

**A  
PROJECT REPORT  
ON  
AIRLINE MANAGEMENT SYSTEM**

**SUBMITTED BY**

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**SUBMITTED TO  
SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE**

**FULFILLMENT OF DEGREE  
MASTER OF COMPUTER APPLICATION (SEM-I)**

**UNDER THE GUIDANCE OF**

**Dr. Neeta Raskar**

**Through,**



**Sadhu Vaswani Institute of Management Studies for Girls,  
Koregaon Park, Pune 411001**

**2024-25**

## **DECLARATION BY STUDENT**

To,  
The Director,  
SVIMS, Koregaon Park, Pune

I, undersigned hereby declare that this project titled, "**Airline Management System**" written and submitted by me to SPPU, Pune, in partial fulfilment of the requirement of the award of the degree of **MASTER OF COMPUTER APPLICATION (MCA-I)** under the guidance of **Dr. Neeta Raskar**, is my original work.

I further declare that to the best of my knowledge and belief, this project has not been submitted to this or any other University or Institution for the award of any Degree.

**Place: Pune**

**Date:**

**(Shruti Ravindra Shelke)**

## **ACKNOWLEDGEMENT**

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I extend my special thanks to Dr. Shveti Chandan and Prof. Deepali Gavhane for their kind co-operation and inspiration.

I extend my special gratitude to my dearest family members and friends who encouraged and motivated me to complete the project report.

**Place: Pune**

**Date:**

**Shruti Ravindra Shelke**

# **CHAPTER 1:**

## **1.1Introduction**

In today's fast-paced world, the airline industry plays a pivotal role in global connectivity and economic development. With millions of passengers traveling by air every day, the need for a robust and efficient system to manage airline operations is more crucial than ever. The Airline Management System (AMS) is designed to streamline various functionalities of airline operations, including flight scheduling, ticket reservations, and passenger management. The AMS not only enhances operational efficiency but also improves customer satisfaction by providing a seamless booking experience.

The AMS is built to address the complexities of airline management through automation and centralized data management. It allows airlines to efficiently manage their flight schedules, making it easier to respond to changes such as delays or cancellations. Moreover, the system can track the status of flights in real-time, enabling both airline personnel and passengers to stay informed. This capability is essential in minimizing disruptions and ensuring that passengers reach their destinations on time.

A crucial component of the Airline Management System is its ticket reservation functionality. The system allows for easy and quick booking of tickets, which can be done online by passengers. By automating the booking process, airlines can reduce manual workload and potential errors associated with traditional booking methods. The AMS also provides various payment options, ensuring that transactions are secure and convenient. Furthermore, passengers can access and manage their bookings online, enhancing their overall travel experience.

The management of passenger information is another significant feature of the AMS. Maintaining an up-to-date database of passengers facilitates personalized services and improves customer relationship management. Airlines can gather insights from passenger data to offer tailored promotions and services, fostering loyalty and repeat business. Additionally, the AMS can store essential details such as frequent flyer miles, making it easier to provide rewards to loyal customers.

Crew management is a vital aspect of airline operations that the AMS effectively addresses. The system allows airlines to manage crew schedules and availability, ensuring that flights are adequately staffed. By automating crew management, the AMS minimizes scheduling conflicts and helps to maintain compliance with regulatory requirements regarding crew hours. This feature not only enhances operational efficiency but also contributes to flight safety and crew welfare.

## **1.2 Need for System:**

### **1. Increasing Demand for Air Travel**

With the global increase in air travel, propelled by economic growth and globalization, airlines are experiencing a surge in passenger volumes. According to industry forecasts, air travel demand is expected to continue growing over the coming years. In this context, airlines must have an efficient management system to handle the growing number of reservations, flight operations, and customer interactions. An Airline Management System can facilitate this growth by automating processes, improving operational efficiency, and ensuring accuracy in bookings.

### **2. Complexity of Operations**

The airline industry operates within a highly complex environment, characterized by intricate logistics, regulatory requirements, and numerous stakeholders, including passengers, crew, ground services, and air traffic control. Managing these diverse elements manually can lead to inefficiencies, mistakes, and service disruptions. An Airline Management System provides a centralized platform that coordinates these complex operations, allowing airlines to streamline processes while enhancing communication and cooperation among different departments, ultimately resulting in improved customer service.

### **3. Customer Expectations and Experience**

In an increasingly competitive market, customer satisfaction is paramount. Passengers today expect a seamless travel experience, from booking tickets to the arrival at their destination. Delays, errors in booking, and poor customer service can lead to dissatisfaction and loss of business. An Airline Management System automates ticket booking, allows for real-time flight information updates, and enables customer service representatives to provide accurate information quickly. This not only enhances the passenger's experience but also fosters loyalty and trust in the airline.

### **4. Data Management and Analytics**

The airline industry generates vast amounts of data, including passenger information, flight statistics, and financial records. Efficiently managing this data is essential for strategic decision-making. An Airline Management System can consolidate and analyze data, enabling airlines to extract valuable insights about operational performance, market trends, and customer preferences. By leveraging analytics, airlines can make informed strategic decisions, optimize routes, and enhance pricing strategies, ultimately improving profitability.

### 1.3 Scope and feasibility of work:

- **User Roles and Accessibility:**

The system is designed for various user roles, including airline staff (ticket agents, customer service representatives, crew members, and management). Each user role has specific access rights and functionalities tailored to their responsibilities. This tiered access ensures data security and efficient workflow management.

- **Integration with Other Systems:**

The Airline Management System will have the capacity to integrate with other essential systems, such as Customer Relationship Management (CRM), Enterprise Resource Planning (ERP), and external booking platforms. This facilitates seamless information flow across different systems and enhances overall operational efficiency.

- **Support for Multiple Channels:**

The system will support multiple channels for ticketing and customer interaction, including web-based platforms, mobile applications, and call centers. This multi-channel approach caters to diverse customer preferences and improves accessibility.

- **Technical Feasibility:**

With the rapid advancement in technology, developing an Airline Management System is technically feasible. There are established software development frameworks, cloud computing solutions, and database management systems that facilitate the development of a robust AMS. Additionally, advancements in data analytics, artificial intelligence, and machine learning can be integrated to enhance system capabilities.

- **Operational Feasibility:**

Airlines are increasingly recognizing the importance of digital transformation in their operations. Implementing an Airline Management System aligns well with operational needs, improving efficiency and reducing manual workloads. As the technology is adopted, training programs can be developed for staff to ensure successful integration and utilization of the system.

