

## AN ANDROID APPLICATION ON UNRESERVED RAILWAY TICKET BOOKING SYSTEM

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### ABSTRACT

"Unreserved Railway Ticket Booking System Using Android" this application provide the user to book the train ticket with in a short span of time provided the user must be in a range of 2-5 kilometers to book the train ticket. The user can book normal ticket, season ticket, platform ticket, and quick booking. The normal ticket is used to book the tickets for local trains. The platform ticket is used to book the tickets to enter the platform. The season ticket is used to book the tickets for specified season i.e. granting a ticket for period of time. And quick booking is something that booking the ticket when we know details of the train i.e. the users are well acquainted with the IRCTC Ticket booking Procedure. After booking the ticket the ticket will be available to the users in offline mode in unreserved railway ticket booking system application, so that they came get verified by the ostiary. . In case if the ticket need to cancel by the user then according to the terms and conditions of the IRCTC the ticket will be cancelled. While the user is being travelled the GPS location of the user device & the train will be tracked simultaneously to check whether the user reached the destination or not. If the user reaches the destination then the ticket will be cancelled automatically. In case if the user need to submit his/her travel summery to organization/institute then he can print his ticket provided his status of his travel in water mark i.e. cancelled or reached destination.

**KEYWORDS:** IRCTC, GPS, Android Application.

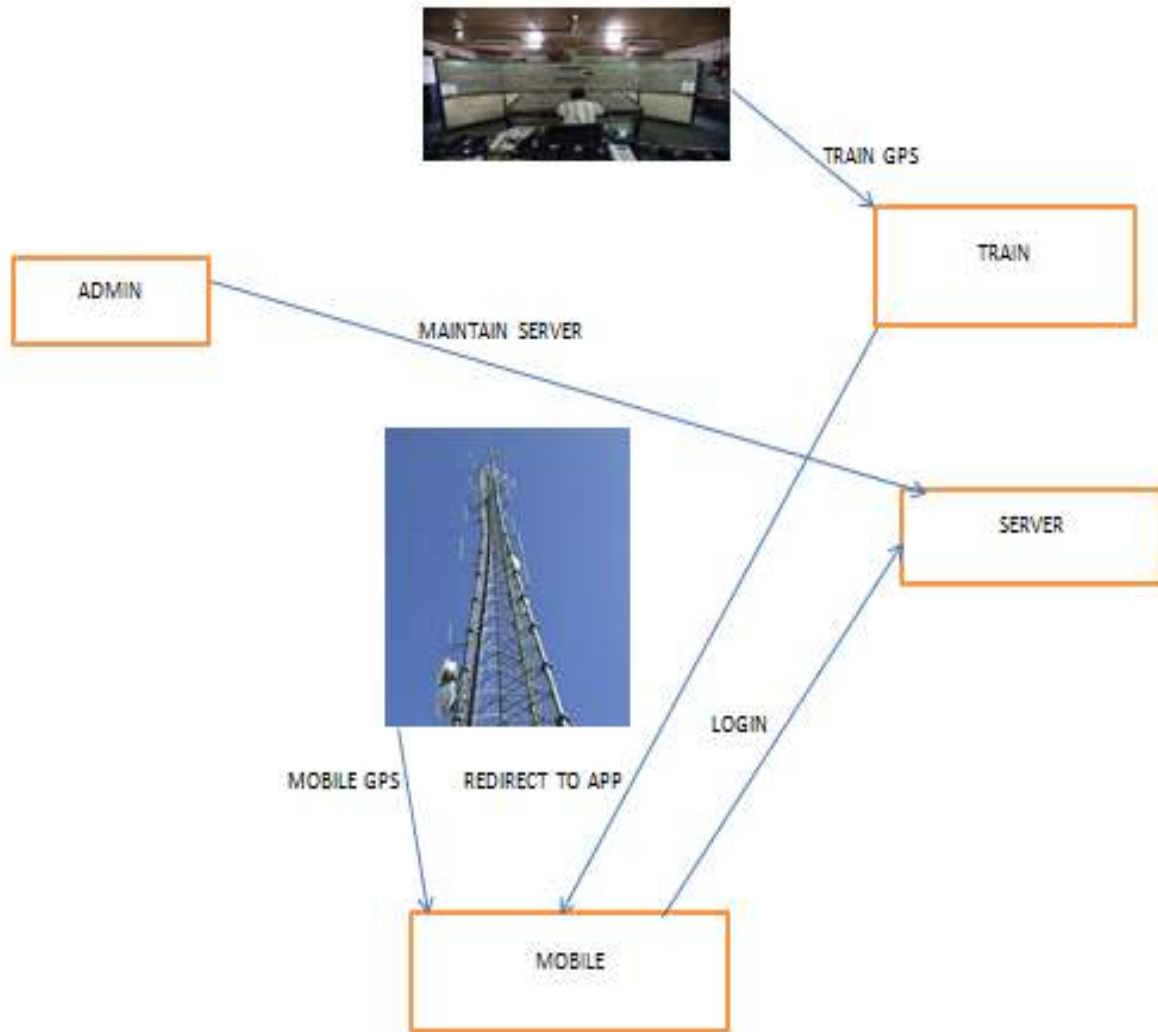
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### I. INTRODUCTION

