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Department of Computer Science and Engineering

Report on Mini Project

Airport Management

Course Name:

Database Management System

Semester: V SEM **Section: C Section**

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ABSTRACTION

The database is based on Airport Management. Airport management system primarily deals with management of airport, airlines and passengers. The system provides broad underlying operational factors that influence the Airport management. The object of this project is to design and implement Airport management with user interface and administrator interface using PHP. It includes details such as passenger with fields such as name, address, phone number and passport details which will be stored in the data base for verification. Reservations details help in reserving seats for the passenger with other details such as providing details to the administrator.

Flight details have to be maintained including Flight code, Airline ID,

Source, Destination etc which is to be considered during reservation.

Airport management is developed using PHP and MY SQL SERVER.

OBJECTIVES

The main objective of the project is to learn and implement a real time application on database for Airport management. This database will be great solution for many functionalities in Airport.

REQUIREMENTS

- The Airport management system primarily deals with management of airport, airlines and flights. The system provides a broad overview of the factors that affect an airport management system.
- The database system has the data of the commercial airports.
- An airport is located in a city.
- We assume that every airport has an airline office in it.
- Airline companies serve flights.
- Every flight has a code associated with it and this code is unique to it.
- Flight serves passengers as it carries a passenger from source to destination.
- Flight can be of two types, arrivals and departures, each having their specific arrival date, arrival time, and departure date, departure time.
- The website also should have an admin through which the data on the website can be adjusted, including adding, removing flights from the time table.

ENTITIES

- Airline (airlineID,al_name,3_digit_code,airportno).
    - AirlineID is the primary key and airportno is the foreign key referred from Airport table.
- Airport (Airportno,airportname, State, Country, City).
    - Airportno is the primary key.
- Flight (flightCode, Source, Destination, Arrival, Departure, Duration, airlineID, sid, did).
    - Flightcode is the primary key and airlineID is the foreign key referred from Airline table and sid, did are the foreign key referred from Airport table .
- Passenger (Pid, PassportNo, Fname, Lname, Address, Phone, Sex, Age).
    - Pid is the primary key.
- Books (pid,ticketno,dateofbooking).

    - Pid is the primary key and ticketno is the foreign key referred from Ticket table.
- Ticket (ticketNo, tsource, tdestination, date of travel, seatNo,price,flightcode).
    - Ticketno is the primary key and flightcode is the foreign key is referred from Flight table.

ALGORITHMS

INSERT

- Use the 'Sql_con' for connection in module to insert the values from front end to back end using SqlClient.SqlConnection.
- 'sql_command' is declared as SqlClient.SqlCommand to execute a command.
- Insert the values to textbox.
- If the inserted value is null.
- Give the message as enter the data.
- Assign con to com to establish connection.
- Write the insert code to insert the values, order of attributes for insert command should be in the values from same order as in back end.
- We have to write execute query to execute this insert command.
- Then give the message as data inserted.

DELETE

- Use the 'Sql_con' for connection in module to insert the values from front end to back end

- ‘sql_command’ is declared as SqlClient.SqlCommand to execute a command.
- Insert the value to textbox.
- If the inserted value is null
- Give the message as enter the data
- If the entered value is integer instead of character
- Then give the message as enter the string
- Assign con to com to establish connection
- Write the delete code to delete the values specify the attribute name and textbox
- We have to write execute query to execute this delete command
- Then give the message as data deleted

UPDATE

- Use the ‘Sql_con’ for connection in module to insert the values from front end to back end .
- ‘sql_command’ is declared as SqlClient.SqlCommand to execute a command.
- Insert the value to textbox.
- If the textbox is null, give an error message.
- Assign con to com to establish connection.
- Write the update command to change old value to new value by specifying the new value and It’s old value and name.
- Write execute query to execute this command.
- Then the message as updated.

Schema diagram:

