



RAILWAY MANAGEMENT SYSTEM REPORT

DBMS PROJECT



GROUP DETAILS:

- | | | |
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INTRODUCTION:

Railway reservation system should be able to manage all the reservation related functions. The system should be distributed in nature. This system is divided into five zones.

Each zone should have same functionalities. Each zone will stores the information about train name, train schedules, availability. The administrator should be able to enter any change related to the train information like change in train name, number etc. The system should be able to reserve seat in a train for a passenger. First the clerk will check for availability for the seats in a particular train on a specified date of journey. If it is available the clerk will reserve seats. The passenger will be given a unique PNR no. The system should be able to cancel a reservation. The clerk will delete the entries in the system. The passenger can check their reservation status online by entering their PNR no. The system will display his current status like confirmed, RAC or waiting list. They are also able to see information related to the train schedules.

The system should be able to print the report like it should be able to generate reservation chart, train report, reservation ticket which will have train no and name, date of journey, boarding station, destination station, person name, age, [censored], total fare and a unique PNR no. The system should be able to print the cancellation ticket which will have total fare and the amount deducted.

AIM:

The main aim of the project was to develop a website which would facilitate the reservation of online air tickets through an effective and yet simple GUI for a normal passenger intending to travel in airways. Apart from reserving tickets, through our system a passenger can compare online fares 'from' various cities 'to' various cities.

OBJECTIVES:

The objective of the online railway reservation management system Project is to design software to fully automate the process of issuing a railway ticket. That is:- 1. To create a database of the trains 2. To search the trains it's arrival and departure time,distance between source and destination. 3.To check the availability of the ticket. 4. To calculate fare. 5.To book the ticket. 6.To cancel the ticket if necessary

SCOPE:

Railway passengers frequently need to know about their ticket reservation status, ticket availability on a particular train or for a place, train arrival or departure details, special trains etc.. Customer information centers at the railway stations are unable to serve such queries at peak periods. The number of the reservation counters available to the passengers and customers are very less. On most of the reservation systems there are long queues, so it takes a long time for any individual to book the ticket.As now there are no call centers facilities available to solve the queries of the passengers. The online railway ticket reservation system aims to develop a web application which aims at providing trains details, trains availability, as well as the facility to book ticket in online for customers. So, we thought of developing a web based application which would provide the users all these facilities from his terminal only as well as help them in booking their tickets. The Application was to be divided into two parts namely the user part , and the administrator part. And each of these has their corresponding features.We decided to give the name of the website "RAILWAY RESERVATION MANAGEMENT SYSTEM".The online railway ticket reservation system is developed using ASP.NET with C# as the backend in the .NET Framework

TABLE DESCRIPTION:

USERINFO

USERINFO table has a attributes f_name ,I_name ,email,password,gender, marital,dob,mobile,ques,ans is used shown in table 2.1

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	f_name	varchar(50)	latin1_swedish_ci		No	None		
2	I_name	varchar(50)	latin1_swedish_ci		No	None		
3	email	varchar(50)	latin1_swedish_ci		No	None		
4	password	varchar(20)	latin1_swedish_ci		No	None		
5	gender	varchar(10)	latin1_swedish_ci		No	None		
6	marital	varchar(10)	latin1_swedish_ci		No	None		
7	dob	varchar(20)	latin1_swedish_ci		No	None		
8	mobile	bigint(10)			No	None		
9	ques	varchar(100)	latin1_swedish_ci		No	None		
10	ans	varchar(100)	latin1_swedish_ci		No	None		

TABLE 2.1 STRUCTURE OF USER INFO

TRAIN LIST

TRAIN LIST table has a attributes number,name,origin,destination,arrival,departure, mon,tue,wed,thu,fri,sat,sun,1A,2A,3A,SL,General and number is used as a primary key as shown in table 2.