- **Economic Feasibility:**

While the initial investment for developing or purchasing an Airline Management System may be substantial, the long-term benefits justify the costs. Improved operational efficiency, increased ticket sales through better reservation management, reduced labor costs due to automation, and enhanced customer satisfaction that leads to increased loyalty can result in a significant return on investment (ROI).

## 1.4 Operating Environment-H/w and S/w:

**Table 1.4.1: Hardware requirements:**

<b>Processor</b>	Intel Core i3
<b>Hard Disk</b>	80 GB
<b>RAM</b>	1 GB
<b>Monitor</b>	Colour Monitor
<b>Other Hardware</b>	Keyboard, Mouse etc.

**Table 1.4.2: Software requirements:**

<b>Operating System</b>	Windows 11
<b>Language</b>	HTML,CSS,JAVA
<b>Database</b>	MySql
<b>Tool Kit</b>	Notepad++, Apache Netbeans, Mysql Workbench

## 1.5 Architecture of System:

When designing an Airline Management System (AMS), it's essential to establish a robust architecture that encompasses various components, technologies, and data flows. Below is a proposed architecture detailing both the high-level structure and the key components that make up the system?

**Presentation Layer (User Interface):** The front-end interface through which users interact with the system.

**Application Layer:** The core functionality where business logic is implemented.

**Data Layer:** The underlying database and data storage solutions that hold all relevant airline data.

**Integration Layer:** Interfaces for integrating with external systems (e.g., airport systems, payment gateways).

**Global Distribution Systems (GDS):** For real-time availability and pricing with other airlines and travel agents.

**Payment Gateways:** For processing online transactions securely.

**Airport Operations Systems:** For check-in and boarding processes.

**CRM Systems:** For enhancing customer relationship management.

**Weather Services:** To obtain real-time weather data to adjust flight operations accordingly.



## 1.6 Detail Description of Technology Used:

### 1. HTML (Hypertext Markup Language)

HTML is the standard markup language used to create the structure of web pages. It defines the elements of a web page and organizes content such as text, images, links, and multimedia.

**HTML (HyperText Markup Language)** is the standard language used to create and structure content on the web. It forms the foundation of every website, organizing elements like headings, paragraphs, images, links, and more using a system of tags. HTML tells the browser how to display text, where to place images, and how to link pages together. Although HTML alone doesn't make a website look fancy or interactive, it works together with CSS (for styling) and JavaScript (for behavior) to build fully functional and visually appealing web pages. Learning HTML is the first step toward becoming a web developer.

### 2. CSS (Cascading Style Sheets)

CSS is used for styling HTML documents and controlling the layout and presentation of web pages. It allows for the separation of content from design.

**CSS (Cascading Style Sheets)** is the language used to style and design web pages. While HTML structures the content, CSS controls how that content looks—like colors, fonts, spacing, and layout. With CSS, you can make a plain HTML page look visually appealing by customizing everything from backgrounds and buttons to animations and page layouts. It works by applying rules to HTML elements using selectors and properties. CSS is essential for creating modern, responsive, and attractive websites.

Key Features

**Selectors:** CSS uses selectors to apply styles to specific HTML elements (e.g., .class, #id, element).

**Box Model:** CSS uses the box model to define the dimensions, padding, margins, and borders of elements.

**Responsive Design:** Media queries enable responsive design, allowing web pages to adapt to different screen sizes and devices.

### 3. JavaScript

JavaScript is a scripting language that enables interactivity on web pages. It is used to manipulate the Document Object Model (DOM), validate forms, create animations, and handle events.

Key Features

**Event Handling:** JavaScript can respond to user actions like clicks, form submissions, and keyboard presses.

**DOM Manipulation:** JavaScript can create, read, update, and delete HTML elements dynamically.

**Asynchronous Programming:** With the use of AJAX and Promises, JavaScript can communicate with servers to fetch data without refreshing the page.

### 4. Core Java

Core Java typically refers to the foundational features of the Java programming language, which is oriented toward building robust, platform-independent applications. It is widely used for back-end development, including server-side programming.

Key Features

**Object-Oriented:** Java is an object-oriented programming language that emphasizes encapsulation, inheritance, and polymorphism.

**Platform-Independent:** Java code is compiled into bytecode, which can run on any platform that has a Java Virtual Machine (JVM).

**Rich Standard Library:** Java provides a vast standard library (Java API) that includes essential classes for data structures, networking, I/O, and more.

MySQL is an open-source relational database management system (RDBMS) based on Structured Query Language (SQL). It is widely used for managing and storing data in web applications and is known for its reliability, ease of use, and performance. Let's explore its features, basic concepts, and how it can be integrated with web technologies like HTML, CSS, JavaScript, and Java.

## 5. MySQL

**Relational Database:** MySQL organizes data into tables that can be related to each other, allowing for complex queries across different datasets.

**SQL (Structured Query Language):** It uses SQL for defining, querying, and modifying data, providing a standardized way to interact with the database.

**Open Source:** MySQL is available under the GNU General Public License, although commercial versions are also offered.

### 2. Key Features of MySQL

**Scalability:** MySQL can handle large databases (up to several terabytes) and thousands of concurrent clients, making it suitable for enterprise-level applications.

**Performance:** Optimized for speed and efficiency, MySQL can quickly process complex queries.

**Data Integrity:** Supports ACID compliance (Atomicity, Consistency, Isolation, Durability) which ensures reliable transactions.

**Compatibility:** MySQL works well with various operating systems, programming languages (like PHP, Java, Python), and frameworks.

**Storage Engines:** Provides different storage engines (InnoDB, MyISAM, etc.) that offer trade-offs between performance and features.

## **Chapter 2:**

### **2.1 Proposed System:**

The proposed Airline Reservation System aims to streamline the flight booking process for users while providing an efficient management interface for administrators. The choice of technologies ensures performance, security, and scalability, addressing potential user needs.

This framework can serve as a guideline for further discussions, implementation, and iterations as you gather more input from stakeholders and users. Would you like to delve deeper into any specific area of this proposed system?

The proposed **Airline Management System** is a digital platform designed to streamline and automate all key operations within an airline company. It will manage flight schedules, ticket bookings, customer details, crew assignments, and real-time updates, providing a seamless experience for both passengers and staff. By centralizing all data, the system ensures accuracy, reduces manual errors, and improves overall efficiency in day-to-day airline operations.