AIRPORT

airportno	airportname	astate	city	country

AIRLINE

airlineid	al_name	3digitcode	airportno

FLIGHT

flightcode	arrival	departure	source	destination	duration	airlineid	sid	did

PASSENGER

pid	paddress	fname	lname	sex	age	phone	passportno

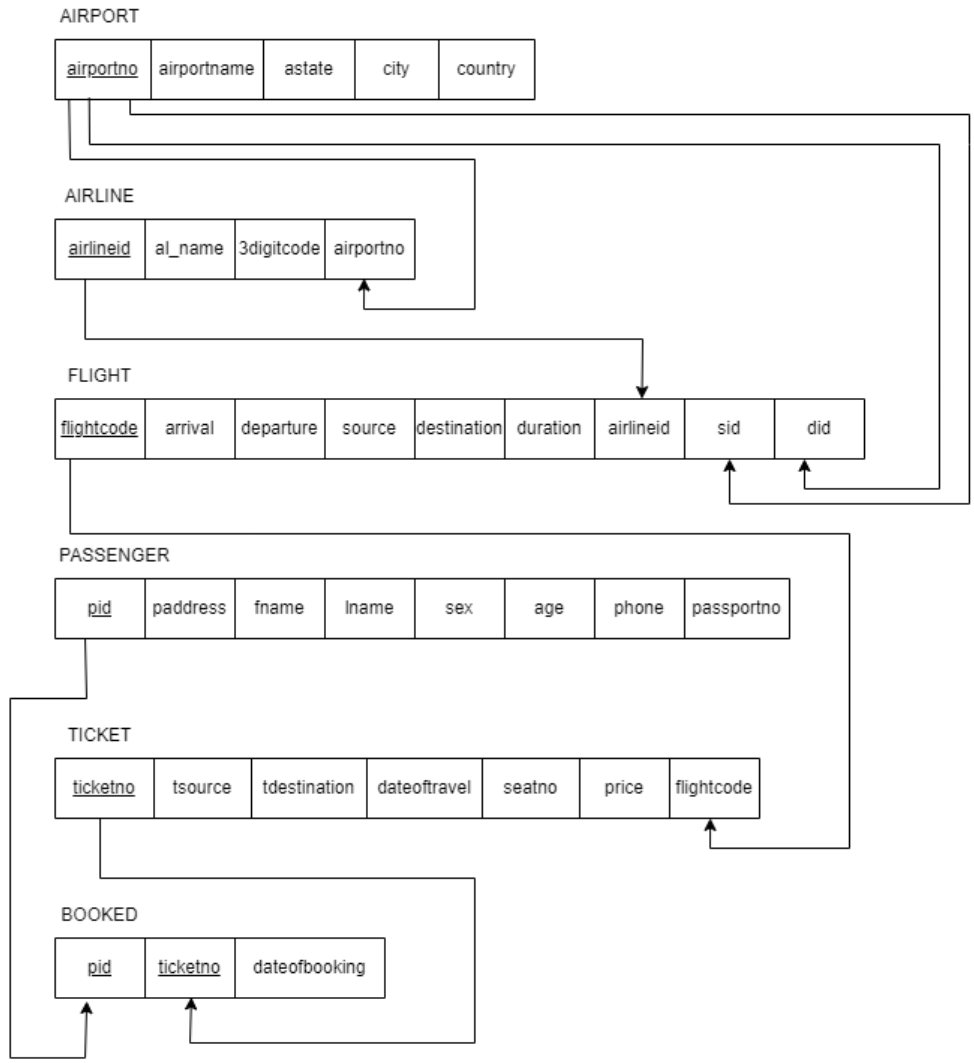
TICKET

ticketno	tsource	tdestination	dateoftravel	seatno	price	flightcode

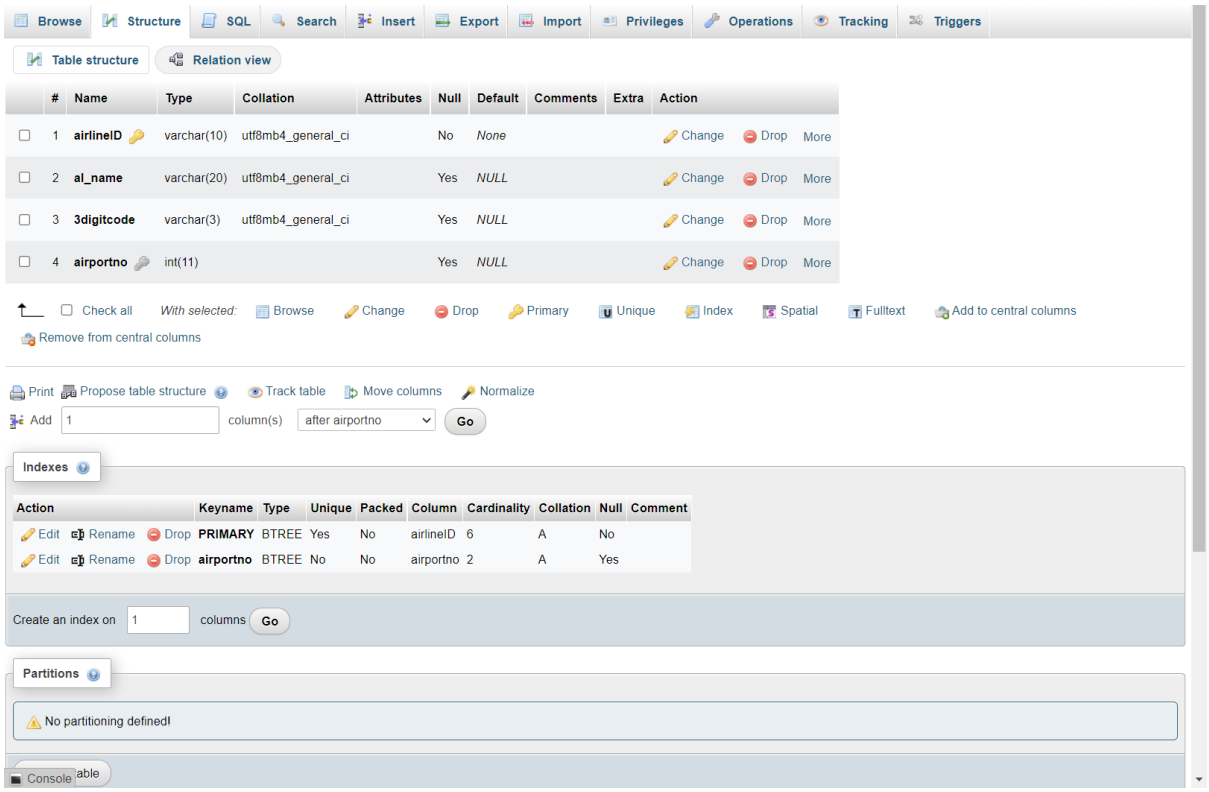
BOOKED

pid	ticketno	dateofbooking

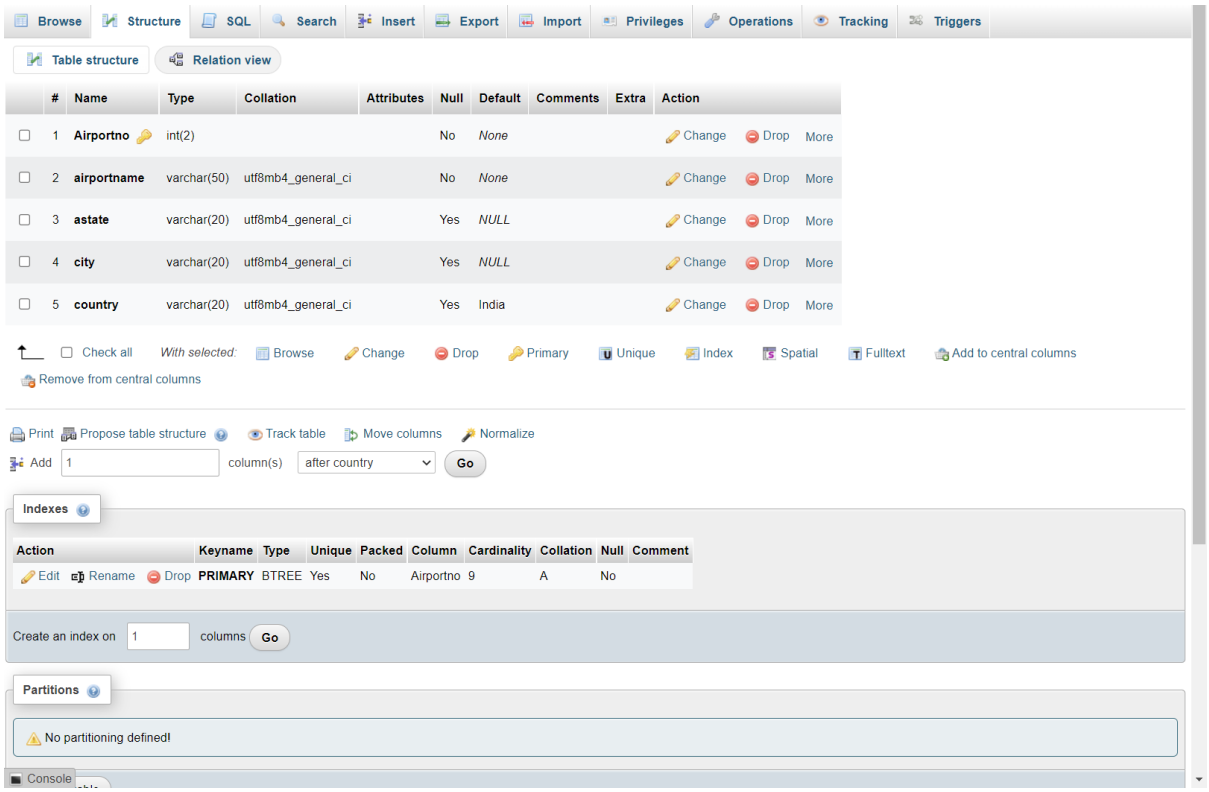
Relational Schema Diagram:



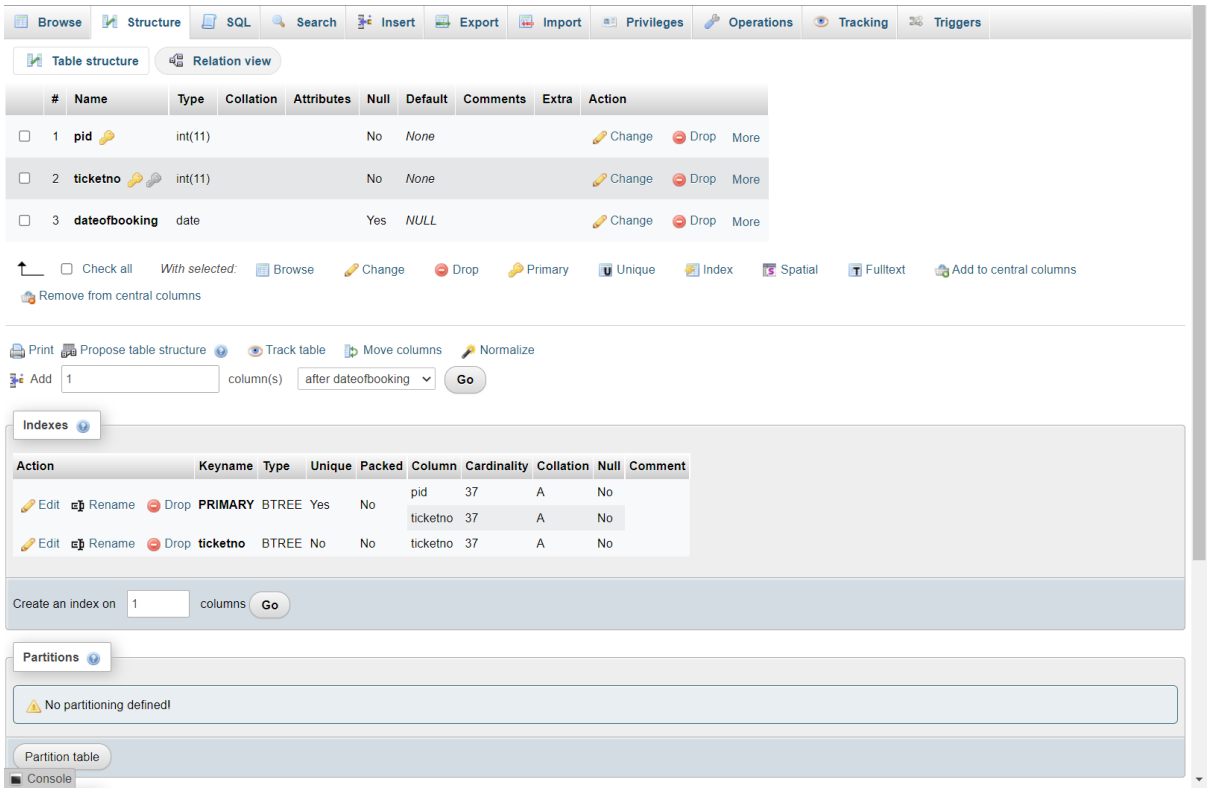
Structure of AIRLINE table:



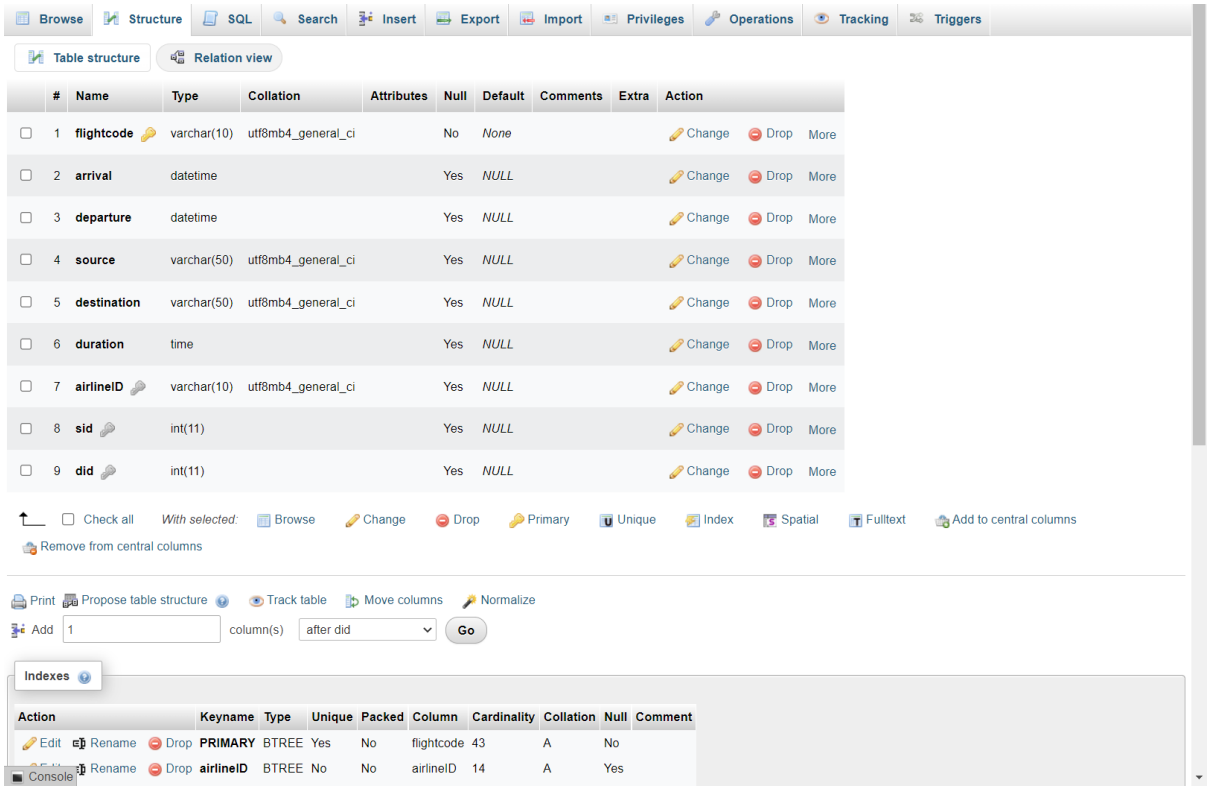
Structure of AIRPORT table



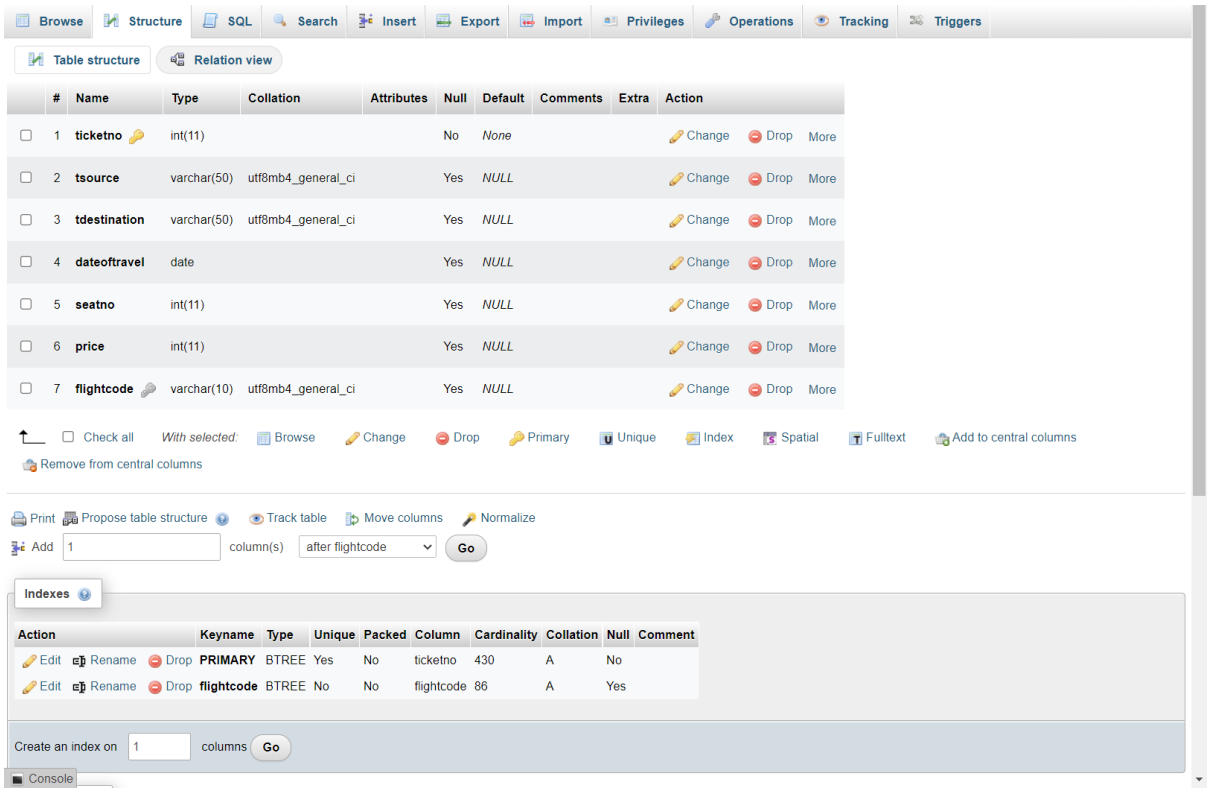
Structure of BOOKED table:



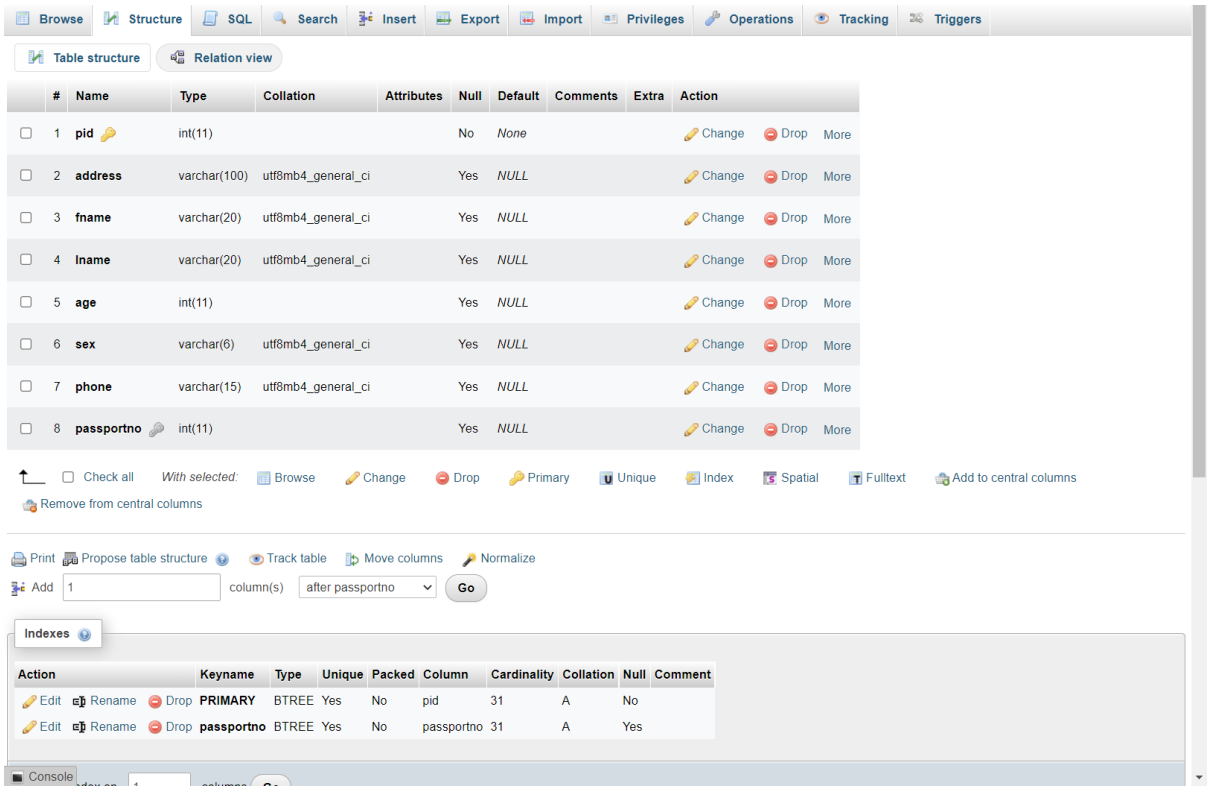
Structure of FLIGHT table:



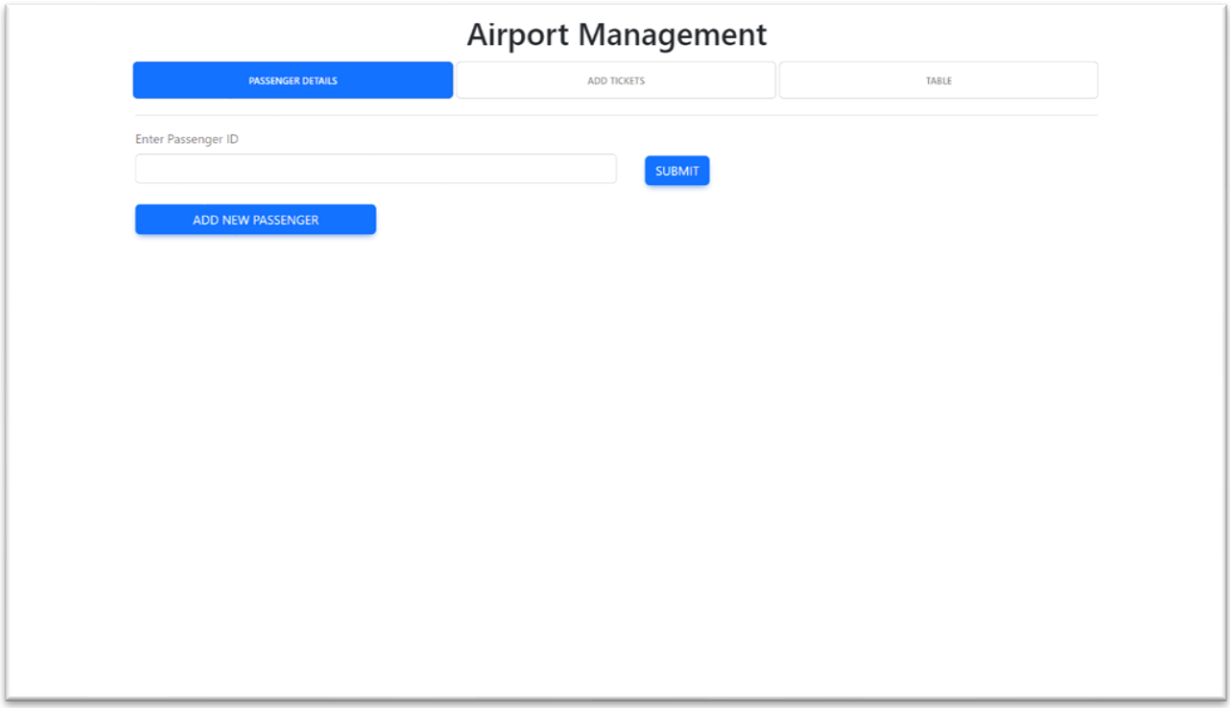
Structure of TICKET table:



Structure of PASSENGER table:

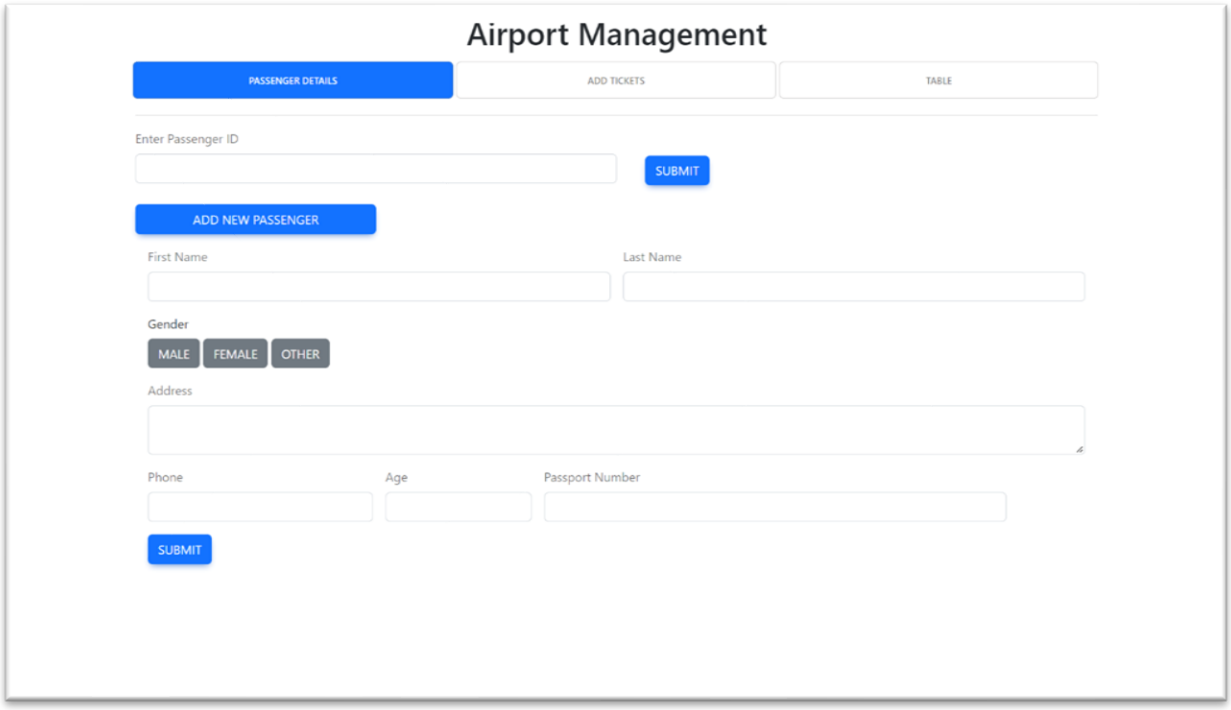


Output Window:

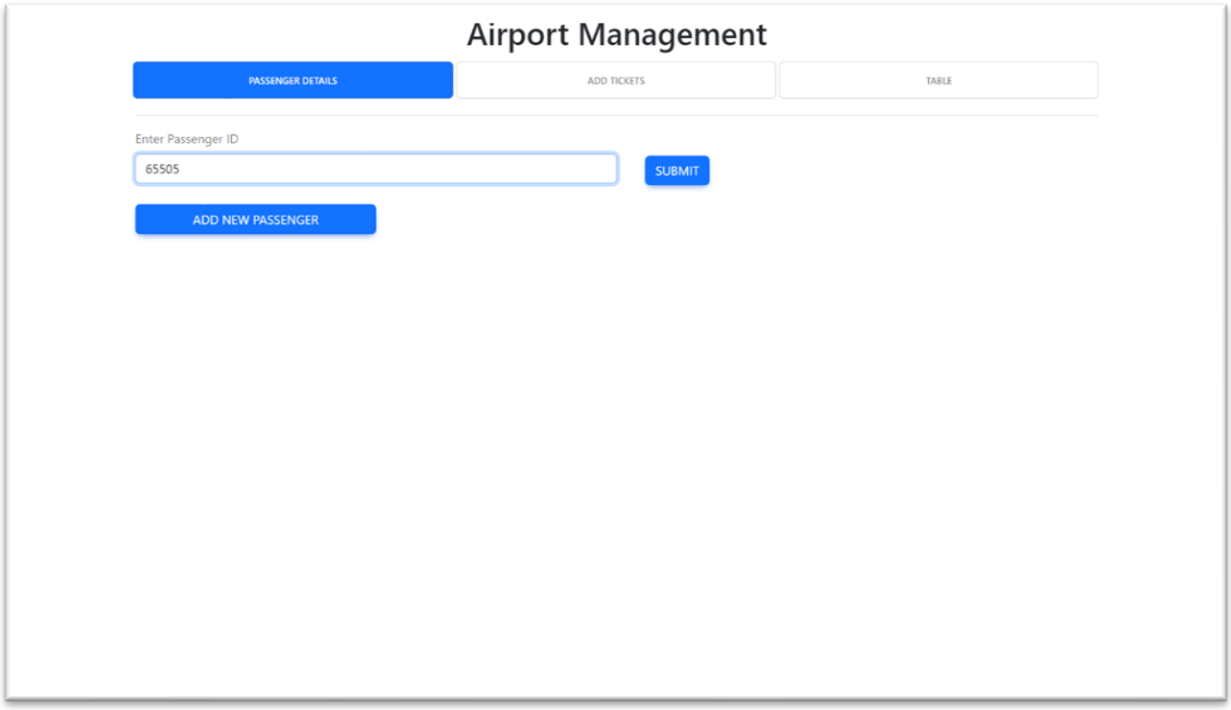


Start page: This page load when the software is run. This page contains navigation buttons to –

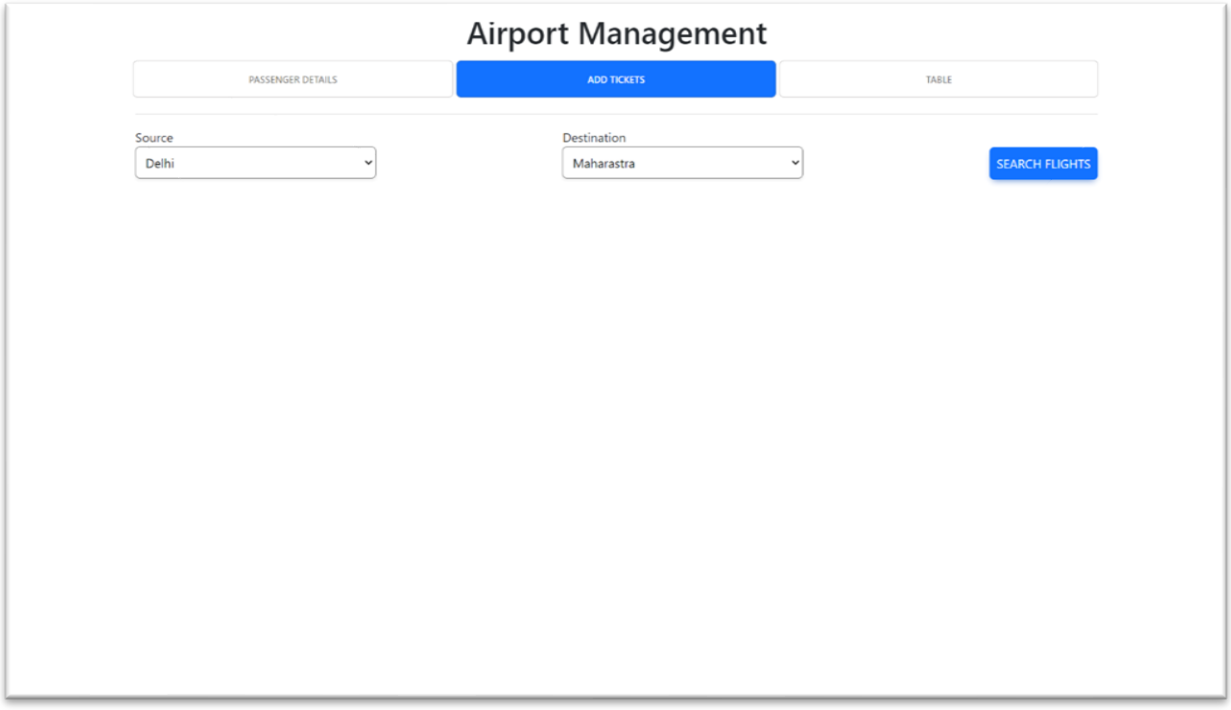
1. Passenger details section
2. Add ticket section
3. Table section



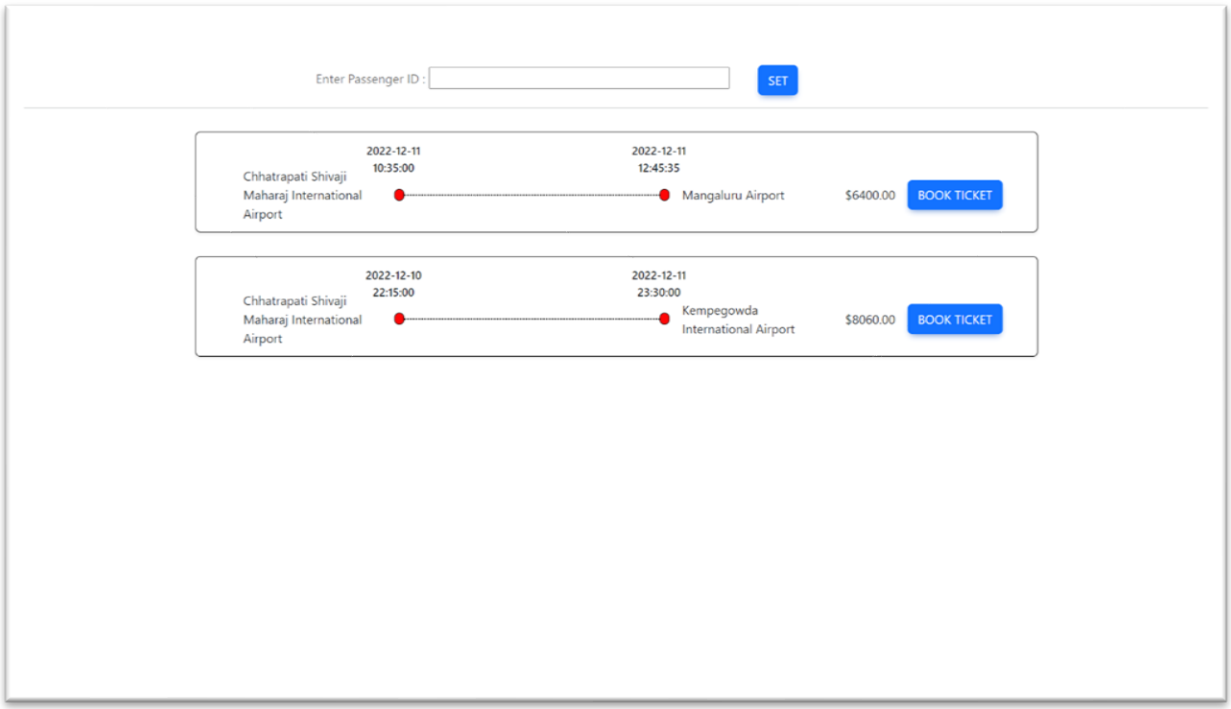
Add Passenger section: When add passenger button is clicked a form is displayed so that the administration is able to enter the passenger details. When submit button is clicked the page will return new passenger id.