#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	Number 	int(6)			No	None		
2	Name	varchar(20)	latin1_swedish_ci		No	None		
3	Origin	varchar(20)	latin1_swedish_ci		No	None		
4	Destination	varchar(20)	latin1_swedish_ci		No	None		
5	Arrival	varchar(10)	latin1_swedish_ci		No	None		
6	Departure	varchar(10)	latin1_swedish_ci		No	None		
7	Mon	varchar(2)	latin1_swedish_ci		No	None		
8	Tue	varchar(2)	latin1_swedish_ci		No	None		
9	Wed	varchar(2)	latin1_swedish_ci		No	None		
10	Thu	varchar(2)	latin1_swedish_ci		No	None		
11	Fri	varchar(2)	latin1_swedish_ci		No	None		
12	Sat	varchar(2)	latin1_swedish_ci		No	None		
13	Sun	varchar(2)	latin1_swedish_ci		No	None		
14	1A	int(11)			No	None		
15	2A	int(11)			No	None		
16	3A	int(11)			No	None		
17	SL	int(11)			No	None		
18	General	int(11)			No	None		

TABLE 2.2 STRUCTURE OF TRAIN LIST

SEATS

SEATS table has the attribute train_no,train_name,doj,1A,2A,3A,AC,CC,SL is used shown in the table 2.3

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	Train_No	int(11)			No	None		
2	Train_Name	varchar(20)	latin1_swedish_ci		No	None		
3	doj	date			No	None		
4	1A	int(11)			No	None		
5	2A	int(11)			No	None		
6	3A	int(11)			No	None		
7	AC	int(11)			No	None		
8	CC	int(11)			No	None		
9	SL	int(11)			No	None		

TABLE 2.3 STRUCTURE OF SEATS

INTERLIST

INTERLIST table has the attribute number,st1,st1arri,st2,st2arri,st3,st3arri,st4,st4arri,st5,st5arri,ori,oriarri,dest,desarri,name,mon,tue,wed,thu,fri,sat,sun as shown in

Table 2.4

#	Name	Type	Collation	Attributes	Null	Default	Comments
1	Number	int(6)			Yes	NULL	
2	st1	varchar(10)	latin1_swedish_ci		Yes	NULL	
3	st1arri	varchar(10)	latin1_swedish_ci		Yes	NULL	
4	st2	varchar(10)	latin1_swedish_ci		Yes	NULL	
5	st2arri	varchar(10)	latin1_swedish_ci		Yes	NULL	
6	st3	varchar(10)	latin1_swedish_ci		Yes	NULL	
7	st3arri	varchar(10)	latin1_swedish_ci		Yes	NULL	
8	st4	varchar(10)	latin1_swedish_ci		Yes	NULL	
9	st4arri	varchar(10)	latin1_swedish_ci		Yes	NULL	
10	st5	varchar(10)	latin1_swedish_ci		Yes	NULL	
11	st5arri	varchar(10)	latin1_swedish_ci		Yes	NULL	
12	Ori	varchar(20)	latin1_swedish_ci		No	None	
13	Oriarri	varchar(10)	latin1_swedish_ci		No	None	
14	Dest	varchar(20)	latin1_swedish_ci		No	None	
15	Desarri	varchar(10)	latin1_swedish_ci		No	None	
16	Name	varchar(20)	latin1_swedish_ci		No	None	

17	Mon	varchar(2)	latin1_swedish_ci	No	None
18	Tue	varchar(2)	latin1_swedish_ci	No	None
19	Wed	varchar(2)	latin1_swedish_ci	No	None
20	Thu	varchar(2)	latin1_swedish_ci	No	None
21	Fri	varchar(2)	latin1_swedish_ci	No	None
22	Sat	varchar(2)	latin1_swedish_ci	No	None
23	Sun	varchar(2)	latin1_swedish_ci	No	None

TABLE 2.4 STRUCTURE OF INTERLIST

BOOKING

BOOKING table has the attribute uname, Tnumber, class, doj, DOB, fromstn, tostn, name, age, sex, status as shown in table 2.5

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	uname	varchar(15)	latin1_swedish_ci		No	None		
2	Tnumber	int(11)			No	None		
3	class	varchar(2)	latin1_swedish_ci		No	None		
4	doj	date			No	None		
5	DOB	date			No	None		
6	fromstn	varchar(15)	latin1_swedish_ci		No	None		
7	tostrn	varchar(15)	latin1_swedish_ci		No	None		
8	Name	varchar(15)	latin1_swedish_ci		No	None		
9	Age	int(11)			No	None		
10	sex	varchar(10)	latin1_swedish_ci		No	None		
11	Status	varchar(20)	latin1_swedish_ci		No	None		

TABLE 2.5 STRUCTURE OF BOOKING

TRIGGERS

A trigger is a special type of stored procedure that automatically executes when a event occurs in the database server.



