, Department of CSE, KKR & KSR Institute of Technology and Sciences, A.P, India

**ABSTRACT:** The public vehicle is the least expensive and most solid transportation framework in India, subsequently, it has consistently been well known with the majority. Transports are an indispensable method for public vehicles which assumes an imperative part in transportation in India. The progression in transport framework has been expanding in everyday life as an ever-increasing number of individuals depend on open vehicles to go to work, school, medical clinics, and so forth. Despite the fact that the public vehicle transports have been offering genuinely acceptable types of assistance, there is a requirement for the brilliant and dependable framework. The serious issue in nearby transports is tied in with giving transport tickets, which frequently prompts struggle between the traveler and the conductor. Remembering this we are fostering an android application that will give a proficient and smooth transport tagging experience for both the client (traveler) and the specialist organization (conductor). To begin with, the client needs to enroll himself/herself by giving the necessary subtleties to our application. The candidate can log in utilizing their username and secret key for the achievement of reestablishment. The augmentation interaction is passed by reimbursing the money utilizing the charge/Visa. The one of something kind in this application is QR code produced after effective enlistment for each client which is displayed to the conductor who checks it's anything but a scanner to know if his membership is alive other than other required data and information security is guaranteed by letting the conductor know just the necessary subtleties.

**KEYWORDS:-** Public transport, Bus tickets, Android application, QR Code

## I. INTRODUCTION

Transport administration is a significant method of transportation now like never before in view of a dangerous atmospheric deviation just as the condition of the economy. 70 level of India's populace depends on transports to get to their objective on schedule. Because of the quick world, people are needing an easy vehicle framework. In metropolitan urban areas like Mumbai and Delhi, 10-15 million individuals travel through open vehicle transports every day. As countless individuals load up transports each day it is normally hard for travelers to get the ticket and keep up with it. So this framework, applying the advantages of innovation will tackle the issue of transport tagging by digitalizing the interaction of cash move for transport passage, ticket age, and capacity travel subtleties. It likewise makes it eco-accommodating by killing the use of paper rolls for a commitment towards Green IT and climate mindfulness.

## TRADITIONAL METHOD

In the current framework, transport pass enlistment and recharging measures are done physically. The individual needs to visit the counter and need to present the subtleties and afterward they need to hang tight for the endorsement. In this current framework, transport subtleties keep up with through documents. Furthermore, after transport data is put away to modernize. The association keeps up with the size of the report, source code and updates the data about colleague's subtleties physically. This is a much a tedious interaction and all the more significantly, it is blunder inclined. In the current framework, clients can confront a lot of issues.

## EXISTING SYSTEM

The existing idea can only facilitate bus pass registration and renewal but doesn't have a QR code generating facility which is the need of the hour and form the basis for our idea and using a mobile application which is user friendly.



Fig 1: Existing system

Our work introduces a new method of generating the Bus pass through online. In this system verification can also be done by sending an OTP to student mail. Then the payment can also be done through net banking. There are many modules in our project. They are

1. Registration
2. Verification
3. payment
4. Pass generation
5. Renewal

## II. LITERATURE REVIEW

### 1) Title: - Online Bus Pass Generation System using Web Application

**Description:** - Project is made to give timesaving, agreeable, and safe administrations for students. The existing framework understudy needed to do every single cycle physically, however this undertaking assists understudy with making their work is quicker and simpler. First he/she needs to finish registration. Then confirmation is made through a select sent. They can pay utilizing the method of installment accessible for their transport pass .After an effective installment transport pass is created and can be sustainable there-after. However this has utilized a web application a QR code age execution is missing which makes our proposed thought remarkable.

### 2) Title: - Online Bus Pass System

**Description:** - This undertaking is made to give "protected, dependable, saving, productive and reasonable administrations for clients. In this transport pass, every one of the necessary subtleties, for example, applicant name, address, date of birth, mail id, name of the school(government/private), legitimacy period, the sum paid (free for government school understudies), and copy of the up-and-comer are given. The restoration cycle should be possible all things considered month to month or yearly according to client's wish. In view of that reestablishment period sum will be deducted.

### 3) Title: - Development of an effective online bus pass generation system for transportation service in Karnataka

**Description:** - This venture is valuable for the understudies who are dealing with issues with the current manual work of transport pass enlistment and recharging. It's anything but an email for the understudies before the finish of his legitimacy period. We can likewise add the transport data with this application. We can join this application for online transport ticket booking

### III. PROPOSEDWORK

At present, the available applications can only provide for bus pass registration and renewal through a website. But it is not user-friendly. So, we have come up with a mobile application that not only facilitates bus pass registration and renewal of the same but also QR code generation for each user.