The objective of the project is to generate the ticket on user demand i.e. normal ticket, platform ticket, season ticket. By developing this application we can save the passenger's time. The user can book his/ her ticket only when the user is around 2-5 kilometer range. Whenever the user wants to cancel his/her ticket he can only cancel based on IRCTC conditions. While travelling the GPS location of the user's device and GPS location of the train are tracked simultaneously, when the location of the user's device, train and the destination is matched then the ticket get cancelled automatically. But it is still remain in the booking history along with the ticket status i.e. cancelled or reached destination.

### II. METHODOLOGY

The proposing system "Unreserved Railway Ticket Booking System" Application overcomes the present existing system. Here the passenger can book his ticket in short span of time. The proposing system makes use of GPS system based tracking to track the device of the passenger and the train. When the user reaches the destination then the ticket gets cancelled automatically.



**Fig-1:** The method used to track the train location

- **How train GPS is tracked?**

The train tracking is not done through satellite! It is done through the section headquarters of the railway station. The CRIS (central for railway information system) and the ISRO (Indian space research organization) both combined and launched a satellite in 2003 for tracking trains. It provides the train location with the difference of 10M. When it was developed it was very costly deploy at each place. Then IIT Kanpur developed a device for rail navigation called “SIMRAN” for tracking trains. It is also not implemented because Indian railway routs are at jungle, hill station etc. as it is hard to get the GPS location.

- **Live tracking technology**

Live train tracking of train is done through section headquarters and all the activities will be managed by CRIS. While leaving the source the station master send the information to the next station headquarters about the train i.e. train no, speed of the train, schedule etc. trackers are implemented in the railway track that intimates the station master about the location of the train. When the train crosses the tracker then a graph will be plotted through which the controller can know the behavior of the train. All train’s live location will get through NTES national train enquiry system.