TABLE 2.6 Trigger in Train list

ER Diagram

An entity-relationship model describes inter-related things of interest in a specific domain of knowledge. An ER model is composed of entity types and specifies relationships that can exist between instances of those entity types.

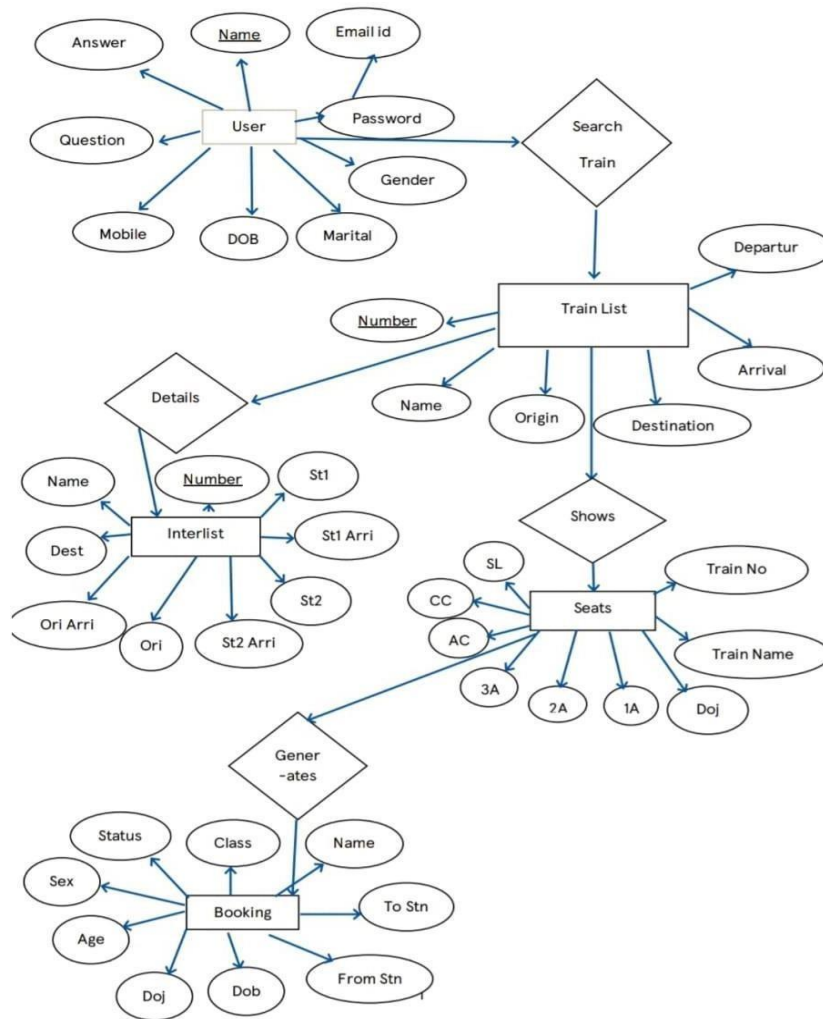


Figure 3.1 E R Diagram

This ER Diagram gives a brief idea about the relations existing between the tables and tells about the primary and the foreign keys being used in this Database.

SCHEMA DIAGRAM

A database schema can be represented in a visual diagram, which shows the database object and their relationship which represents the logical view of the database and how the relationships among them are represented.

