

RAILWAY RESERVATION SYSTEM

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1. Project Overview?

The project introduces railway reservation system with an objective to make the reservation system more efficient, easier and fast. This project explores how computer technology can be used to solve the problem of user. The main objectives provided by the software as follows:

- To enquire about availability of trains
- To reserve and cancel tickets
- To modify the information related to train number, train name, ticket fare.
- Users will be able to search the train availability
- The expected arrival and departure time of the train

2. To what extend the system is proposed for?

Besides the existing system, in this project user can reserve food along with the ticket if he wants. Soon after the reservation, train, journey and fare details will be informed via mail.

Other advantages of the proposed system:

- Menu driven and user friendly.
- It is highly reliable and secure.

- Fully Automated System.
- Faster information retrieval and storage.
- Time consuming project.
- User satisfaction and less human effort.

3. Specify the Viewers/Public which is to be involved in the System?

The system can be access any person who wants to know about train information, status and only registered user can reserve tickets and food.

4. List the Modules included in your System?

- **Food reservation system**

User can reserve their food while reserving the ticket, if the user cancel the reserved tickets, he get back the amount of the ticket, but cannot get the fare paid for food.

- **Immediate ticket reservation**

Immediate tickets are meant for last minute or immediate plans. It is the most sought after mode of booking tickets for train travel. It starts booking one day in advance (reduced from 2 days) excluding the day of journey

- **Searching**

To provides the searching facilities to a user based on source and destination.

- **Cancellation of reserved tickets**

User can cancel the reserved ticket by entering the PNR number.

5. Identify the users in your project?

There are three modules in the system:

Admin

- Add Staff, Train, Stations, Routes, Food.
- View user details
- Delete their profile after which the user will not be able to login to the system
- Monitor the complaints registered by the user
- Control the number of reservations by decreasing the count of availability after every reservation in a particular category.

Staff

- Check and verify the ticket and food reserved by the user
- View user profile
- Edit profile
- View food list added by the admin

User

- Register
- Make ticket, food reservation and get fare details
- View booking details

- View train status
- Cancellation
- Check seat availability
- Search trains using source and destination

6. Who owns the system?

The railway reservation system owns the indian railway. **IRCTC** is owned by Railways and there are some stakehold by **private company** also. That's reason everything on railways related to food, ticket booking is controlled by **IRCTC**.

7. System is related to which firm/industry/organization?

The railway reservation system is related to Ministry of Railways of India. It manages the fourth-largest railway network in the world by size.

8. Details of person that you have contacted for data collection?

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9. Questionnaire to collect details about the project? (min 10 questions, include descriptive answers, attach additional docs (e.g. Bill receipts, certificate models), if any?)

1. How often passengers would like to travel long distances?

Passengers are mostly prefer railway for long distance travel in india. Trains are an increasingly cost-effective alternative to planes. People Mostly often like to travel long distances in trains because it is cost effective, safe.

2. Which class would passengers prefer to reserve for their journey?

While most of India's middle class used to travel in Sleeper Class, many have now moved up to 3AC. Three Tier Air Conditioned Class, and Two Tier Air Conditioned Class AC offers a significant step up in comfort and quietness. The carriages in 3AC and 2AC are laid out in the same manner as in Sleeper Class.

3. What about the cost of reservations?

- Miscellaneous charges like reservation fee, superfast charge, catering charge, GST (Goods and Services Tax) etc. wherever applicable are levied additionally to the base fare of railway tickets, said Indian Railways.
- Reservation fee is also levied on RAC (reservation against cancellation) and waitlisted tickets.
- The ticket fares are same in case of all distances within that distance slab.

- Indian Railways charges a service charge of Rs. 20 is for second/sleeper class and Rs. 40 is charged in case of all other higher classes (1AC, 2AC, 3AC, CC, 3E, FC) per e-ticket, irrespective of the number of passengers (maximum six) booked on an e-ticket. GST (Goods and Services Tax) charges are extra.