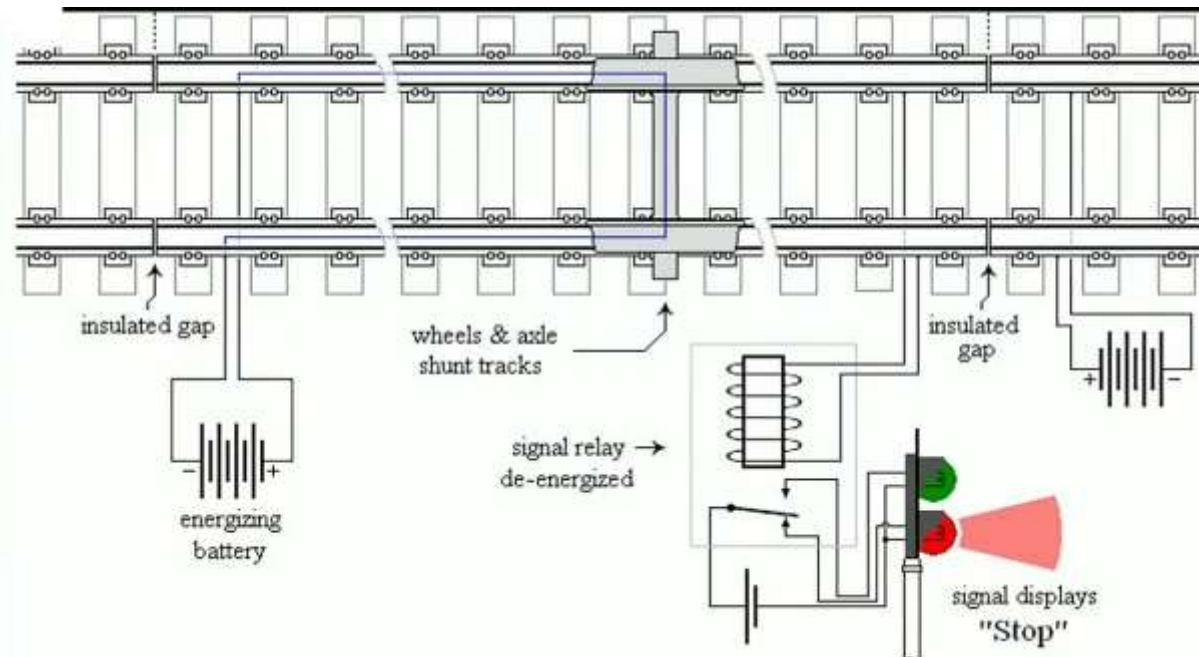


Fig-2: Train tracker



Fig-3: The train tracker device

### III. RESULTS AND DISCUSSION

#### 3.1 Discussion:

There are three main modules in this project, they are:

1. admin Module
2. user Module
3. GPS Tracking Module

##### 3.1.1 Module1: Admin Module

The admin module is used to maintain the server. The server main purpose is to maintain information user login details, profile, payment and train booking history data in a Server.

### 3.1.2 Module 2: user Module

The user module is used by local train passengers. They can use this android application to book the unreserved train tickets by logging the application and entering the user profile details. Here user can book the ticket, online payment and also view the booking history through the user mobile phone.

### 3.1.3 Module 3: GPS Tracking Module

The Tracking module is used track the Train location with the difference of 10m.by using satellite which is launched by the CRIS(central for railway information system) and ISRO (Indian space tracking research organization).The live train tracking is done through the headquarters and all activities will be managed by CRIS. Trackers are implemented in the railway track.