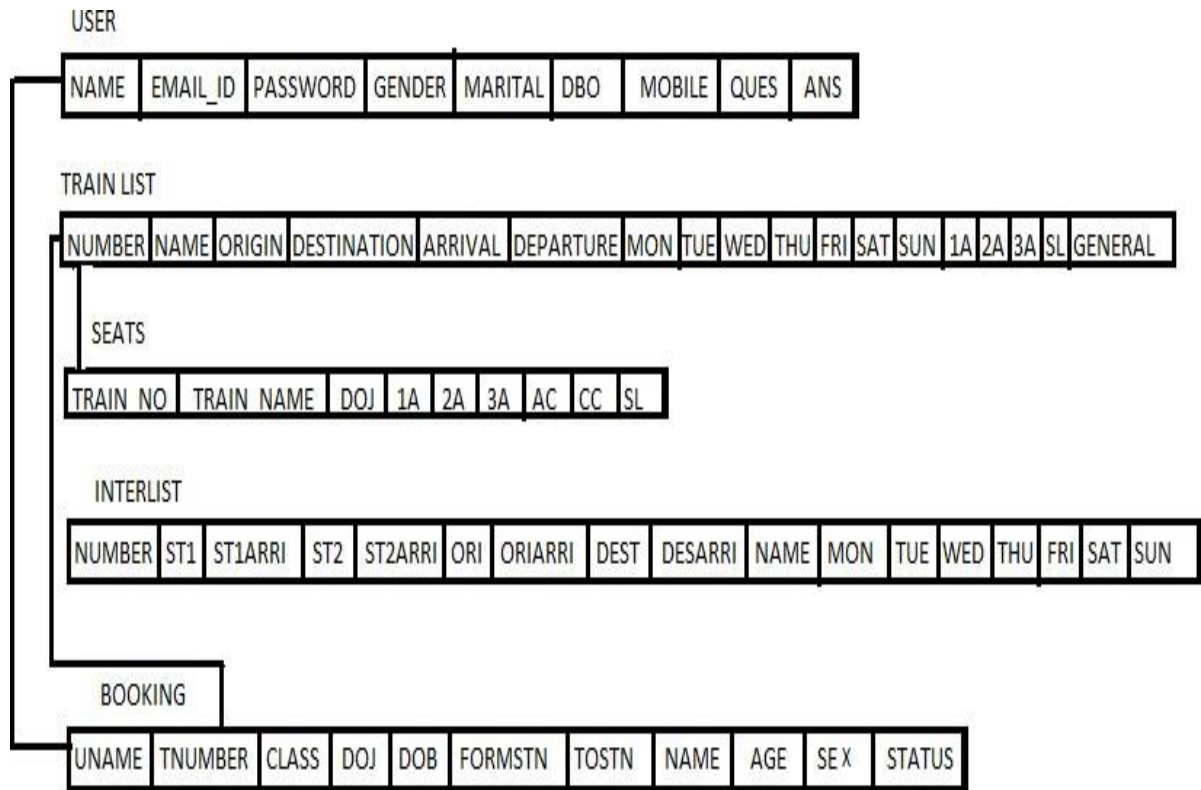


Figure 3.2 SCHEMA DIAGRAM

TECHNOLOGY USED:

Front end: HTML, CSS, JavaScript

1. HTML: HTML is used to create and save web document. E.g. Notepad/Notepad++
2. CSS : (Cascading Style Sheets) Create attractive Layout
3. Bootstrap : responsive design mobile freindly site
4. JavaScript: it is a programming language, commonly use with web browsers.

Back end: PHP, MySQL

1. PHP: Hypertext Preprocessor (PHP) is a technology that allows software developers to create dynamically generated web pages, in HTML, XML, or other document types, as per client request. PHP is open source software.
2. MySQL: MySql is a database, widely used for accessing querying, updating, and managing data in databases.

SOFTWARE REQUIREMENT:

(any one)

- WAMP Server
- XAMPP Server
- MAMP Server
- LAMP Server

CONCLUSION :

Our system can successfully give information on any train, find trains running between two stations, book tickets and cancel tickets. This system could be used for official train booking. However, several other features could be added like booking meals on trains etc.

Also, payment gateways have to be implemented to make sure the transactions happen securely.

FUTURE RESEARCH:

- We can even further make it private and secured by implementing Log-in IDs and encrypting them with passwords.
- We can give away this software for more number of people and organizations to conduct a Beta Testing and based upon the results we can just make those changes and be assured of the application developed.
- We can make it more space and resource efficient so that this application consumes lesser RAM and ROM and battery power (if available).

