QR BASED STUDENT BUS PASS SYSTEM

[1]Mrs.G.SWETHA, [2]J.BHAVANA, [3]K.NARESH, [4]M.NIKITHA

[1](Assistant Professor), CSE. Teegala Krishna Reddy Engineering College Hyderabad.

[2,3,4]B, Tech, scholar, CSE. Teegala Krishna Reddy Engineering College Hyderabad.

ABSTRACT

Over the last few decades, there has been an increase in the use of public transport like social travel (ST). The traditional system of buss pass system is fully depend upon paper. Means this system has use amount of paper. Rather than traditional system, there is invent in this and people create online buss pass system but it is very complex to maintain the users online. To overcome this problem QR based student bus pass system get use. This system provide only QR code to the candidate, means the use of paper is reduce. There are 80% of candidates use the smart phone, so this QRcode based system reduces the headache to carry paper pass. Admin get all the information of candidates and stores this in database by creating QR code contain the id, name etc. This minimizes usage of paper and reduce to carry paper pass.

1. INTRODUCTION

By using the advanced technologies it is much easier to bring the entire bus pass generation to online. It is very easy and also efficient when compare to the old bus pass generation method. Old method is took very long time and have to maintain lot of details in physical form. It is very hard to transfer that much of data in physical form, so it take lot of man power to get the job done. This process is highly time consuming and more complex. Even though it is very difficult and time consuming it has lot of drawbacks. The first and main disadvantage is it does not provide any security options. This is mainly useful for school and college students and old age peoples. The aim is develop this system for government. So that it can used by many peoples. These pass are auto renewed or it can renewed in the online application. Renewed QRcode can be downloaded from the website. Bus conductor can verify or check the bus pass by just scanning it from their android phone or QR code scanner. If the pass is valid the it will provide all the route and basic

information about the passenger. If the pass is not valid for duplicate it will prompt as not valid. So it is easy to prevent fraudulent activities by using this application. Our concept was created to provide people with services that are practical, simple, and secure. We developed the idea of creating bus permits online because the present system has flaws and can better serve consumers. Our product gives users the ability to finish their work more quickly and easily than the current system, which forces user to conduct each and every operation by hand. Using the app, users can buy a bus pass. Using this technique also helps the user save time. QR codes record student information such as name, point of origin to point of destination, and pass validity.

This technology is the most cost-effective when compared to other options. When the bus conductor requests their pass to scan their information, users only need to present the QR code. The conductor can see all the user's information, including name, ID, source, destination, and validity, on the screen after the system scans the QR code. The government and Mother Nature will use a lot less paper as a result of this technology. 2 The necessity for paper bus passes is eliminated, and the bus conductor can more easily identify the appropriate owner of the

pass thanks to this application. In our application, we use Firebase, a back-end platform for building Web, Android, and iOS applications. It offers courses on real-time databases, cloud fire stores, and firebase cloud messaging, among others. Firebase authentication: Most applications need that the identity of the user be verified. Authentication makes it easier than any other technique to log in. The sign-in API for Firebase is simple to use. Real-time database: Since many programmers require that their applications run without regard to network conditions, the Firebase database which keeps an internal cache of all the data displayed in the app is used.

2.LITERATURE REVIEW

ϖ **Detailed Survey collection on online bus pass generation:**

In this paper, a solution for current issue in the bus pass generation is discussed. This system intended to provide a solution for drawbacks in the current system and reduces paper work and man power. Admin and user has their respective login pages. Then the user can apply for pass by filling the details in online form and uploading the proof. Then the proof and form are verified by the admin. If the proof and form filled by user

are valid then a notification is sent to the user. After the user receive notification he/she can do the payment only authorized sources. Once the payment is done by the user then pass is generated to the user in online as pass with Aztec code, in which the information is encoded. The user can download it and use it. If bus pass is damage, the user can download the temporary pass in online. This makes user work easy and it takes less time. The conductor scans the code by using the recommended device for scanning.

ϖ Online Bus Pass Generation System using Web Application:

In this paper, the system has separate logins pages for user and the admin person. This system concentrates on security and confidentiality of the user details, so once the user register in the website, he /she receives a OTP code to his/her mail, by doing this the admin can verify whether the user is valid one or not. Then the user enters the OTP and he/she can login into the website. The user can apply for the pass and the online payment or net banking . Once the payment is done and verified by the admin the pass is generated and sent to the students or users mail. Then the user can have the softcopy of the pass and he/she can

download it and make it as hard copy and useit. A notification has been sent to the users registered e-mail if the pass is about to expire, so he /she can aware of it and renew it.

ϖ Digital Bus Pass for Local Buses:

In this system, the online bus pass generation system is a cross platform, it is supported in kind of devices. So one can apply the bus pass from anywhere easily without any difficulties.

