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E-Pass for Bus

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ABSTRACT

To overcome the issues that people face nowadays, the E-pass system is generated as a web application. Each time people travel by buses suffer from a lot of hectic rules and regulations to generate pass physically. The E pass system is the web application system that is going to be developed to generate E passes digitally by adding necessary information and documents to generate passes. The main feature of this work is to make the application user-friendly to make their lifestyle easier. By adding all the necessary information regarding the pass, the pass is easily generated. The Bus Pass Generator Application is a user-friendly and efficient mobile application designed to simplify and streamline the process of acquiring and managing bus passes for public transportation systems. This innovative application leverages modern technology to enhance the convenience and accessibility of public transportation for both commuters and transit authorities.

Keywords: E-Pass, Digital Pass, Access Control, Identity Verification, Contactless Pass, Authorization System, Pass Validation, Reporting and Analytics.

I. INTRODUCTION

The E-Pass Generator Project is a digital solution designed to streamline and modernize the process of issuing and managing passes or permits for various purposes. This system leverages technology to provide efficient and secure access control, whether it's for events, transportation, healthcare, or any other scenario where controlled access is essential. The E-Pass system for buses can streamline ticketing and improve passenger convenience. E-passes are electronic tickets that passengers can purchase and store on their smartphones or smart cards. They offer benefits such as contactless payments, reduced paper waste, and the ability to track usage and plan routes more efficiently. This innovation can enhance the overall bus travel experience for passengers and make public transportation more accessible and sustainable. The E-Pass system for buses represents a significant leap forwarding modernizing and optimizing public transportation. E-passes, or electronic passes, offer passengers a convenient and efficient way to access and pay for bus services. Pharmaceutical innovation faces challenges. Research merges quantum computing and machine learning to revolutionize drug discovery, simulation, and safety assessment for expedited progress.[17]

II. LITERATURE SURVEY

Online Bus Pass System created in 2022 is mainly helpful for the student who are facing problem with the current manual work of bus pass registration and generate as well as getting bus pass online and renew online without any irritating process. The proposed system is will work in all the configurations. So, Online buss pass system is use to generate online buss pass and give the Digital bus pass at home.

In 2022, The Software powered by PHP assures clear and systematic services to the company. This easy to operate system helps to access and change user. The process of getting bus Pass Apply through Online, view bus information and Cost details for given source. The process of getting bus Pass Apply through Online, view bus information and Cost details for given source and destination, Add New bus details and Ticket amount details by admin and all Customer details and Bus pass details and Renewal Details, Payment Details are maintained more simple and easy.

Digital Bus Pass Generation System 2021 technique is used to solve the problem is by providing QR codes to generate pass easily but system is will work in all the configurations. So, Online buss pass system is use to generate online buss pass and give the Digital buss pass at home.

The technique used to solve the problem by providing user friendly applicaion to generate pass with low cost (2019) scope for future development, as the users requirement is always going to be changed which is including tracking the location of the bus. It is helpful for the user to find the current location of the bus and it is providing the feature that is online booking of ticket and seat.

'Survey on Online Bus Pass System' in 2019 This online bus pass system application will help candidates to save their time and renewal bus pass without standing in a line for hours near counters, is developed using Active Server Page.

Online Bus Pass System is mainly helpful for the student who are facing problem with the current manual work of bus pass created in 2019. The proposed system is will work in all the configurations. So, Online buss pass system is use to generate online buss pass and give the Digital buss pass at home. It will verify by Aadhaar card and User-id.

The technique is used to reduce work of customers to get pass who travelled by buses (2019). Online based app for applying and renewals of bus pass in government bus.

Study of an Effective Online Bus Pass Generation and Renewal System(2018). Study of an Effective Online Bus Pass Generation and Renewal System.

In 2015, Online bus pass Generation system is a web application for people to get Bus passes through online. This system was intended to develop an application to perform functionalities.

Online Bus Pass (2015) this project is created to safe, reliable and time saving service for people. To provide an effective solution for marinating bus pass.

Lots of IOT based technologies are used for advancement of safe, secure and smart travelling [11].

More Security can be provided with the help of Watermarking scheme[13]

III.PROPOSED SYSTEM

A. Problem Statement

The current state of public transportation lacks an efficient, user-friendly, and technologically advanced fare collection system for bus services. Traditional paper tickets and cash payments are cumbersome for passengers

and transit authorities, leading to issues like long queues, inefficient fare collection, and limited data analysis capabilities. Traditional ticketing systems, reliant on paper tickets and cash payments, are time-consuming and result in long queues, especially during peak hours. Paper tickets are susceptible to counterfeiting and fraud, leading to potential revenue losses for transit authorities.