### **2.2 Objectives:**

- **Automate Core Operations:**  
To automate key airline processes such as flight scheduling, booking, check-in, and ticket generation to reduce manual workload and errors.
- **Enhance Customer Experience:**  
To provide an easy-to-use interface for customers to search flights, book tickets, select seats, and receive updates in real-time.
- **Improve Operational Efficiency:**  
To streamline internal processes including crew management, aircraft maintenance tracking, and passenger handling.
- **Ensure Data Accuracy and Security:**  
To maintain secure and centralized storage of customer, flight, and financial data, ensuring accuracy and privacy.
- **Enable Real-Time Monitoring:**  
To offer real-time flight tracking and status updates for both staff and passengers.
- **Generate Reports for Better Decisions:**  
To provide detailed analytics and reports for management to aid in strategic planning and performance evaluation.

- **Support Multi-User Access:**

To allow different user roles (admin, staff, passengers) with appropriate permissions to interact with the system.

**Scope:**

The system will accommodate both end-users and administrators.

Functions will include searching for flights, booking tickets, viewing flight status, and managing flight schedules.

The proposed Airline Management System aims to serve as an all-in-one solution for managing the various operational, customer service, and administrative functions of an airline. The system will handle everything from flight scheduling and ticket reservations to passenger check-in, crew management, and real-time flight updates. It will support both passenger-facing features (like booking, seat selection, and notifications) and backend functionalities (like aircraft maintenance tracking, staff scheduling, and report generation).

The system will be accessible via web and possibly mobile platforms, allowing users to interact with the airline 24/7. It is designed to support multiple user roles such as admins, airline staff, and passengers, each with different levels of access and functionality. Additionally, the system will focus on data security, reliability, and scalability, making it suitable for both small and large airline operations.

## 2.3 User Requirements:

### 2.3.1 Functional Requirements:

- **User Registration and Login**
  - Passengers and staff must be able to create accounts and log in securely.
  - Different access levels for admin, staff, and customers.
- **Flight Management**
  - Admins can add, update, or delete flight details including routes, timings, and availability.
- **Ticket Booking System**
  - Passengers can search for flights, view availability, and book tickets.
  - System generates digital tickets upon successful payment.
- **Seat Selection**
  - Users can view and choose available seats during booking or check-in.
- **Online Check-in**
  - Passengers can check in online, select seats (if not already), and receive a boarding pass.
- **Payment Integration**
  - Secure online payment options for booking tickets using credit/debit cards, wallets, etc.
- **Flight Status and Notifications**
  - Real-time updates on flight status (delays, cancellations, etc.) via SMS or email.
- **Crew and Staff Management**
  - Admin can assign pilots and crew to flights and manage their schedules.
- **Customer Support Module**
  - Users can raise queries or complaints; support staff can respond through the system.
- **Reports and Analytics**
  - Admin can generate reports on revenue, ticket sales, passenger data, and flight performance.

### 2.3.2 Non-functional Requirements:

**Performance:** The system should respond within 2 seconds of a user request.

**Security:** User data must be protected against unauthorized access.

**Scalability:** The system must handle up to 10,000 concurrent users.

**Usability:** The interface must be intuitive for users of all ages.

### 2.3.3. System Architecture

#### **Frontend:**

Technologies: HTML, CSS, JavaScript (possibly using a framework like React or Angular).

Functionality: Display flight searches, booking forms, and user profiles.

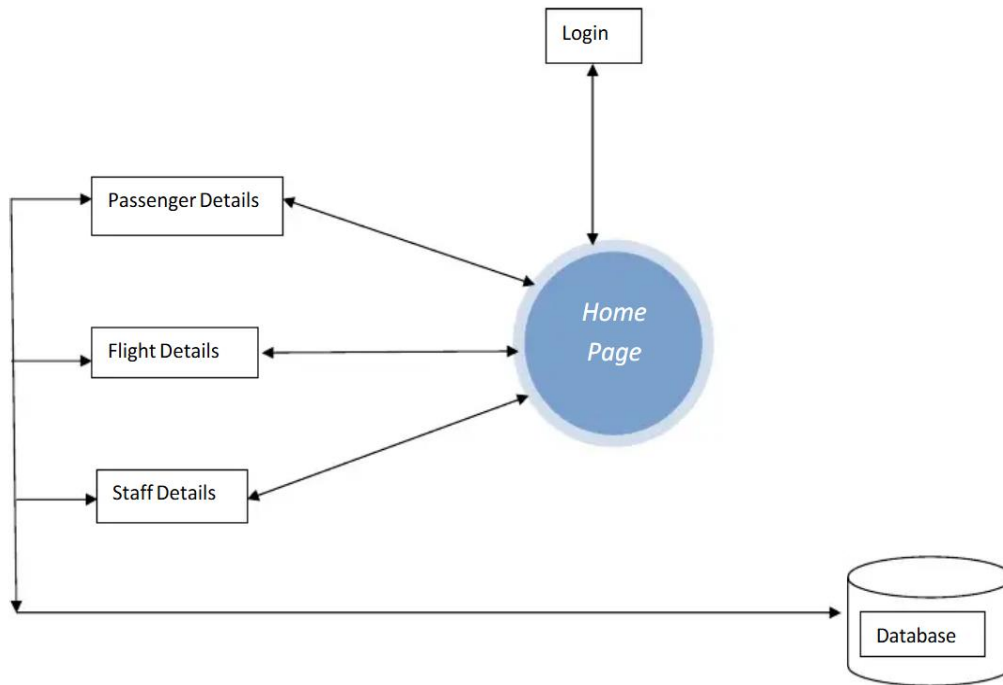
**Backend:**

Technologies: Java (using Spring Boot) for RESTful API development.

Database: MySQL for storing user, flight, and booking information.

