

# **Software Engineering**

**Topic:** Airline Seat Selection, Boarding Pass Issuance And Aircraft Boarding

**Group:** 8

**Dept-Sec:** CSE-C

| Name             | Roll             | Role                                     |
|------------------|------------------|--|
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## **About the project**

- We will be creating an Airline Booking System which will help the customers to book a flight ticket. The customers can modify and cancel the ticket.
- Given that the passenger hasn't already registered, will allow creating an account
- The boarding pass will contain the passenger details, scannable QR code of their PNR number, seat number.
- The airport agent can enter the flight ID and grab the passenger list.
- The airport agent can enter the PNR and grab the passenger details.
- The main purpose of this software is to reduce the manual errors involved in the airline reservation process and makes it convenient for the customers to book the flights when they require so that they can utilize this software to make reservations, modify reservations or cancel a particular reservation.

## **Stakeholders**

- a. Employees**
- b. Passengers**
- c. Government Authorities**
- d. Airline Clients**

## Modules

- Login Module
- Booking Module
- Search Module
- Check Availability Module
- Boarding Pass Issual Module
- Payment Module
- Purchase Module
- Exit Module

## Table(Master/Transaction)

**Primary key — Master table (Flight Info Table)**

**Foreign key — Transaction table**

1. **Ticket Price Table**-price,flight boarding point,flight destination,flight name,flight-ID.
2. **Ticket Cancellation Status Table**-price,flight boarding point,flight destination,flight name,flight-ID(change if any requirements)
3. **Flight Schedule Table**-flight-ID,flight\_name,date,time,flight\_boarding point,flight\_destination\_point,path\_taken.
4. **Login Details Table**-name,username,user\_id,address,aadhaar\_number,passport\_number,phone\_number,date\_of\_birth,password.
5. **Flight Info Table**-flight\_name,airline\_name,no\_of\_tickets\_available,\_cost\_of\_ticket,flight\_destination,travel\_date,time,seat\_vacancy,passenger\_id
6. **Flight Route Table**-flight\_name,flight\_id,flight\_destination,flight\_starting\_from,path\_taken,date,time
7. **Airport Staff Table**-staff\_id,staff\_name,staff\_shift\_hour,aadhar\_no,date\_of\_birth
8. **Passenger Table**-passenger\_id,passenger\_name,passenger\_mobile,passenger\_username,passenger\_password,passenger\_address,aadhar\_no,date\_of\_birth
9. **Transaction Table**-Transaction\_ID,price,payment\_method.  
  
User\_id, payment\_id,

## **Tools/Languages:**

1. VScode, MongoDB, Android Studio (Java) + SQLite
2. Javascript (NodeJS, EJS, ReactJS), HTML/CSS
3. Bootstrap

## **Reports**

**Name:** Airline Booking

**Purpose:** For booking Flight tickets using our product

This report is to convey all the modules that we are using in this project along with the tables. This project consists of tables that include the details of Flight, passengers, and different modules which will help the user to freely interact with the application.

**Suppliers:** They are interested in gaining more profits. However, they will be affected if the tickets are sold less which means less purchase of the flight tickets will lead to less profit.

**Competitors:** They will charge less price for the same traveling journey to attract more customers, and they will keep eye on each other to do better and get more sales.

## **Assumptions:**

- Mobile and web Platform
- When the Ticket is canceled by the user, only some percent of the user ticket amount will be re-sent. (Ticket Cancellation Charges).
- Admin will be able to search booking enquiry and has permission to edit, add and delete any booking enquiry
- Passenger will be able to generate a report of airline ticket booking
- Admin can update the price of the Flight Ticket.

## **Requirements:**

### **User**

#### **a) Passenger :**

- Login
- KYC Details and Update
- Search Ticket
- Book Ticket
- Payment
- After payment receives receipt and schedule

#### **b) Government Authorities:**

- Login
- KYC Details and Update
- PNR Searching
- Ticket cancellations module

#### **c) Admin(Airline reservation system)**

- Display list of vacant schedules
- Display reservation info and payment
- Receives the payment and transaction
- Generates reservation form and release receipt

#### **d) Airline Clients**

- Login
- Price updation portal

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