B. Architecture Diagram

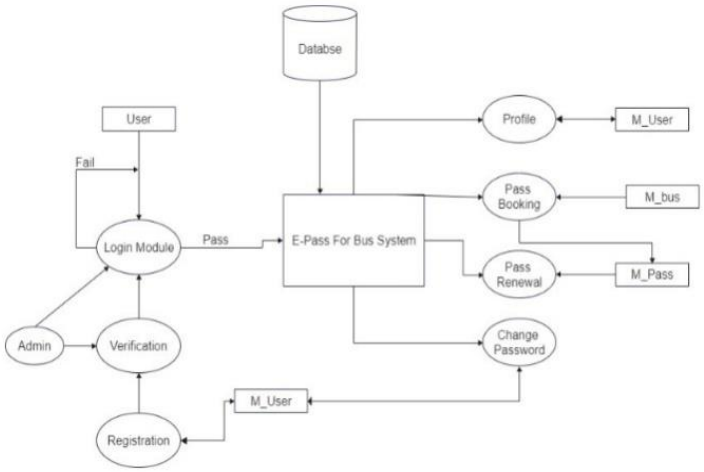

Figure 1: Architecture Diagram

C. Requirements

A. Hardware Requirements:

- Processor - Intel i5/i7
- Speed - 3.1 GHz
- RAM - 4 GB(min)
- Hard Disk - 20 GB
- Key Board - Standard Windows Keyboard
- Mouse - Two or Three Button Mouse
- Monitor - SVGA Document Scanner/Camera

B. Software Requirements:

- Operating System – Windows
- Front End - ReactJS, Bootstrap, CSS
- Language – Java
- IDE - Eclipse IDE J2EE, Visual Studio Code

D. Requirements

A use case diagram can show the different types of users of a system and the various ways in which they interact with the system. Use case diagrams are used to gather the requirements of a system including internal and external influences. These requirements are mostly design requirements [13]. The detailed survey given in [14].

IV. RESULT AND DISCUSSION

The result of implementing an e-pass for buses using Java full-stack development would be highly beneficial for people, offering convenience and efficiency regardless of their location. Users would be able to easily book and manage their bus passes online, reducing the need for physical queues and paperwork. Additionally, features such as real-time tracking and updates could enhance the overall travel experience, making it more accessible and user-friendly for passengers. Overall, the e-pass system would streamline the process of bus travel, providing a valuable service to people everywhere. Cyberattacks surge. Cybercriminals seek efficient channels to spread malware via images. JPEG Vigilant, a machine learning method, identifies malicious JPEGs using 10 derived properties.[16]