REFERENCES :

- [1] <https://github.com/samgakii123/>
 - [2] <http://php.net/>
 - [3] <https://www.http://en.wikipedia.org/wiki/PHP>
- <https://www.w3shools.com>

APPENDIX 'B'- SCREENSHOTS

B.1 HOME PAGE

This is the first window when the application is executed as shown in Fig B.1



FIG B.1 HOME PAGE

B.2 SIGN UP PAGE

The page allows admin to sign up to database as shown in Fig B.2



Indian Railways

[HOME](#)[FIND TRAIN](#)[RESERVATION](#)[PROFILE](#)[BOOKING HISTORY](#)

Signup

First Name *

Last Name *

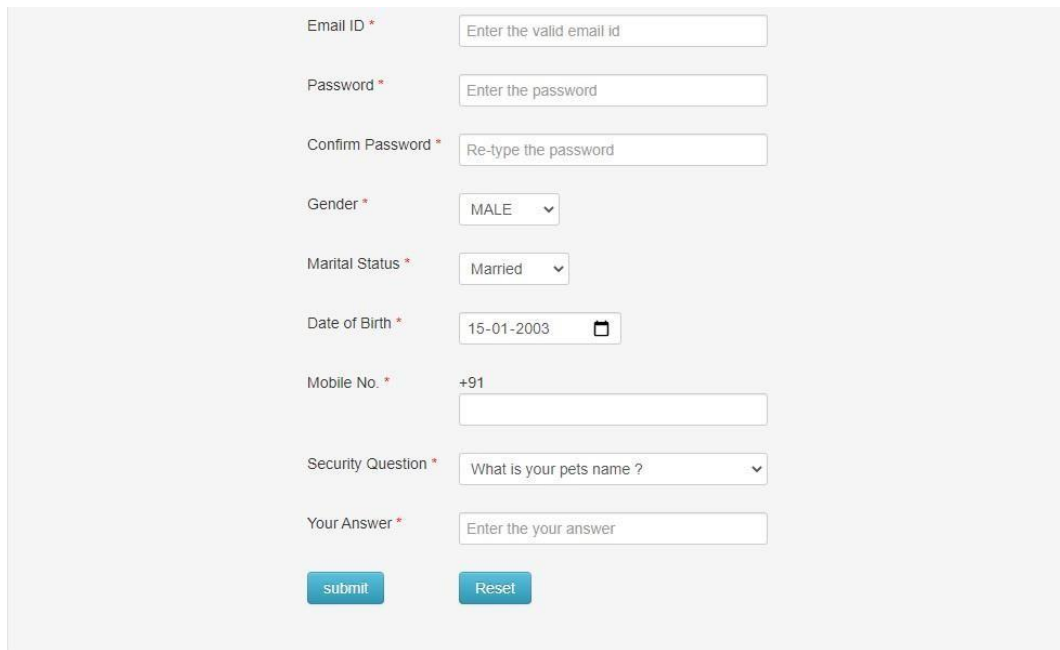
Email ID *

Password *

Confirm Password *

Gender *

 ▼



A sign-up form with the following fields and controls:

- Email ID ***: Text input with placeholder "Enter the valid email id".
- Password ***: Text input with placeholder "Enter the password".
- Confirm Password ***: Text input with placeholder "Re-type the password".
- Gender ***: Dropdown menu with "MALE" selected.
- Marital Status ***: Dropdown menu with "Married" selected.
- Date of Birth ***: Date picker showing "15-01-2003".
- Mobile No. ***: Text input with "+91" as a prefix and an empty field for the number.
- Security Question ***: Dropdown menu with "What is your pets name ?" selected.
- Your Answer ***: Text input with placeholder "Enter the your answer".
- submit**: Blue button.
- Reset**: Blue button.

FIG B.2 SIGN UP PAGE

B.3 ADMIN LOGIN PAGE

This page allows admin to login and make changes to data base as shown in Fig B.3



Indian Railways

[HOME](#)[FIND TRAIN](#)[RESERVATION](#)[PROFILE](#)[BOOKING HISTORY](#)

Username

Password

Login

You don't have register?