Passenger details section: When appropriate passenger id is entered the page will return details of the particular passenger. Details include personal details and ticket details.



Add Ticket section: The administrator is allowed to select any combinations of source and destination. After clicking the Search button following page will be loaded.



Search Result Page: This page displays all the available flight. Details such as source, destination, arrival, departure and price of the ticket is mentioned.

The administrator must enter the passenger id and then click set and choose any ticket by clicking Book Ticket button.

By clicking this the passenger is booked with ticket.

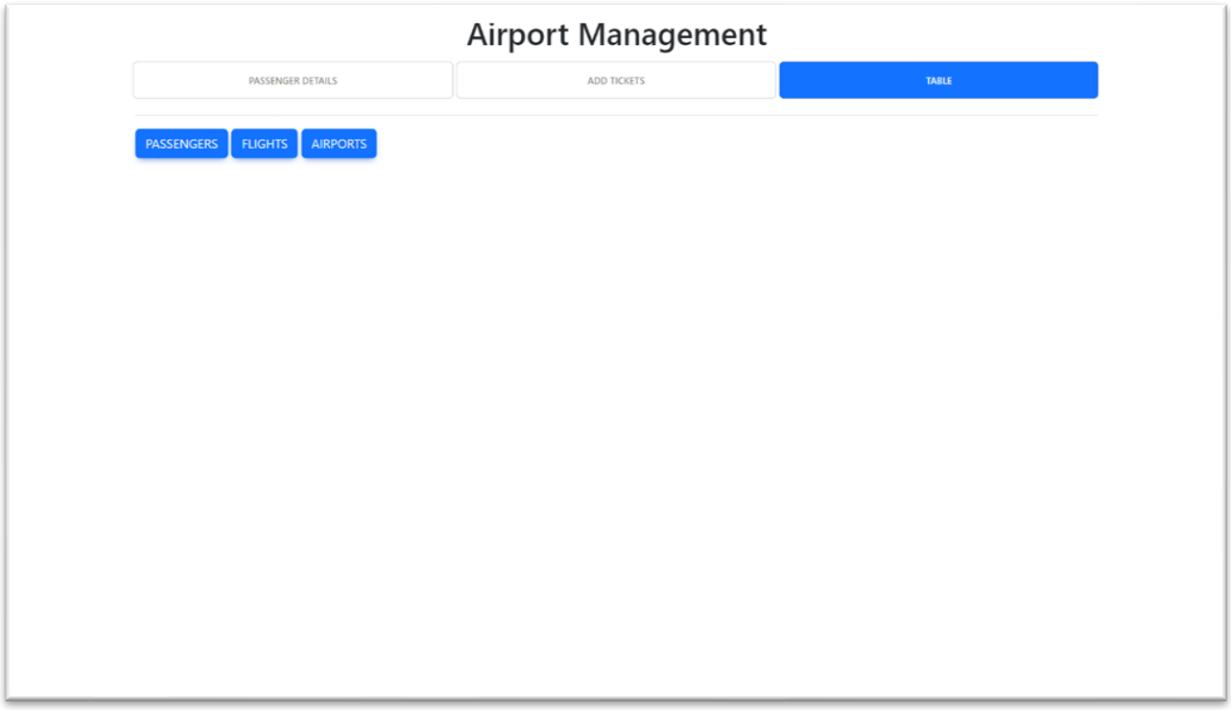
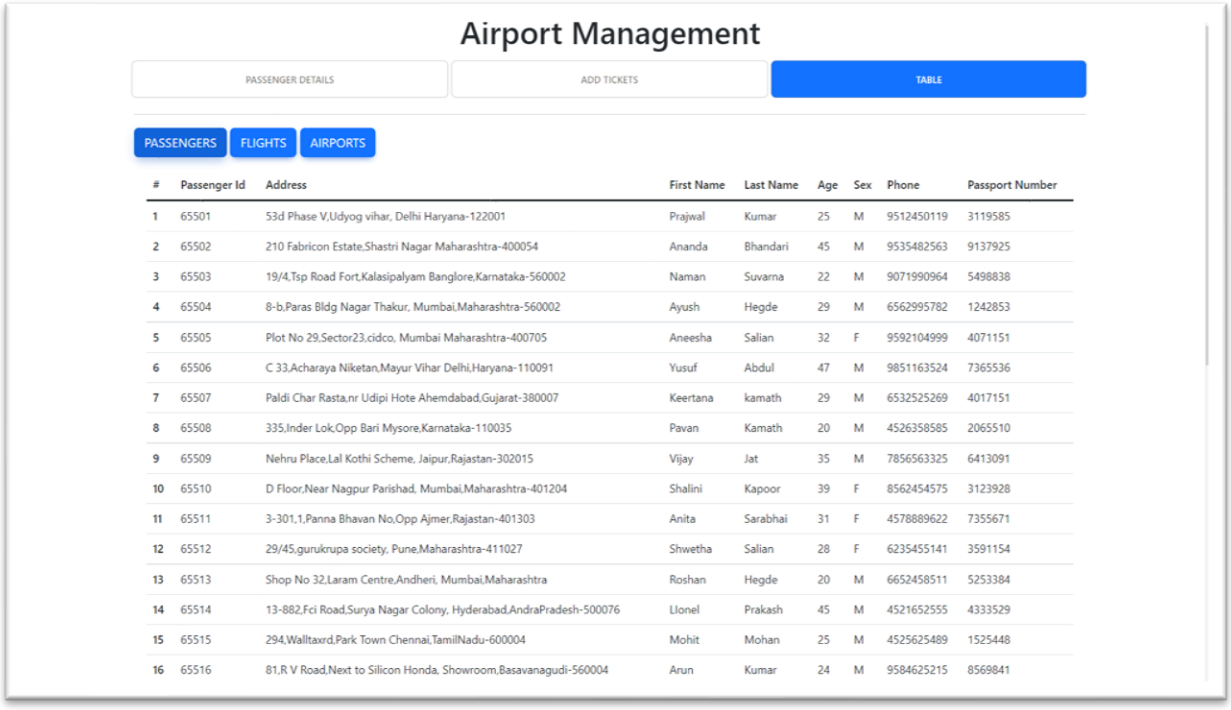


Table Section: This page allows administrator to choose any table to display.