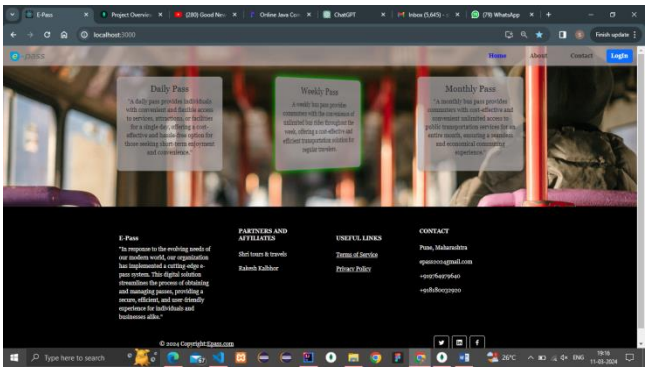

Figure 2: Home Page

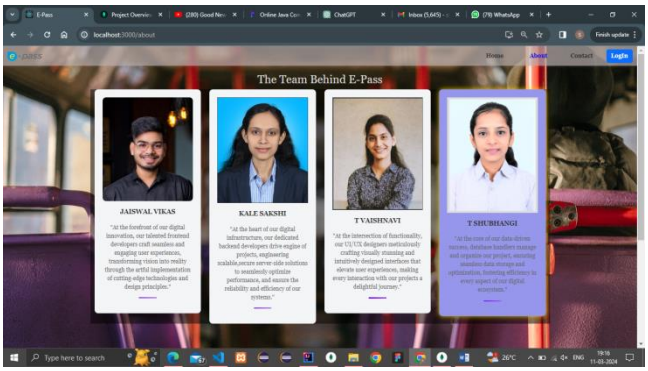

Figure 3: About Us

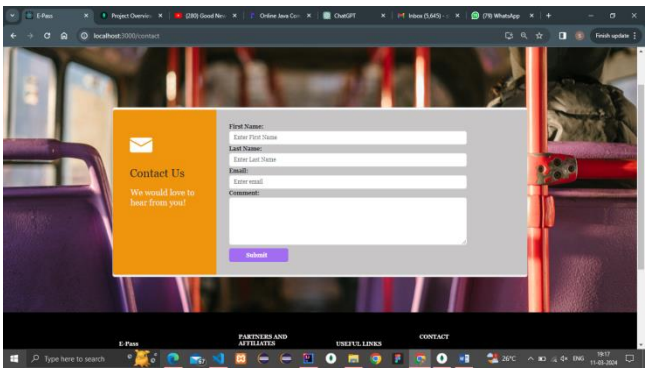

Figure 2: Contact Us

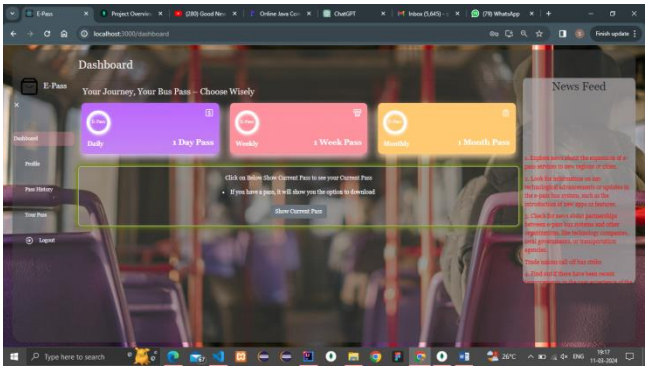

Figure 3: Dashboard

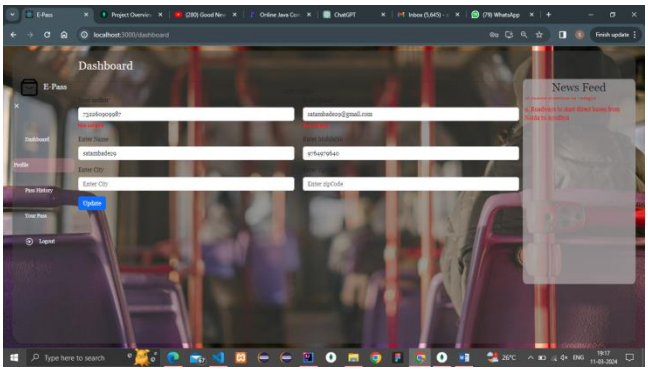

Figure 4: Pass History

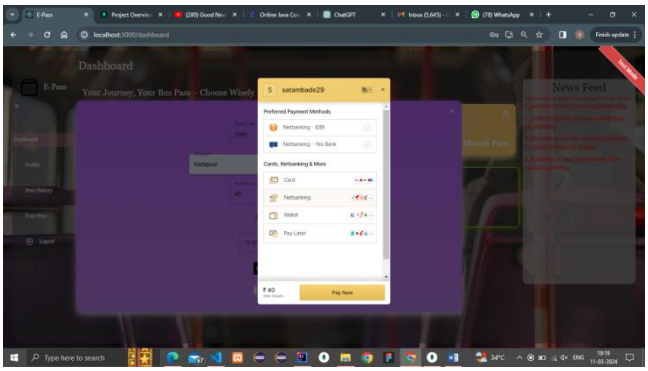

Figure 5: Payment

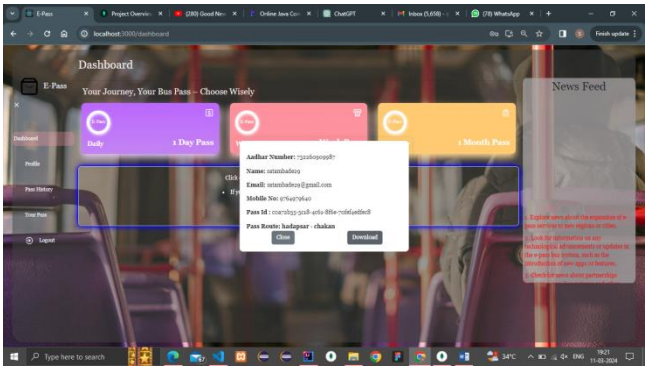

Figure 6: Pass Download

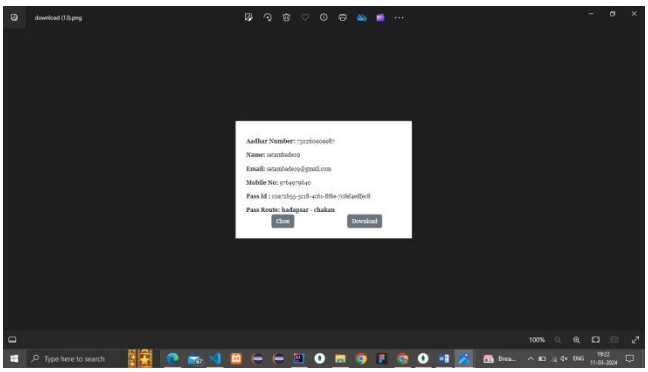

Figure 7: Pass Downloaded

V. CONCLUSION

The E-Pass Generator Project represents a significant advancement in access control and pass issuance through digital means. This project harnesses technology to provide efficient, secure, and convenient solutions for various industries and scenarios. However, it is important to be aware of the project's limitations and challenges, such as issues related to security, privacy, and accessibility.

VI. REFERENCES

[1]. Jadhav, A., Shinde, A., Nanavare, N., Ranmode, G., & Gavali, A. B. (2018). RFID based secure smart schoolbus system. Department of CSE, IAETSD J, March.

[2]. online bus pass management system mrs.m.jas mine Cagayan joint ms.v.dharshini research get 2022

[3]. Bus Pass Management System ShindeVijaya Rajendra1, PawadeSakshi Sandip2, Prof. Nawale S. K.3IJRPR 2022

[4]. Digital Bus Pass Generation System Vasanta Sanga, PritiNavale, MayuriShirke, DhanashriPatil 2021

[5]. Online Bus Pass System Lecturer Vikas Burgute, Shamrao Ghodake, Priyanka Koradkar, SonaliDhawar IJSRET2020

[6]. Online Bus Pass System Lecturer Vikas Burgute, Shamrao Ghodake, Priyanka Koradkar, Sonali Dhaware-IJSRED 2019