3. SYSTEM DESIGN

Systems design interfaces, and data for an electronic control system to satisfy specified requirements. System design could be seen as the application of system theory to product development. There is some overlap with the disciplines of system analysis, system architecture and system engineering. The physical design relates to the actual input and output processes of the system. This is explained in terms of how data is input into a system, how it is verified/authenticated, how it is processed, and how it is displayed. In physical design, the following requirements about the system are decided.

1. Input requirement,

2. Output requirements,

3. Storage requirements,

4. Processing requirements,

5. System control and backup or recovery.

Put another way, the physical portion of system design can generally be broken down into three sub-tasks:

1. User Interface Design

2. Data Design

3. Process Design

ACTIVITY DIAGRAM

Activity Diagrams describe how activities are coordinated to provide a service which can be at different levels of abstraction. Typically, an event needs to be achieved by some operations, particularly where the operation is intended to achieve a number of different things that require coordination, or how the events in a single use case relate to one another, in particular, use cases where activities may overlap and require coordination. It is also suitable for modeling how a collection of use cases coordinate to represent business workflows
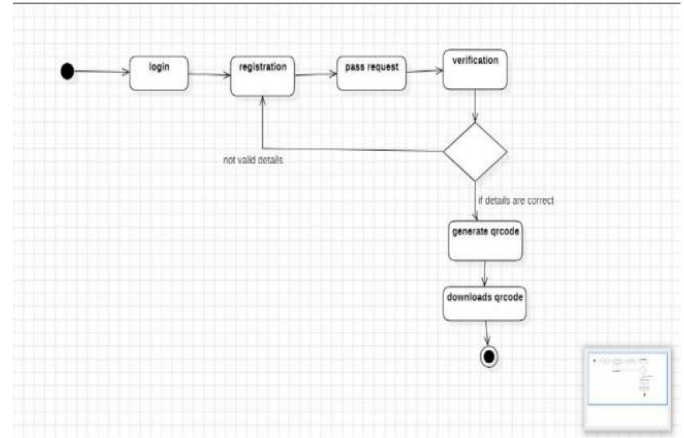

FIG: 1 Activity Diagram

4.OUTPUT SCREENS

¬ HOME PAGE

A home page is the main web page of this website where it shows User and Admin login pages.

FIG: 2 Home Page

¬ STUDENT BUS PASS PAGE

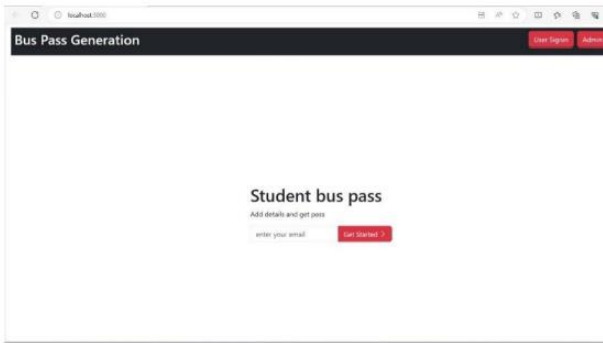This page shows the user to enter their Email-Id. If new applicant is enteredit shows not register as popup message.
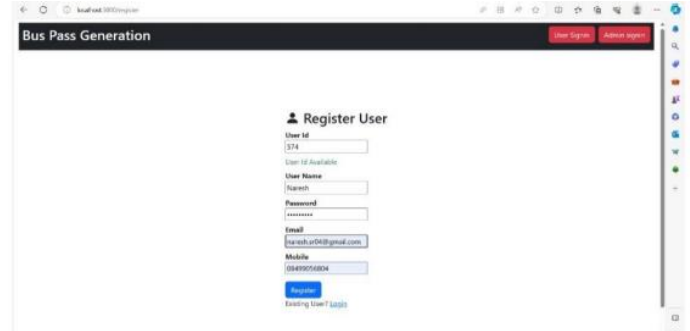
FIG: 3 Student Bus Pass Pag

¬ USER LOGIN

The user login page shows to enter the details of User-Id and password. After entering the details it goes to main Login page.
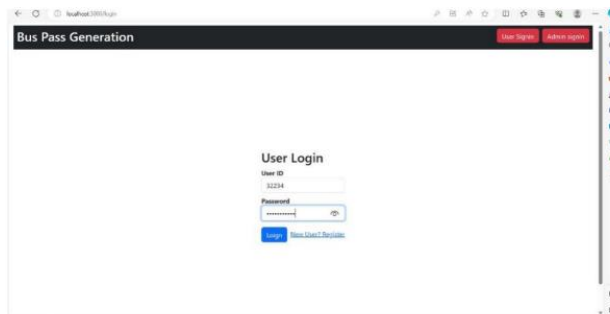

FIG: 4 User Login

¬ REGISTER PAGE

The register page is used to enter the user details with their User-Id, Username, Password, Email, Mobile. Then goes to the application form of bus pass.