Signup

FIG B.3 ADMIN LOGIN PAGE

B.4 ADMIN FIND TRAIN PAGE

This page allows admin to find the train as shown in the FigB.4



Indian Railways

Welcome, hruth

[Logout](#)[HOME](#)[FIND TRAIN](#)[RESERVATION](#)[PROFILE](#)[BOOKING HISTORY](#)

Search Train

By Number

Train Number

Find

Reset

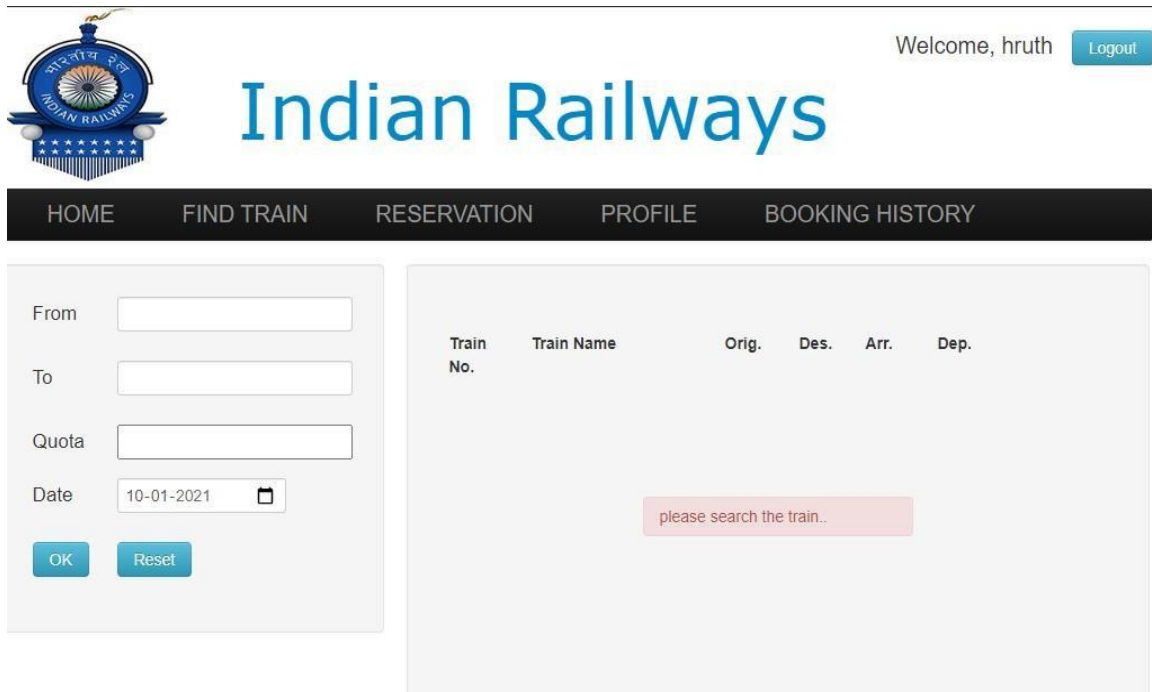
Train No.	Train Name	Orig.	Des.	Arr.	Dep.	M	T	W	T	F	S	S
-----------	------------	-------	------	------	------	---	---	---	---	---	---	---

please search the train..