[7]. Online Bus Pass System Prof. Jagrati Shekhawat, Honey Amin, Harsh Amin JETIR 2019

[8]. Smart Buspass System Using Android Pandimuru

[9]. gan V.; Jayaprakash R.; Rajashekar V.; YogeshwarSinghK.2019

[10]. Study of an Effective Online Bus Pass Generation and Renewal System Niteesh Joshi1, Mahesh Waghmare2, Sujeet Bhosale3, Ankit Singh 2016

[11]. Jadhav, Ajit, et al. "RFID based secure smart school bus system." Department of CSE, IAETSD J, March (2018).

[12]. Development of an effective online bus pass generation system for transportation service in Karnataka state Parashuram Baraki1, Sandhya Kulkarni2, Spurthi Kulkarni3, Arpita Goggi4, Keertipriya I 2015

[13]. Vyawahare, J. S., Bankar, M. A., Banker, S., Gavi, S. B., & Nalawade, V. S. A SCHEME OF WATERMARKING FOR IMAGE COPYRIGHT PROTECTION BY USING NEW DCT ALGORITHM.

[14]. Prof. Tonape Y.L., Kale Sakshi, JaiswalVikas, TakleVaishnavi, TambadeShubhangi, "A Survey on E-Pass for Bus", International Journal of Scientific Research in Computer Science, Engineering and

Information Technology (IJSRCSEIT), ISSN: 2456-3307, Volume 9 Issue 10, pp. 71-77, September-October 2023.

[15]. Shirkande, S. T., Barve, A. P., Bondar, H. N., Gore, S. B., &Rupanawar, S. S. (2023). Ambulance Detection and Traffic Flow Control System.

[16]. Ekatpure, J. N., Kharade, N., Korake, D., Kshirsagar, D., & Mind, R. (2023). JPEG Vigilant: AI-Powered Malware Image Detection.

[17]. Ekatpure, J. N., Jadhav, P., Gavali, R., Kale, P., & Padasalkar, S. (2023). Pharmaceutical Data Optimisation Using Quantum Machine Learning.ZX