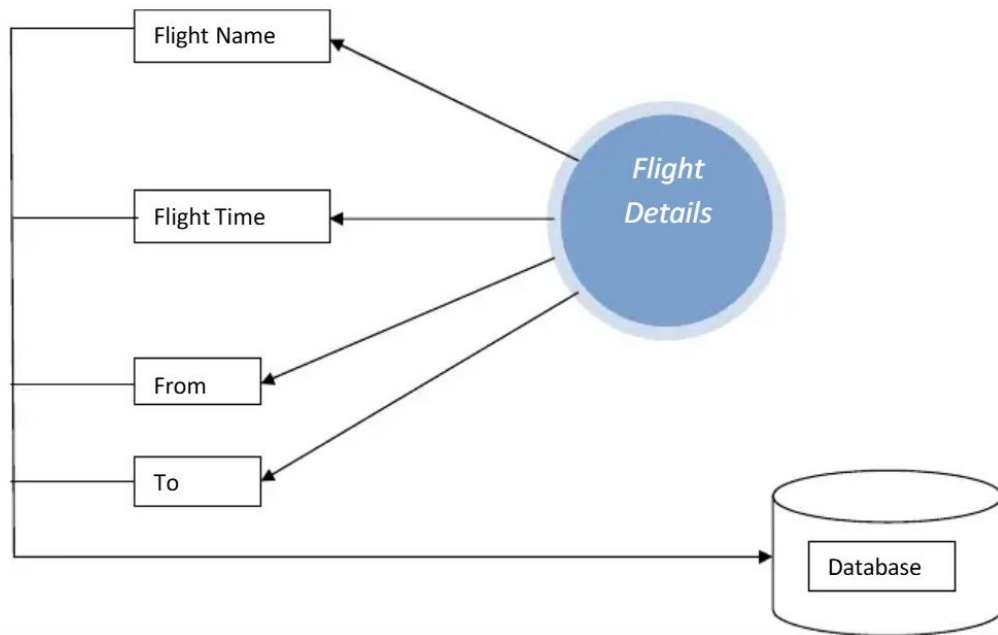
## Chapter 3:

### **3.1 DFD:**

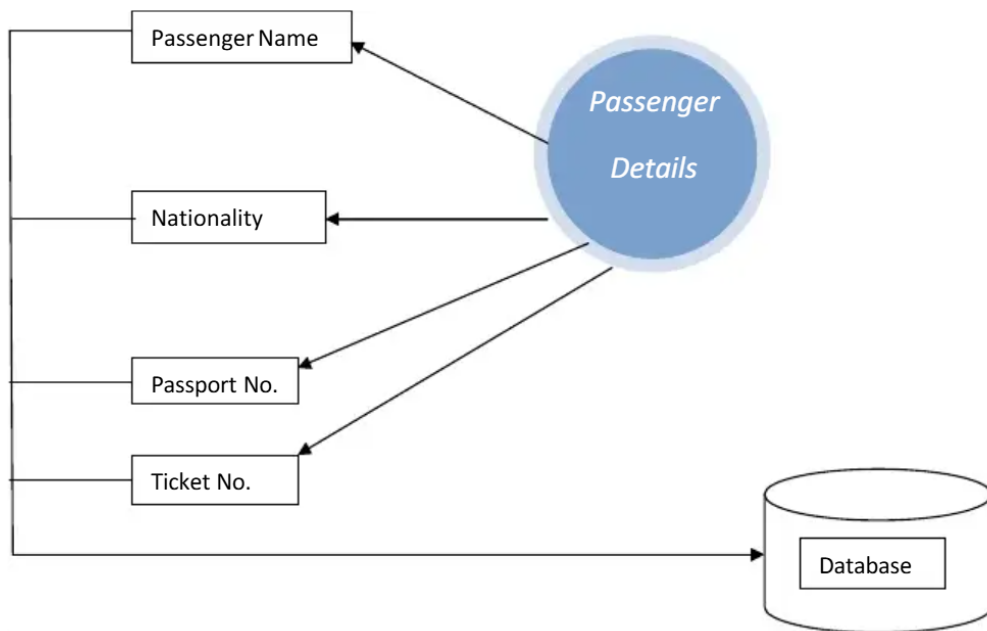


Airline Management System for DFD Diagram 0 Level





Airline Management System for DFD Diagram 1 Level



Airline Management System for DFD Diagram 1 Level

### 3.2 Table Specification:

#### Login

Field Name	Data Type	Size	Allow Nulll	Constrain
Admin	varchar	20	No	
Password	varchar	20	No	

#### Flight

Field Name	Data Type	Size	Allow Nulll	Constrain
f_code	varchar	20	Yes	Primary key
f_name	varchar	20	No	
source	varchar	40	No	
destination	varchar	40	No	

#### Passenger:

Field Name	Data Type	Size	Allow Nulll	Constrain
name	varchar	20	No	
nationality	Varchar	20	No	
phone	int	15	No	
address	Varchar	50	No	
aadhar	Varchar	20	Yes	Primary key
gender	varchar	20	No	