FIG B.4 ADMIN FIND TRAIN PAGE

B.5 ADMIN BOOKING RESERVATION PAGE

This page allows admin to book the tickets as show in the Fig B.5

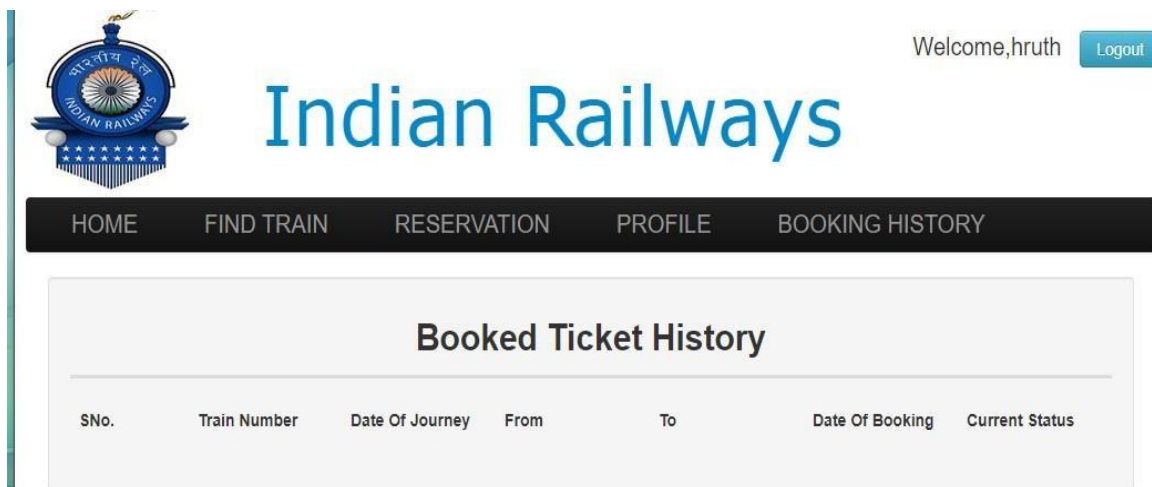


The screenshot shows the Indian Railways Admin Booking Reservation Page. At the top left is the Indian Railways logo. To its right is the text "Indian Railways". Further right is a welcome message "Welcome, hruth" and a "Logout" button. Below this is a navigation bar with links: HOME, FIND TRAIN, RESERVATION, PROFILE, and BOOKING HISTORY. The main content area is divided into two sections. On the left is a form for booking a ticket with fields for "From", "To", "Quota", and "Date" (set to 10-01-2021). There are "OK" and "Reset" buttons below the form. On the right is a table with columns: Train No., Train Name, Orig., Des., Arr., and Dep. Below the table is a pink box with the text "please search the train..".

FIG B.5 ADMIN BOOKING RESERVATION PAGE

B.6 ADMIN BOOKING HISTORY

This page allows admin to see the Booking history as shown in the fig B.6



The screenshot shows the Indian Railways Admin Booking History Page. At the top left is the Indian Railways logo. To its right is the text "Indian Railways". Further right is a welcome message "Welcome,hruth" and a "Logout" button. Below this is a navigation bar with links: HOME, FIND TRAIN, RESERVATION, PROFILE, and BOOKING HISTORY. The main content area is a table titled "Booked Ticket History". The table has columns: SNo., Train Number, Date Of Journey, From, To, Date Of Booking, and Current Status.

SNo.	Train Number	Date Of Journey	From	To	Date Of Booking	Current Status
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FIG B.6 ADMIN BOOKING HISTORY



Welcome,yugesh

[Logout](#)

Indian Railways

[HOME](#)

[FIND TRAIN](#)

[RESERVATION](#)

[PROFILE](#)

[BOOKING HISTORY](#)

Booked Ticket History

SNo.	Train Number	Date Of Journey	From	To	Date Of Booking	Current Status	
1	12931	2018-06-24	SURAT	BARODA	2018-06-24	Waiting	View Full Status
2	12009	2018-06-28	SURAT	BARODA	2018-06-24	Waiting	View Full Status

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Welcome,yugesh

[Logout](#)

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[PROFILE](#)

[BOOKING HISTORY](#)

Search Train

By Station ▼

From

To

[Find](#)

[Reset](#)

Train No.	Train Name	Orig.	Des.	Arr.	Dep.	M	T	W	T	F	S	S
-----------	------------	-------	------	------	------	---	---	---	---	---	---	---

please search the train..

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There is no proposal to extend to mail/express and superfast trains the flexi-fares currently applicable only to Rajdhani, Shatabdi and Duronto trains, said Railways Minister Suresh Prabhu.

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Username

Password

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You don't have register?

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Welcome, yugesh

[Logout](#)

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[BOOKING HISTORY](#)

From

To

Quota

Date

[OK](#)

[Reset](#)

Train No.	Train Name	Orig.	Des.	Arr.	Dep.
-----------	------------	-------	------	------	------

please search the train..



Indian Railways

[HOME](#)[FIND TRAIN](#)[RESERVATION](#)[PROFILE](#)[BOOKING HISTORY](#)

Signup

First Name *	<input type="text" value="Enter the First name"/>
Last Name *	<input type="text" value="Enter the Last name"/>
Email ID *	<input type="text" value="Enter the valid email id"/>
Password *	<input type="password" value="Enter the password"/>
Confirm Password *	<input type="password" value="Re-type the password"/>
Gender *	<input type="text" value="MALE"/>
Marital Status *	<input type="text" value="Married"/>
Date of Birth *	<input type="text" value="28-06-2000"/>
Mobile No. *	+91 <input type="text"/>
Security Question *	<input type="text" value="What is your pets name ?"/>
Your Answer *	<input type="text" value="Enter the your answer"/>