

Literature survey

- 1) *Gangurde, Nirmal, Subendu Ghosh, Akash Giri, and Swapnil Gharat. "Ticketing System Using AES Encryption Based QR Code." In 2022 4th International Conference on Smart Systems and Inventive Technology (ICSSIT), pp. 201-206. IEEE, 2022.*

In this paper GUI is developed for the users through by which users book their tickets and the ticket generated will be in the form of QR code which is generated after booking confirmation. The QR Code will be generated on the basis of encrypted data entered by the user. A mobile application is designed to scan the encrypted QR Code. On decrypting, the information about the passenger can be viewed.

- 2) *Kazi, Sanam, Murtuza Bagasrawala, Farheen Shaikh, and Anamta Sayyed. "Smart e-ticketing system for public transport bus." In 2018 International Conference on Smart City and Emerging Technology (ICSCET), pp. 1-7. IEEE, 2018.*

The user can check the availability of seats, book tickets, get the seat automatically through efficient novel algorithm and the expected waiting time. If seats are not vacant, our algorithm will efficiently allot the seat that will be vacant in shortest time. They will pay digitally through our portal.

- 3) *Karthick, S., and A. Velmurugan. "Android suburban railway ticketing with GPS as ticket checker." In 2012 IEEE International Conference on Advanced Communication Control and Computing Technologies (ICACCCT), pp. 63-66. IEEE, 2012.*

This paper Android Suburban Railway (ASR) ticketing is mainly to buy the suburban tickets. Our ASR ticket can be bought with just a smart phone application, where you can carry your suburban railway tickets in your smart phone as a QR code. It uses the smart phones "GPS" facility to validate and delete your ticket automatically after a specific interval of time once the user reaches the destination.

- 4) *Alam, Shah, Mahfuzulhoq Chowdhury, and Abu Bakkar Siddique. "A User-friendly Android Application Featuring Smart Ticketing System and Destination Announcement for Metro Rail based Rapid Transport System in Bangladesh." In 2021 3rd International Conference on Electrical & Electronic Engineering (ICEEE), pp. 29-32. IEEE, 2021.*

This paper presents a user-friendly android application for metro-rail based rapid transport system. It can offer a smart ticketing, users authorization by verifying QR code, and notify the metro-rail passengers when they arrive close to their final destination.

- 5) *Ariffin, Ahmad Ashraff Bin, Noor Hafizah Abdul Aziz, and Kama Azura Othman. "Implementation of GPS for location tracking." In 2011 IEEE control and system graduate research colloquium, pp. 77-81. IEEE, 2011.*

This project is aim to design and implement a low cost Global Positioning System suitable to be used for traveling and sailing activities. The function of the GPS is to locate the position of user. The effects of line of sights in relation to different

experimented locations are also studied. The GPS modules will generate the coordinates of latitude and longitude as well as the bearing angles between two positions.