## **Airplane Management**

The object of this project is to design and implement Airport Management with user interface and administrator interface using spring boot . It includes details on such as passenger with fields such as name, address , phone number and passport details which will be stored in database for verification. Reservation details help in reserving seats for the passenger with other details such as date, flight no, code and other details. If the user needs to cancel the reservation he can do cancellation providing details to the administrator. Flight details have to be maintained including flight no, code, source and destination etc which is to be considered during reservation. Airport Management System is developed using Java and MYSQL.

## REQUIREMENTS OF THE SYSTEM

- ➤ 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.
- ➤ All international and national airlines have their offices in all major cities and aiports. So 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, terminal and departure date, departure time, terminal associated with it respectively.
- ➤ Airport provides services such as car parking and car rentals . .
- ➤ Parking Space has fixed maximum number of cars it can hold and the website provides a way for passengers to pre book the parking space by paying the appropriate fee.
- ➤ Airport provides for tourists the option of renting various kinds of cars for their ease of motion throughout the stay duration in the city.
- ➤ 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, adding or removing information about the employees working on the airport, and also managing the parking space.

## **Entities**

- 1. Airline (airline\_id, airline\_name, iata)
- 2. Airplane (airplane\_id, capacity)
- 3. Airplane\_Type (airplane\_type\_id, airplane\_type\_identifier, description)
- 4. Airport (airport\_id, iata, icao, airport\_name)
- 5. Airport\_Geo (airport\_geo\_id, country, city)
- 6. Booking (booking\_id, seat, price)
- 7. Services (services\_id, services\_name)
- 8. Employee (employee\_id, firstname, lastname, birthdate, sex, street, city, zip, country, email, telephone, salary, username, password)
- 9. Flight (flight\_id, flight\_no, departure\_date, arrival\_date, from, to)
- 10. Passenger (passenger\_id, passport\_no, firstname, lastname)

- 11. PassengerDetails (passenger\_details\_id, birthdate, sex, street, city, zip, country, email, telephone)
- 12. Parking (parking\_id, name, email, contact, entry\_date, entry\_time, exit\_date, exit\_time, car\_no, amount)
- 13. Rentals (rental\_id, name, email, contact, licence\_no, pickup\_date, pickup\_time, return\_date, return\_time, car\_no, amount)
- 14. Time\_Table (time\_table\_id, flight\_from, flight\_to, airline, flight\_type)

## **Relationships**

