

Online Ordinary Ticket Booking In Indian Railway & It's Challenges And Issues

¹Kushal Patel, ²Panthil Patel, ³Akansha Raidas

¹Assistant Professor, ^{2,3,4,5}Student

^{1,2,3,4,5}Computer Engineering Department,

^{1,2,3,4,5} GIDC Degree Engineering College, Abrama, Navsari, India

Abstract: A citizen has to compulsory buy a ticket for travelling in public transportation system viz. Bus, train, flight, etc. To buy an ordinary (general) ticket people has to stand in a queue at the respective railway station at which citizen going to start his journey. Sometime people could not able to buy tickets due to the heavy rush of passenger at the time of train arrival and travel in the train without tickets. Currently there is no provision of Indian Rail to buy online ordinary ticket except in Mumbai local. In this paper, we are aiming to discuss challenges and Issues currently facing to facilitate online ordinary ticket booking in Indian Railway.

Index Terms – Digitalization, Indian Railway, Travelling

I. INTRODUCTION

Information Technology has elaborated to an immense level and is being utilized in the field of transportation services. In addition, Hon'ble Prime minister of India Shri Narendra Modi, started the a new project called as "DIGITAL INDIA", which is an initiative of the Government of India to ensure that government services are made available to citizens electronically by improving online infrastructure and by increasing internet connectivity.

Roaming in Train is the most under-value form of long-distance travel. In addition, travelling by train is time preserving as the trains usually runs on time. Furthermore, many train journeys over long distance need reservations, but the short distance train journey requires an ordinary railway ticket. For Indian railways, to buy ordinary tickets, the traveler has to abide in long queue. Standing in queues which is a protracted, vexatious and inconvenient process as time demand is more [1]. With respect to Mumbai Suburban Railway, one of the major problems faced by the 7 million people, who travel by local trains every day, is standing in the long queues for an average of 10-15 minutes to buy a ticket [2].



Figure 1 long queue for buying tickets [3]

Sometimes many citizens facing problems to reach the railway station on time due to one or more reasons. Sometime ticket issuing officer generates a ticket only if we provide change money. It is risky to carry money for purchasing tickets. In addition, a citizen who wants to issue season ticket, has to abide in the queues.

II. ADVANTAGES OF ONLINE (CASHLESS) TICKET

- Anyone from anywhere can buy tickets who have internet connection and can able to make online payment on their devices.
- Avert deprivation of money from loss.

- Facilitate exact payment, Change of money is not required.
- Online Ticket lessens the spending by reducing the requirement of printing of Tickets.
- Avoid unnecessary wasting of time by standing at the ticket issuing windows.

In some cases, the traveler may have to travel by linking train and have to buy travelling ticket for the continual journey in the second train. Online ticket buying avoids travelling to go for buying of such ticket outside railway platform and then again coming at station for continuing his journey. In addition, it's helpful if another train is departing with a few minutes of arrival of the first train.

III. EXISTING SYSTEM

Facility for purchasing unreserved tickets through mobile phone is available at DELHI, Mumbai, Chennai, Kolkata and Secunderabad railway stations[4]. Android Suburban Railway(ASR) ticketing is to purchase the suburban tickets by 'M-ticket'[5]. ASR ticket can be purchased with smart phone app through which travelers can travel with railway tickets in smart phone as QR (Quick Response) code. ASR utilizes smart phone's GPS (Global Positioning System) to authenticate and obliterate generated ticket itself following a definite time of period once traveler accomplish the journey. In addition, the railway ticket checker is supplied with a checker application to verify the traveler's ticket with the ticket number and generated QR code.

In [5], a Wi-Fi router is set up at ticket counter. In addition, router does not require internet connection. Furthermore, Wi-Fi router is connected to the railway server. When travelling with an android application in smart phone arrives near the region of ticket issuing counter area, traveller initially connect with Wi-Fi router. Later traveller will prompt with source railway station name automatically. Subsequently traveler has to enter his credential for authentication of traveler. If traveller enters correct credential then application allows travelers to select destination based on route that has to be travelled by traveler. Further traveller has to enter number of tickets required. Traveller information will be verified at a railway server via Wi-Fi router. If information entered by travelers are valid then based on number of ticket required payment will be done and later travelers receive message which is identical to the railway ordinary ticket.

In [2], traveller who want to buy an online ticket has to download application for smart phone. Then the traveler will prompt to insert the train information like source and destination station, number of tickets required to generate including the category of passenger like an adult or child, and class of ordinary ticket like first or second class. Final cost of ticket/s will be calculated based on information inserted and train information stored in database. After successful deduction of payment via diverse payment methods, the ticket is generated with information similar to the paper-based tickets.

The Android Ticketing of Railways (ATR) [6] is an online railway ticket system where the ticket can be bought easily from any place in the internet enable smart phone. The ticket will be generated in a smart phone in the form of Quick Response(QR) Code. In addition, the ticket checker is facilitatet with a QR code scanner to check traveller tickets based on information store at database.

IV. CHALLENGES IN ONLINE ORDINARY RAILWAY TICKET

- Maintain a prominent database with updated information regarding train, source, destination distance, fare etc.
- Availability of required information at the time of booking.
- On time delivery of Ticket in terms of SMS/QR code or any other digital form.
- Verification of generated ticket.
- Automatic exterminate of generating tickets after specified interval of time i.e. after completion of journey for which ticket is generated.
- Facilitate secure and smooth mode of payment options
- Handling multiple simultaneously ticket generation request
- Maintain the cancellation and refund policy for generated tickets

V. Issues in Online Ordinary Railway Ticket

- For online booking of ordinary railway ticket reliable internet is required all the time. It is a big issue to provide internet all the time from every place.
- In addition, for online ticket booking internet enable phone is necessary
- If stringent cyber security measures don't implement then person privacy may be breached.

VI. Conclusion

Online ordinary railway ticket booking system allows remote bookings and Instantaneous payments. It avoids unnecessary wasting of time by standing at the ticket issuing windows. If we able to get ordinary railway ticket online for all the stations than we can preserve efficient timing of the traveler. In addition, reducing requirement of printing of paper tickets which in turn save paper. In this paper, we have highlighted a few challenges and issues related to online ordinary railway ticket booking.

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