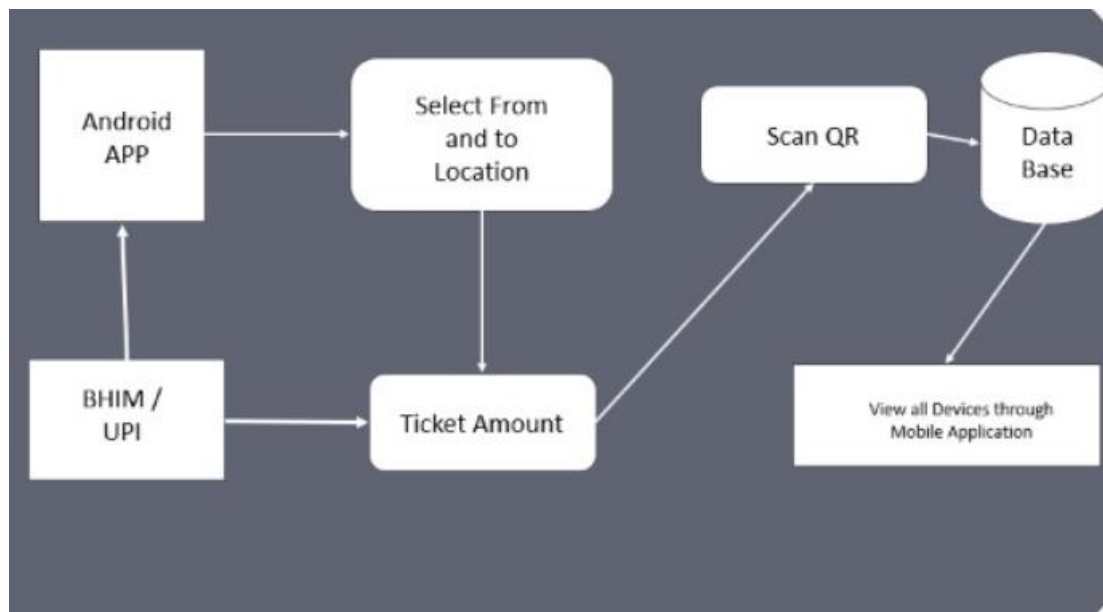
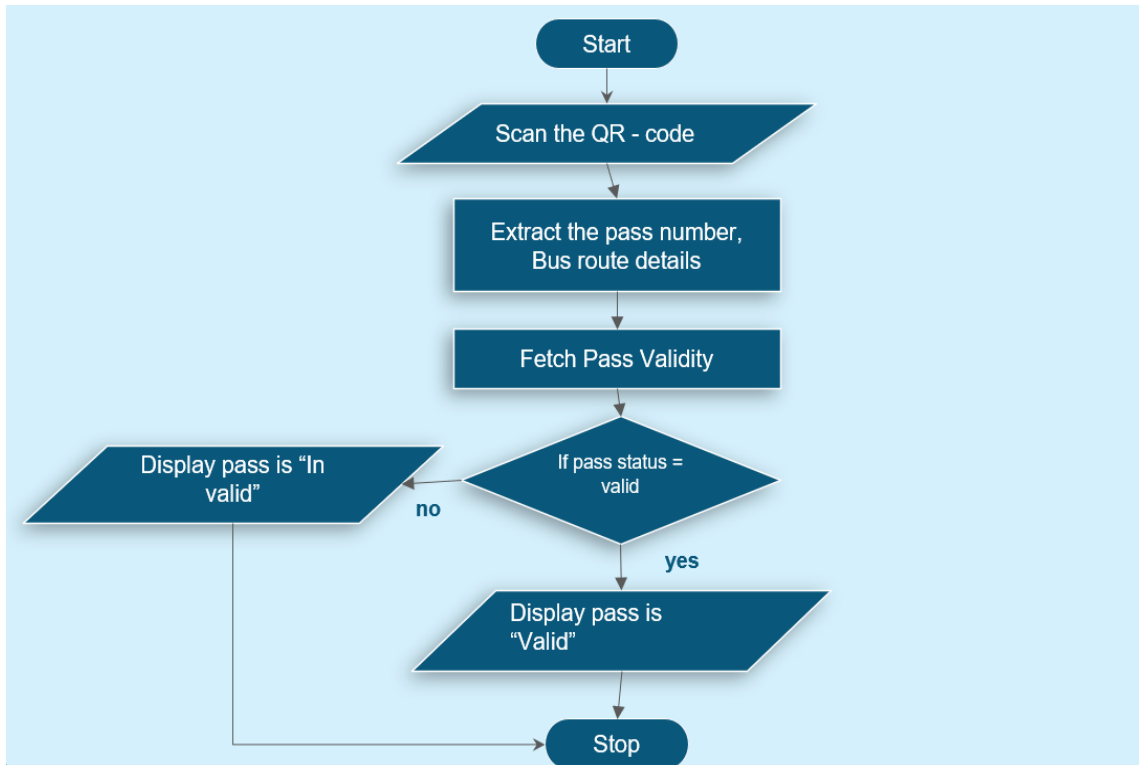


