

Literature Survey

There are mainly two security issues related with all the ticketing systems. One is validation and the other is ticket checking. The problems arising due to these security issues are many and various. One of them is the e-payment. To deal with these problems a new protocol has been given in the previous papers itself. This protocol aims at providing high level security. Security was offered but the performance of the system. E-ticketing is one of the most popular trading services since it does not involve any paper work for e-ticketing in transport system. With the emergence of new technology, came the digital era. It provided the concept of money in the place of real one for all trades and transactions as well. Then evolved Mobile Ticket or m-ticket.

The concept of virtual money is supported by existing Near Field Communication (NFC) device. Mobile ticket for public transport application can be purchased using this NFC technology as explained by Biader Ceipidor. Then was derived the concept of smart phones which may be considered as a platform for validating the tickets using low cost ticketing device. Interoperability and elasticity are ensured by the integration of android mobile with the cloud environment. The cloud platform automatically configures and remembers the user information, and thereby validates the tickets. The smartphones however are accompanied by shortage of data storage, battery and computation capability of the phones. For overcoming this problem cloud based virtual environment can be used to store data with complete security along with Android Emulator. The pressure and time of computation can be reduced with the incorporation of a virtual server in the mobile device.

Thus with the introduction of Android devices M-ticket concept was introduced which removes the burden of passengers to stand in queues to book the tickets. Security is ensured by the use of QR code. GPS is used for automatic validation and deletion of ticket information during the required

points in the journey. All information about the users is stored in cloud database in encoded form thereby ensuring constant availability and security. This smart phone application for ticket booking may be used for any kind of transportation system such as bus, railways, airways etc. It has been first implemented in airways, then in railways for long distances and lastly in buses.

In case of Android railway ticket, which came into existence, QR was used. Online ticketing system was introduced for Suburban Railway System. The Android application known as the Android Application for Suburban Railways not only uses all the above features but it uses another application for ticket checking. GPS is used for the validation of tickets. It saves a large amount of energy. Ticket checker holds the ticket number in CLOUD database⁸. This concept is clearly described and implemented in this paper.