FIG: 5 Register Page

¬ APPLY STUDENT BUS PASS

Here is the page of applying the request of bus pass by entering their details like Name, DOB, Age, Mobile, Gender, Aadhar, Email, City
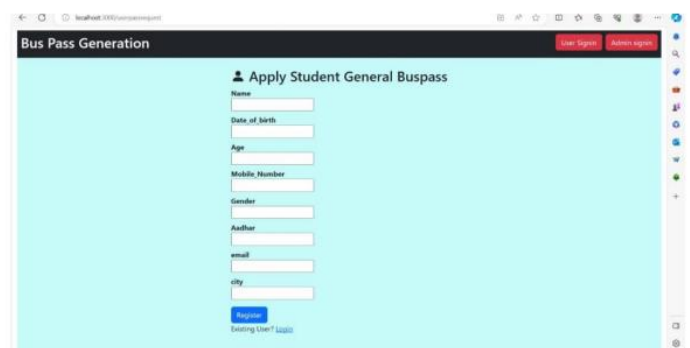

FIG: 6 Apply Student Bus Pass

¬ PAYMENT PAGE

After applying the pass payment will be proceed and waited for QR generation.
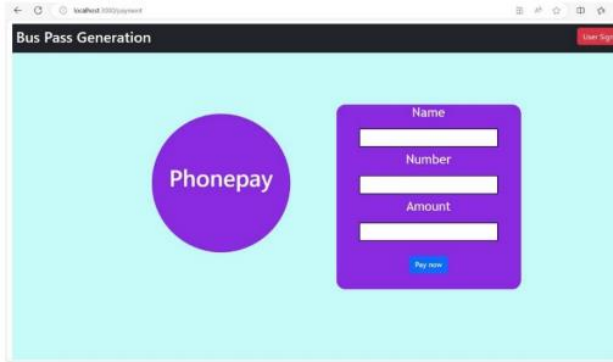
FIG: 7 payment page

¬ QR CODE

After generating QR code of passengers details, admin sends QR code to their registered mails.

FIG: 8 Qr Code

5.CONCLUSION

The Online bus pass is helpful for those who face several problems. This system is provide efficient solution for maintaining all the information related bus pass using a database. It is useful for the public who are facing the problems likes stand in queue and register. By using this system user can register from anytime to anywhere. It also increases the validity period, frequently Warns to the student before completion of his validity period by website. This Digital bus pass registration application will help students save their time without standing in a line for hours near counters. Initially students need to register with the application by submitting details of photo, address proof, and required details and submit through online. They will verify your details and if they are satisfied they will approve bus pass. This project will generate QRcode passin stead of paper bus pass QR code having details of the passengers where they can easily access and display their passes on their smart phone without the risk of physical tickets. So by this project users can easily get there passes by simple steps.

6.FUTURE ENHANCEMENT

This project has a wide scope for future development, as the user's requirement is always going to be changed which is not static and this need are dynamic. The technology which is famous today becomes outdated in very next day. To keep abstract of technical improvements, the system may

be further refined. So such type of system is improved in further future development. This enhancement is done in an efficient and effective manner. We can thus update the same with further modification establishment and can be integrated with minimal modification. Thus the project is extendable and can be developed in anytime with more advanced features.

7.REFERENCE

• Juanjuan Zhao, Fan Zhang, Lai Tu, Chengzhong Xu, Dayong Shen, ChenTian, Xiang-Yang Li,Estimation of Passenger Route Choice Pattern Using Smart CardDatafor Complex Metro Systems", 1524-9050 2016 IEEE. Personal use is permitted, but republication/redistribution requires IEEE permission.

• Raed M. Bani-Hani, Yarub A.Wahsheh, Mohammad B. Al-Sarhan SecureQRCode System 978-14799-72128/14/2014 IEEE

• Joo Leal, Rui Couto, Pedro Maurcio Costa, Teresa Galvo, Exploring ticket ingapproaches using mobile technologies: QR Codes, NFC and BLE",9781-4673-6596-3/15 2015 IEEE DOI 10.1109/ITSC.2015.9

• Dijana Jagodi, Dejan Vujii, Sinia Rani, Android system for identificationofobjects based on QR code ,978-1-50900055-5/15/2015 IEEE

• Rafael Martnez-Pelez, Patricia Romero-Navarro, Aaron Garca-Molina, Joel Ruiz,"A Flexible Mobile Ticket for Intelligent Public Transportation"9781-4673-7839-0/15/2015 IEEE.

• P.Sharmila, A.Ponmalar, Skanda Gurunathan R, "Bus Pass and Ticket automation System ", Volume 3, Issue 8, August2016, pp. 389-393 ISSN (O): 2349-708.