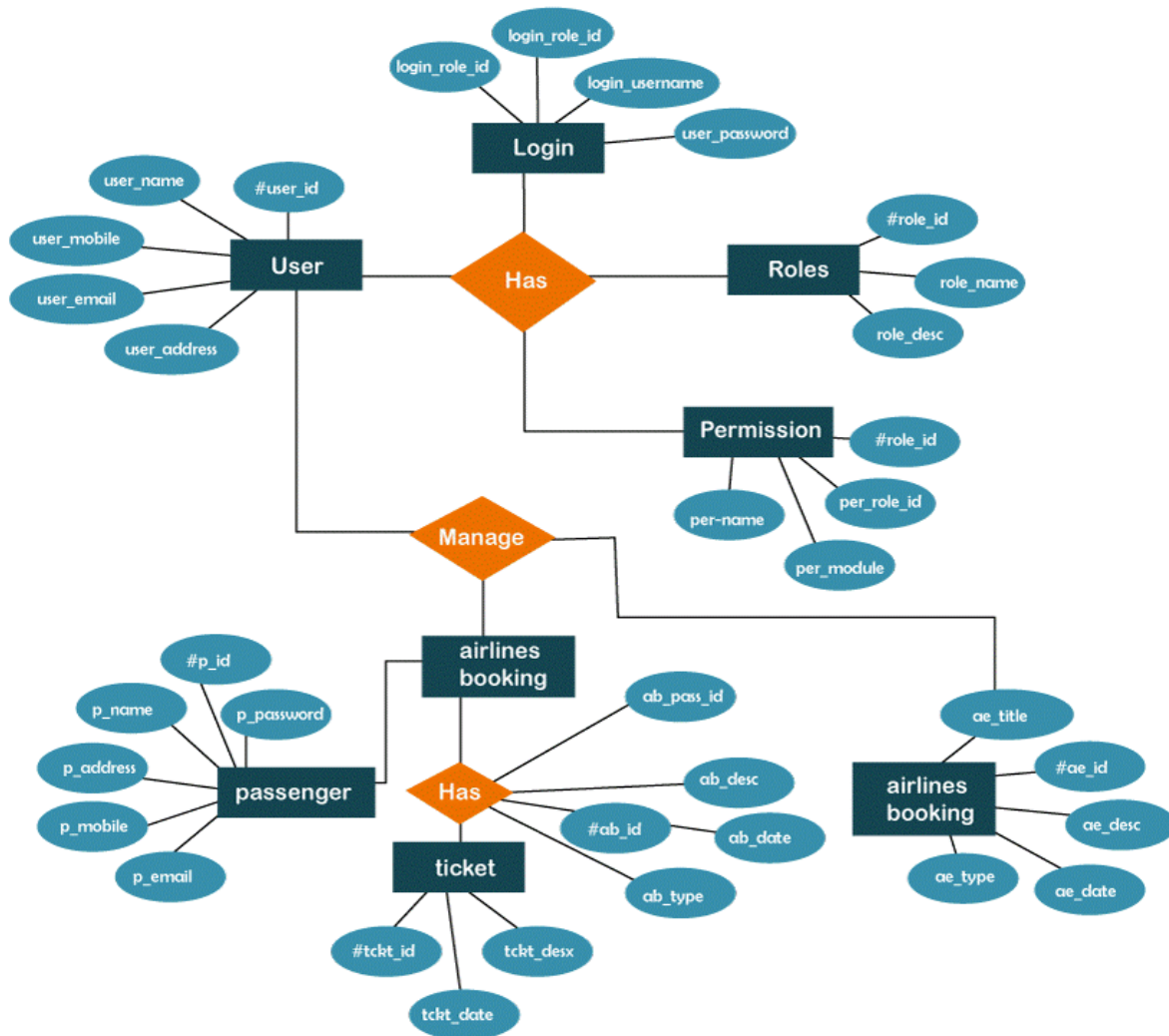
#### Reservation:

Field Name	Data Type	Size	Allow Nulll	Constrain
PNR	varchar	20	Yes	Primary key
TICKET	varchar	20	No	
aadhar	varchar	20	No	
name	varchar	20	No	
nationality	varchar	30	No	
flightname	varchar	15	No	
flightcode	varchar	20	No	
src	varchar	30	No	
des	varchar	30	No	
ddate	date	30	No	

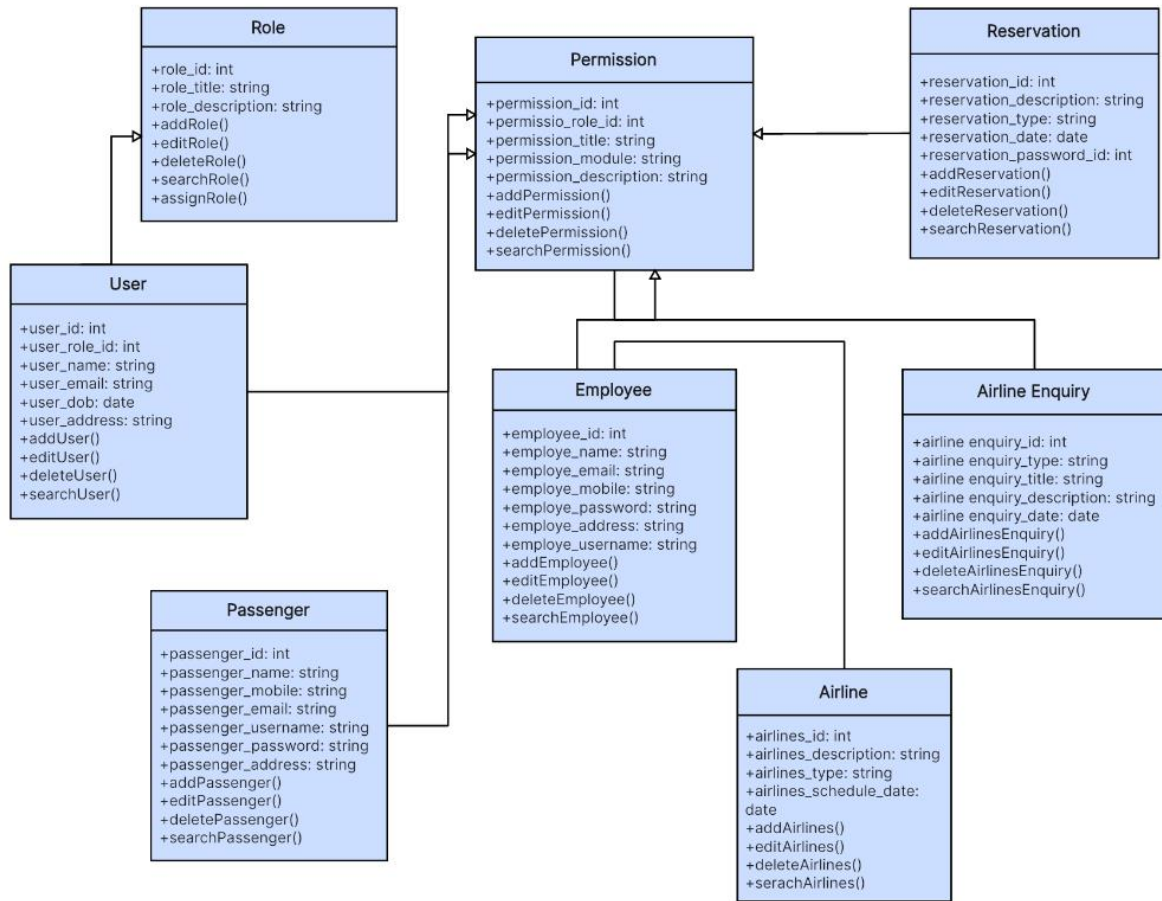
#### Cancel:

Field Name	Data Type	Size	Allow Nulll	Constrain
PNR	varchar	20	Yes	Primary key
name	varchar	40	No	
cancelno	varchar	20	No	
fcode	varchar	20	No	
ddate	date	20	No	