4. What about the quality of food being supplied?

Strict quality checks should be done before selecting food vendors and contracts should be given to big and established vendors who would provide good quality and service. High penalty should be imposed on defaulting or non performing contractors. Standard dispensing machines should be installed for items like milk, cornflakes, coffee, tea, pre made snacks, etc. Now the railway have given the passengers the assurance that good and hygienic food would be served to the people.

5. What are the problems faced by passengers?

- Problems related to compartments.
- Problems related to waiting and retiring room.
- Problems related to platform.
- Unclean and Unhygienic
- Punctuality of trains
- Dirty linen

6. Which place the passengers mostly make reservations through railway?

The passengers are different types most of them reserve their ticket to tourist spots like agra, delhi, goa, etc. Most of the daily travelers did not reserve their tickets.

7. Which coach is mostly get reserved?

Sleeper class in the India railway system is the main chunk of a typical express train. Each coach holds about 72 passengers per coach (80 in LHB). Marked as S on trains. with about 10 to 15 coaches per train. They are sleeping coaches with three berths across the width and two lengthwise, without air-conditioning. The middle class masses of India travel by this class. The upper berth on the Indian train is undisturbed and can be used for sleeping during the daytime as well. Lower berth passenger gets the window seats during the daytime.

8. What is your opinion about managing the waiting list?

Now even after the purchase of your ticket if there are further cancellations of tickets that were bought earlier than you, your **waiting list** position advances towards an RAC (Reservation Against Cancellation) which entitles a confirm seat but not a berth.

There are Various types Waiting list:

- **(GNWL) - General Waiting List (GNWL)** waitlisted tickets are issued when the passenger begins his/her journey at the originating station of a route or stations close to the originating station. This is most common type of waiting list and has got the highest chances of confirmation.
- **(PQWL) - A Pooled Quota Waiting List (PQWL)** is shared by several small stations. The Pooled Quota is generally allotted for passengers travelling from the originating station to a station short

of the terminating station, or from an intermediate station to the terminating station, or between two intermediate stations.

- **(RSWL) - Roadside Station Waiting List (RSWL)** is allotted when berths or seats are booked by the originating station for journeys up to the road-side station and distance restrictions may not apply. This waiting list has also very less chances of confirmation.

9. What all benefits are offered by Indian Railways?

Indian Railways ties up with Air India! Now, passengers of Indian Railways booking tickets for the luxury train, Maharajas' Express, can avail 17 per cent discount on Air India tickets to any part of the country, according to a senior railway official. Like in other public services, the **Indian Railways** also extend certain facilities to **senior citizens**. These facilities are extended to men who are a minimum of 60 years and women of minimum 58 years of age. They are granted concession in fares of all classes of trains. **Students**, senior citizens, doctors, patients and **some** other passengers can save money on train tickets as **Indian Railways** offers a **concession** to a select category of people. **The concession** is offered on both AC class and sleeper class tickets for **some** categories.

10. Why the trains can't keep on time in most cases ?

Being a railway enthusiast, and someone who has closely observed the operations of Indian Railways (just as a hobby), let me elucidate the reasons for trains not running on time in India

- **Over-saturation of the current network :** All the major trunk routes of IR network is saturated beyond the capacity it can handle. These routes are handling more than **150% of the trains they can handle**
- **No major upgradation in infrastructure :** The delays are often caused by multiple TSRs (Temporary Speed Restriction) that are put on the railway networks due to damages and infrastructural problems. This is due to outdated technology, poor maintenance and lackadaisical attitude when it comes to repairing tracks, catenaries or signals.
- **Same track for both freight and passenger trains :** In all the countries with dense railway network and 100% punctuality of trains, freight and passenger trains have separate tracks. Due to freights and passengers running on same track, both the freights and passengers face delays (more so with freights, which have no fixed timetables and are often held up at same station for several hours). Moreover, if a goods train is on run, it cannot be stopped at stations which are short in length, and the passenger train behind it keeps on getting delayed as the freight trains have lesser permissible speed.
- **Lack of civic sense in the society :** When a train is stopped by chain pulling, it leads to atleast 10 minutes before it can be repaired and train started. In busy routes, if a train gets delayed by half an hour, the trains behind it also start to accumulate the delay.