#	Passenger Id	Address	First Name	Last Name	Age	Sex	Phone	Passport Number
1	65501	53d Phase V,Udyog vihar, Delhi Haryana-122001	Prajwal	Kumar	25	M	9512450119	3119585
2	65502	210 Fabricon Estate,Shastri Nagar Maharashtra-400054	Ananda	Bhandari	45	M	9535482563	9137925
3	65503	19/4,Tsp Road Fort,Kalasipalyam Banglore,Karnataka-560002	Naman	Suvarna	22	M	9071990964	5498838
4	65504	8-b,Paras Bldg Nagar Thakur, Mumbai,Maharashtra-560002	Ayush	Hegde	29	M	6562995782	1242853
5	65505	Plot No 29,Sector23,cidco, Mumbai Maharashtra-400705	Aneesha	Salian	32	F	9592104999	4071151
6	65506	C 33,Acharaya Niketan,Mayur Vihar Delhi,Haryana-110091	Yusuf	Abdul	47	M	9851163524	7365536
7	65507	Paldi Char Rasta,nr Udipi Hote Ahemdabad,Gujarat-380007	Keertana	kamath	29	M	6532525269	4017151
8	65508	335,Inder Lok,Opp Bari Mysore,Karnataka-110035	Pavan	Kamath	20	M	4526358585	2065510
9	65509	Nehru Place,Lal Kothi Scheme, Jaipur,Rajastan-302015	Vijay	Jat	35	M	7856563325	6413091
10	65510	D Floor,Near Nagpur Parishad, Mumbai,Maharashtra-401204	Shalini	Kapoor	39	F	8562454575	3123928
11	65511	3-301,1,Panna Bhavan No,Opp Ajmer,Rajastan-401303	Anita	Sarabhai	31	F	4578889622	7355671
12	65512	29/45,gurukrupa society, Pune,Maharashtra-411027	Shwetha	Salian	28	F	6235455141	3591154
13	65513	Shop No 32,Laram Centre,Andheri, Mumbai,Maharashtra	Roshan	Hegde	20	M	6652458511	5253384
14	65514	13-882,Fci Road,Surya Nagar Colony, Hyderabad,AndraPradesh-500076	Llonel	Prakash	45	M	4521652555	4333529
15	65515	294,Walltaxrd,Park Town Chennai,TamilNadu-600004	Mohit	Mohan	25	M	4525625489	1525448
16	65516	81,R V Road,Next to Silicon Honda, Showroom,Basavanagudi-560004	Arun	Kumar	24	M	9584625215	8569841

Airport Management

PASSENGER DETAILS | ADD TICKETS | TABLE

PASSENGERS | FLIGHTS | AIRPORTS

#	Airport Name	State	City	Country
1	Indira Gandhi International Airport	Delhi	New Delhi	India
2	Chhatrapati Shivaji Maharaj International Airport	Maharastra	Mumbai	India
3	Shirdi Airport	Maharastra	Shirdi	India
4	Mangaluru Airport	Karnataka	Mangaluru	India
5	Kempegowda International Airport	Karnataka	Bangaluru	India
6	Vadodar Airport	Gujarat	Vadodar	India
7	Jabalpur Airport	Madhya Pradesh	Jabalpur	India
8	Kanpur Airport	Uttar Pradesh	Kanpur	India
9	Nal Airport	Rajasthan	Bikaner	India

Airport Management

PASSENGER DETAILS | ADD TICKETS | TABLE

PASSENGERS | FLIGHTS | AIRPORTS

#	Flight Code	Departure	Arrival	Source	Destination	Duration
1	AIC01	2022-12-10 14:30:00	2022-12-10 12:30:30	Indira Gandhi International Airport	Kempegowda International Airport	02:00:30
2	AIC02	2022-12-11 12:45:35	2022-12-11 10:35:00	Chhatrapati Shivaji Maharaj International Airport	Mangaluru Airport	02:10:35
3	AIC03	2022-12-10 12:35:41	2022-12-10 11:30:41	Kempegowda International Airport	Chhatrapati Shivaji Maharaj International Airport	01:05:00
4	AIC04	2022-12-12 12:35:41	2022-12-12 11:30:41	Vadodar Airport	Chhatrapati Shivaji Maharaj International Airport	01:05:00
5	AIC05	2022-12-11 12:35:41	2022-12-11 11:30:41	Jabalpur Airport	Shirdi Airport	01:05:00
6	AIC06	2022-12-10 12:35:41	2022-12-10 11:30:41	Kanpur Airport	Chhatrapati Shivaji Maharaj International Airport	01:05:00
7	AIC07	2022-12-13 12:35:41	2022-12-13 11:30:41	Nal Airport	Chhatrapati Shivaji Maharaj International Airport	01:05:00
8	AXB01	2022-12-12 18:30:00	2022-12-12 15:15:00	Indira Gandhi International Airport	Jabalpur Airport	03:15:00
9	AXB02	2022-12-14 15:15:50	2022-12-14 14:00:10	Shirdi Airport	Jabalpur Airport	01:45:40
10	AXB03	2022-12-11 15:20:00	2022-12-11 13:50:00	Kempegowda International Airport	Jabalpur Airport	02:30:00
11	AXB04	2022-12-11 15:20:00	2022-12-11 13:50:00	Vadodar Airport	Jabalpur Airport	02:30:00
12	AXB05	2022-12-12 17:20:00	2022-12-12 15:50:00	Jabalpur Airport	Vadodar Airport	02:30:00
13	AXB06	2022-12-11 16:20:00	2022-12-11 14:50:00	Kanpur Airport	Vadodar Airport	02:30:00
14	AXB07	2022-12-10 15:20:00	2022-12-10 13:50:00	Nal Airport	Vadodar Airport	02:30:00
15	AXB08	2022-12-11 23:30:00	2022-12-10 22:15:00	Chhatrapati Shivaji Maharaj International Airport	Kempegowda International Airport	01:15:00
16	IAD01	2022-12-11 19:30:30	2022-12-11 18:15:00	Indira Gandhi International Airport	Vadodar Airport	01:15:30

Conclusion:

With this report we conclude that our software can be used in Airport across the country. Using this software we can keep track of all the Airline and help in efficient ticket booking. This project can be deployed as a fully functional web page with a few additional features.