Fig 4 : Propose System Architecture

Which when filtered by a conductor of the transport will come to think about the subtleties like name, the situation with his membership of transport pass i.e., if restoration is finished by the client and our framework additionally works with the SPOC( single resource) from the upkeep side so that entrance consent is given to just assigned individual from the support side. In our framework client, can filter subsequent to finishing Signup and Login can go into our application and can present an application in the wake of filling in required subtleties like a versatile number, choosing a course through he/she needs to travel and the installment should be possible by means of UPI which makes the installment after which an exceptional QR code is produced for every single client. The conductor of the transport can check it to know if he has to recharge the transport pass. Our framework makes pass enlistment and reestablishment straightforward for the client without standing and holding up in long lines and recharging of transport pass is likewise given in our application itself.

#### Algorithm:

- Step 01:** User creates new account and login to his account.
- Step 02:** User can submit his/her application using the apply option in menu
- Step 03:** User after filling all the required details can pay for the bus pass
- Step 04:** After payment is done a unique QR-code is generated for each user.
- Step 05:** A payment Id is generated which is stored in our database
- Step 06:** User can show this QR code for conductor who checks his pass.
- Step 07:** User can renewal upon expiry of bus pass.
- Step 08:** All the current and the past transaction details are stored in the database.



#### IV. CONCLUSION

This paper provides a comprehensive review on a mobile application which facilitates the user to apply for the bus pass and renewal of the same without forcing the user to stand in long queues to perform the same. Besides providing many advantages like promoting digital India, it is protected from the physical damages as only QR code of his bus pass is only required by the conductor of bus pass which when scanned shows whether he/she has active subscription for bus pass (checking whether is renewal is made or not) besides showing other required details and data privacy is ensured in our web application in each every phase of our system. This system can be further extended by providing tracking of bus, facilitating payment of a passenger who wants to travel in pay-as-you-go fashion.

#### REFERENCES

- [1] K. Ganesh, M. Thrivikraman, J. Kuri, H. Dagale, G. Sudhakar and S. Sanyal, "Implementation of a Real Time Passenger Information System", CoRR abs/1206.0447 (2012).
- [2] B. Caulfield and M. O'Mahony, "An examination of the public transport information requirements of users", IEEE Transactions on Intelligent Transportation Systems, vol. 8, no. 1, (2007), pp. 21–30.
- [3] S. Kim, "Security Augmenting Scheme for Bus Information System based on Smart Phone", International Journal of Security and Its Applications, vol. 7, no. 3, (2013), pp. 337-345.
- [4] J. Lee, K. Hong, H. Lee, J. Lim and S. Kim, "Bus information system based on smart-phone Apps", in Proc. of KSCI Winter Conference (2012), pp. 219-222.
- [5] S. Chandurkar, S. Mugade, S. Sinha, M. Misal and P. Borekar, "Implementation of Real Time Bus Monitoring and Passenger Information System", International Journal of Scientific and Research Publications, vol. 3, no. 5, (2013), pp. 1-5.
- [6] K. G. Zografos, K. N. Androutopoulos and V. Spitadakis, "Design and assessment of an online passenger information system for integrated multimodal trip planning", Trans. Intell. Transport. Syst. vol. 10, (2009), pp. 311–323.
- [7] D. M. Bae, "An analysis on the efficiency of bus information systems in Bucheon city", Journal of Korean Society of Transportation, vol. 20, (2002), no. 1, pp. 7-18.



**INNO**  **SPACE**  
SJIF Scientific Journal Impact Factor  
**Impact Factor: 7.542**



**ISSN** INTERNATIONAL  
STANDARD  
SERIAL  
NUMBER  
**INDIA**



# INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH

IN COMPUTER & COMMUNICATION ENGINEERING

 **9940 572 462**  **6381 907 438**  **ijircce@gmail.com**



[www.ijircce.com](http://www.ijircce.com)

Scan to save the contact details