### 3.2 Result:

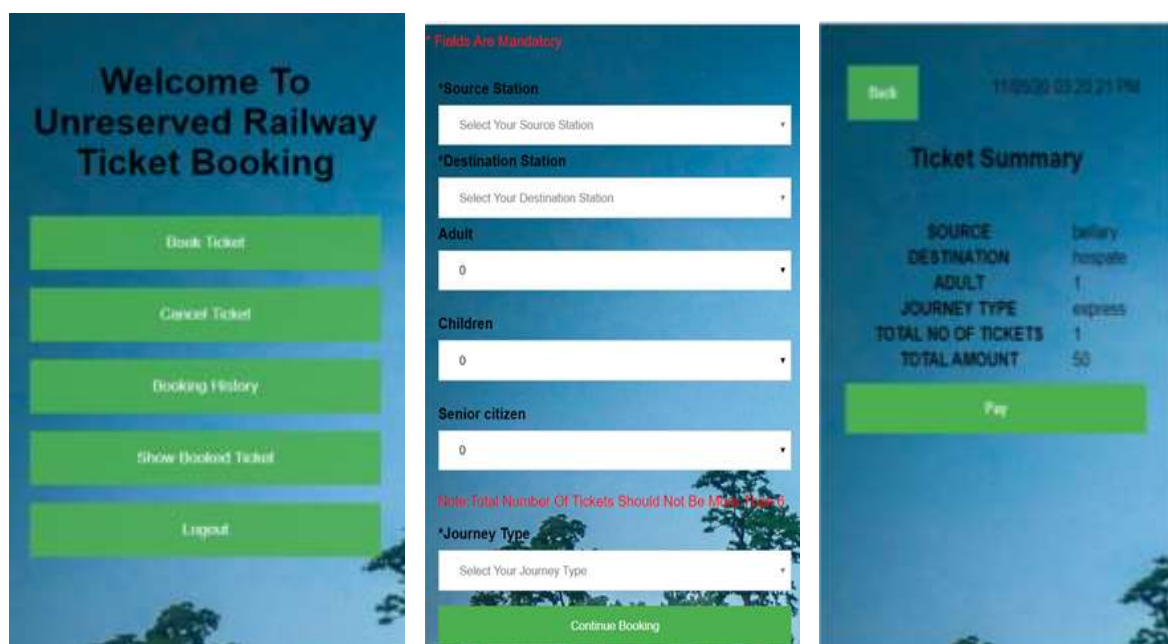
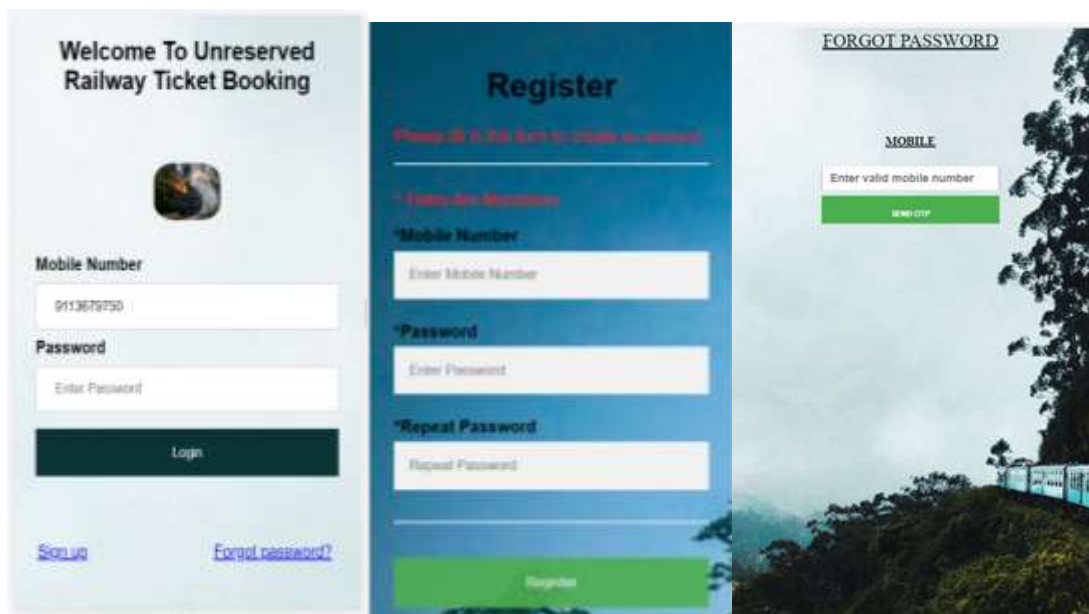


Fig-4

#### IV. CONCLUSION

By developing this application we are trying save the passenger's time. Every Year we spend lots of papers for printing train ticket. By developing this application we are trying to reduce the use of papers and also save the passenger's valuable time.

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