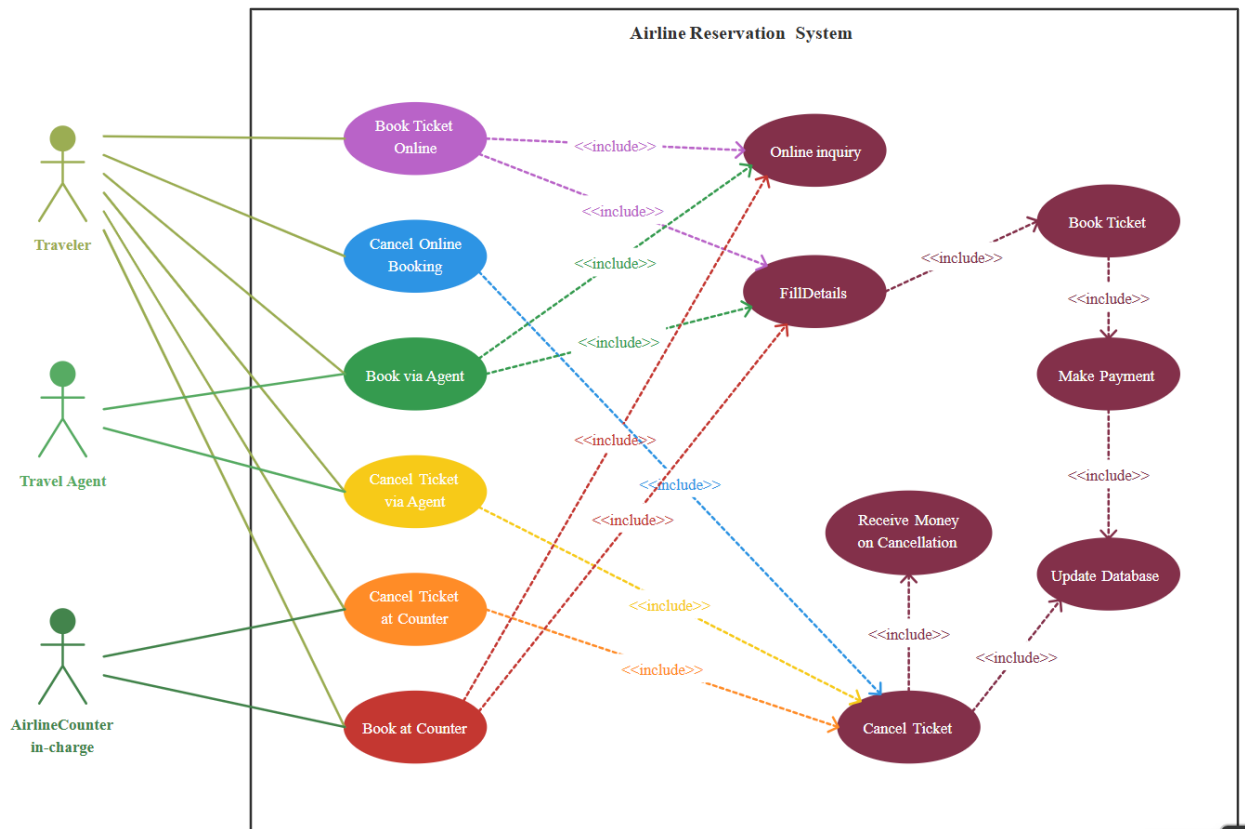
### 3.3 Entity Relationship Diagram:



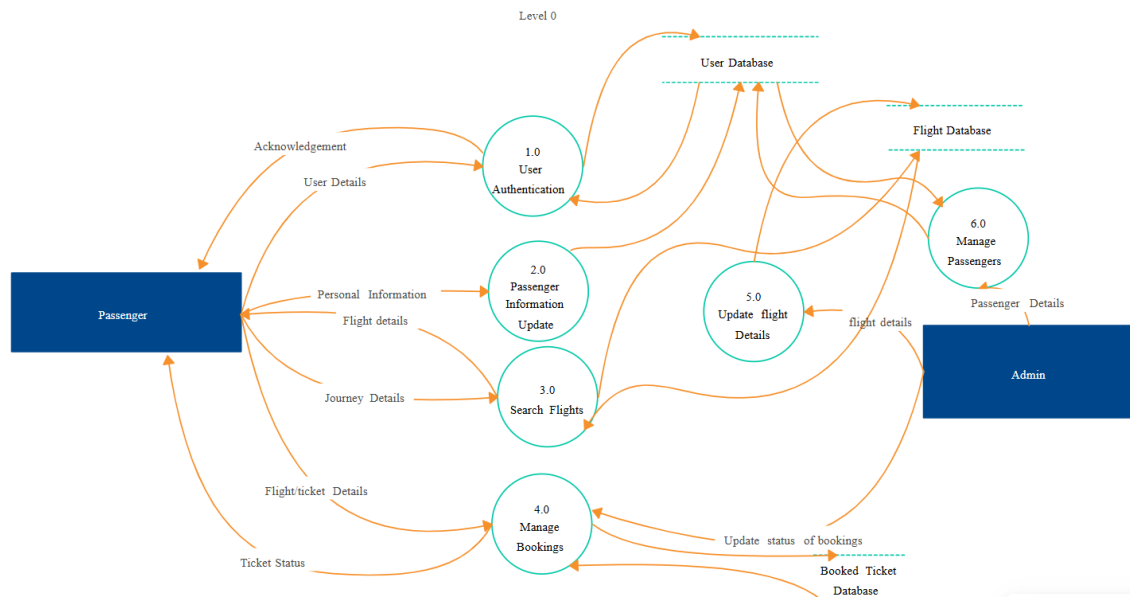
### 3.4 Class Diagram:



### 3.5 Use case diagram:



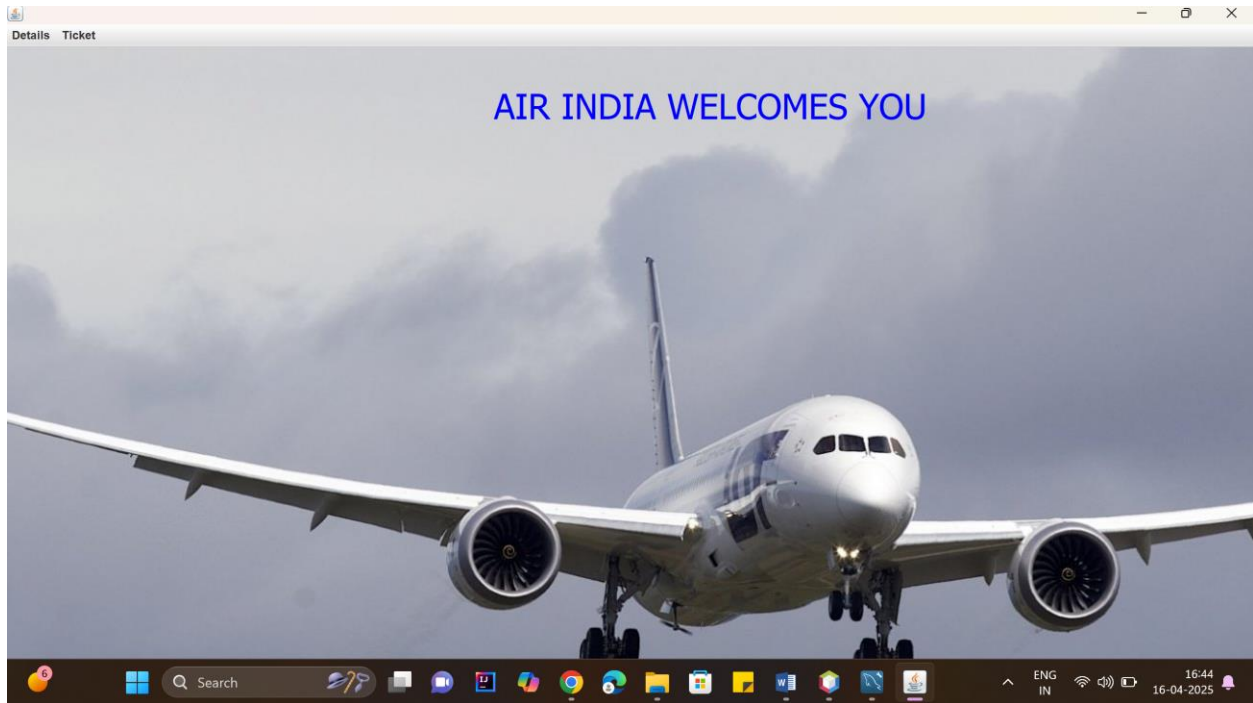
### 3.6 Map Diagram:



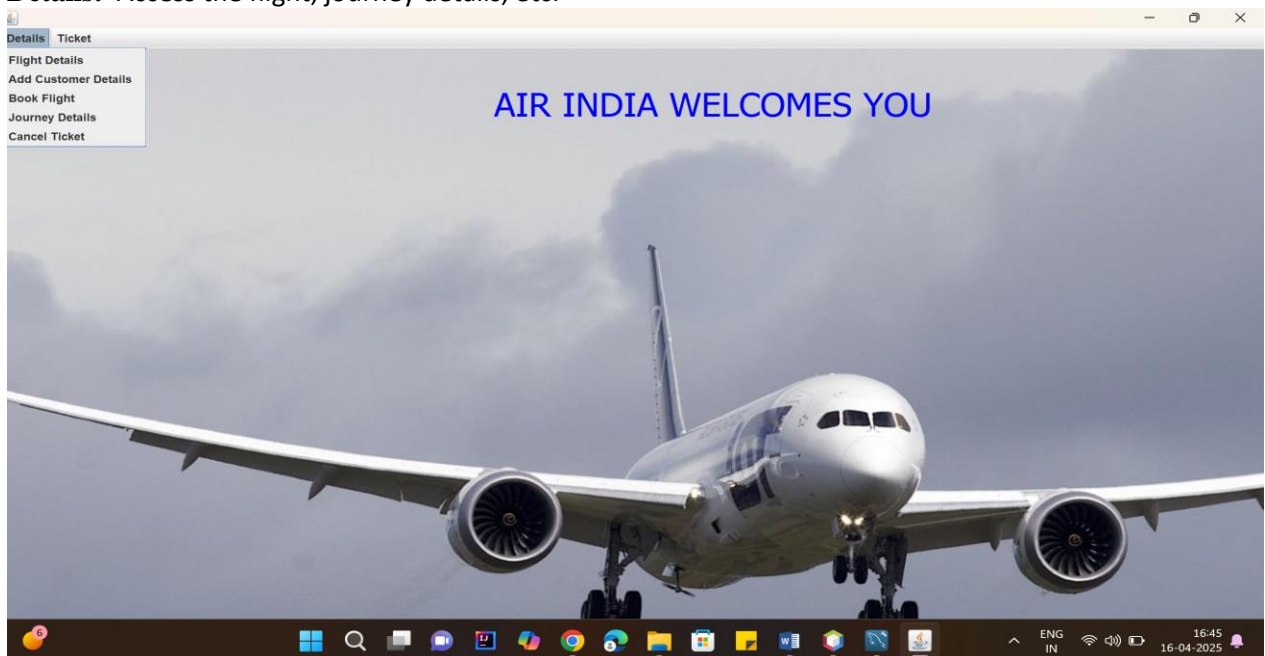
## Chapter 4:

### 4.1 User Interface Design (Screen etc.)

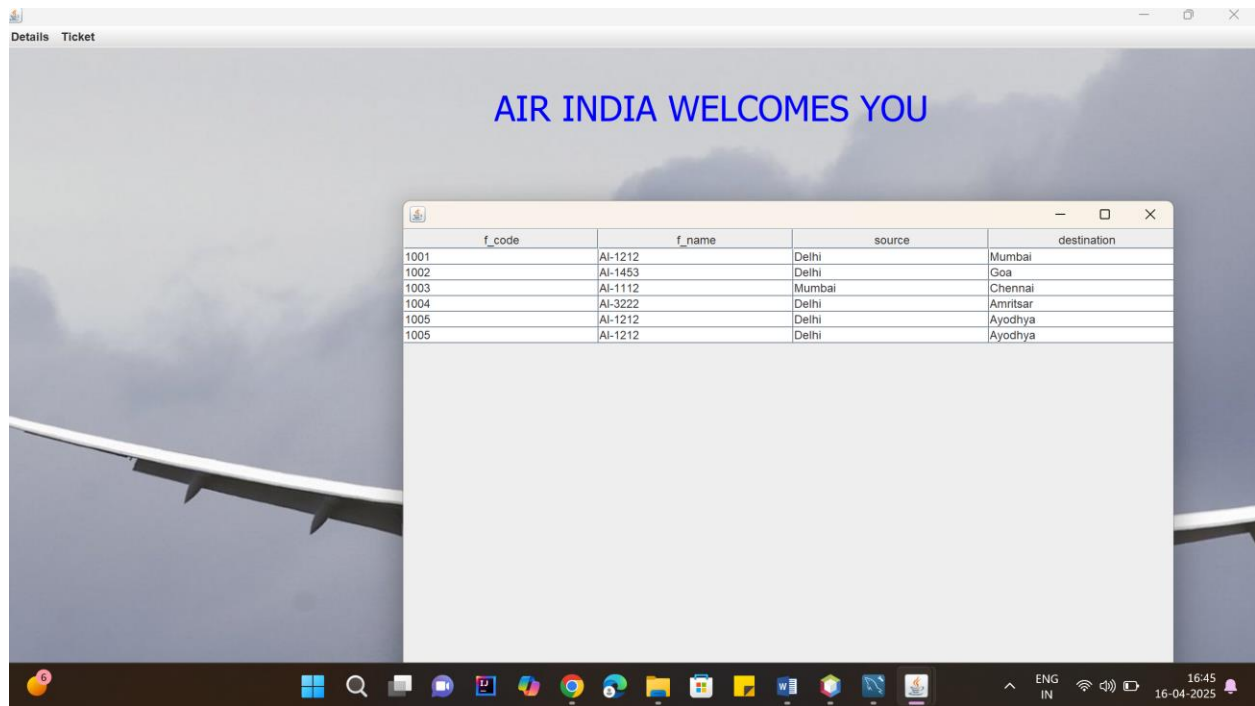
**Home Page:** Welcome Air India page.



**Details:** Access the flight, journey details, etc.



Flight Details: Showing available Flight status.





## Add Customer Details: Adding customer basic details.

Details Ticket

### AIR INDIA WELCOMES YOU

#### ADD CUSTOMER DETAILS

Name

Nationality

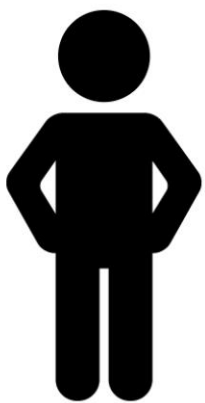
Aadhar Number

Address

Gender ☐ Male ☐ Female

Phone

**SAVE**



#### ADD CUSTOMER DETAILS

Name

Nationality

Aadhar Number

Address

Gender ☐ Male ☒ Female

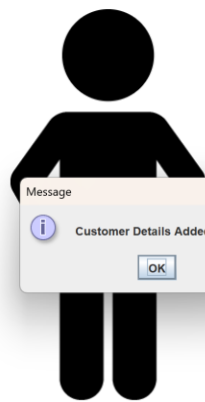
Phone

**SAVE**

Message

**Customer Details Added Successfully**

**OK**



## Book Flight: Booking the Customers Flight.

Book Flight

Aadhar

Fetch User

Name

Nationality

Address

Gender

Gender

Source

Delhi

Destination

Mumbai

Fetch Flights

Flight Name

Flight Code

Date of Travel

Book Flight

Windows Taskbar

ENG IN 16:46 16-04-2025

Book Flight

Aadhar

758802282212

Fetch User

Name

Shruti Shelke

Nationality

Indian

Address

Pune

Gender

Female

Source

Mumbai

Destination

Chennai

Fetch Flights

Flight Name

AI-1112

Flight Code

1003

Date of Travel

19-Apr-2025

Book Flight

Message

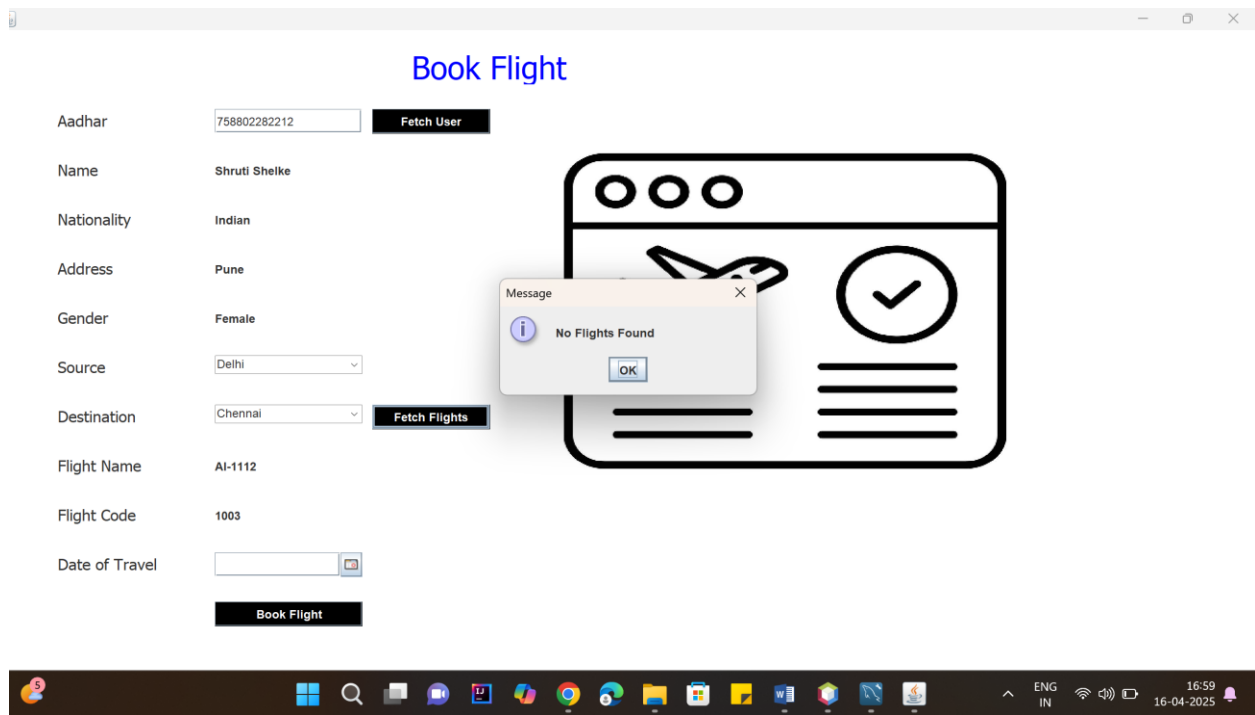
Ticket Booked Successfully

OK

Windows Taskbar

ENG IN 16:59 16-04-2025

26



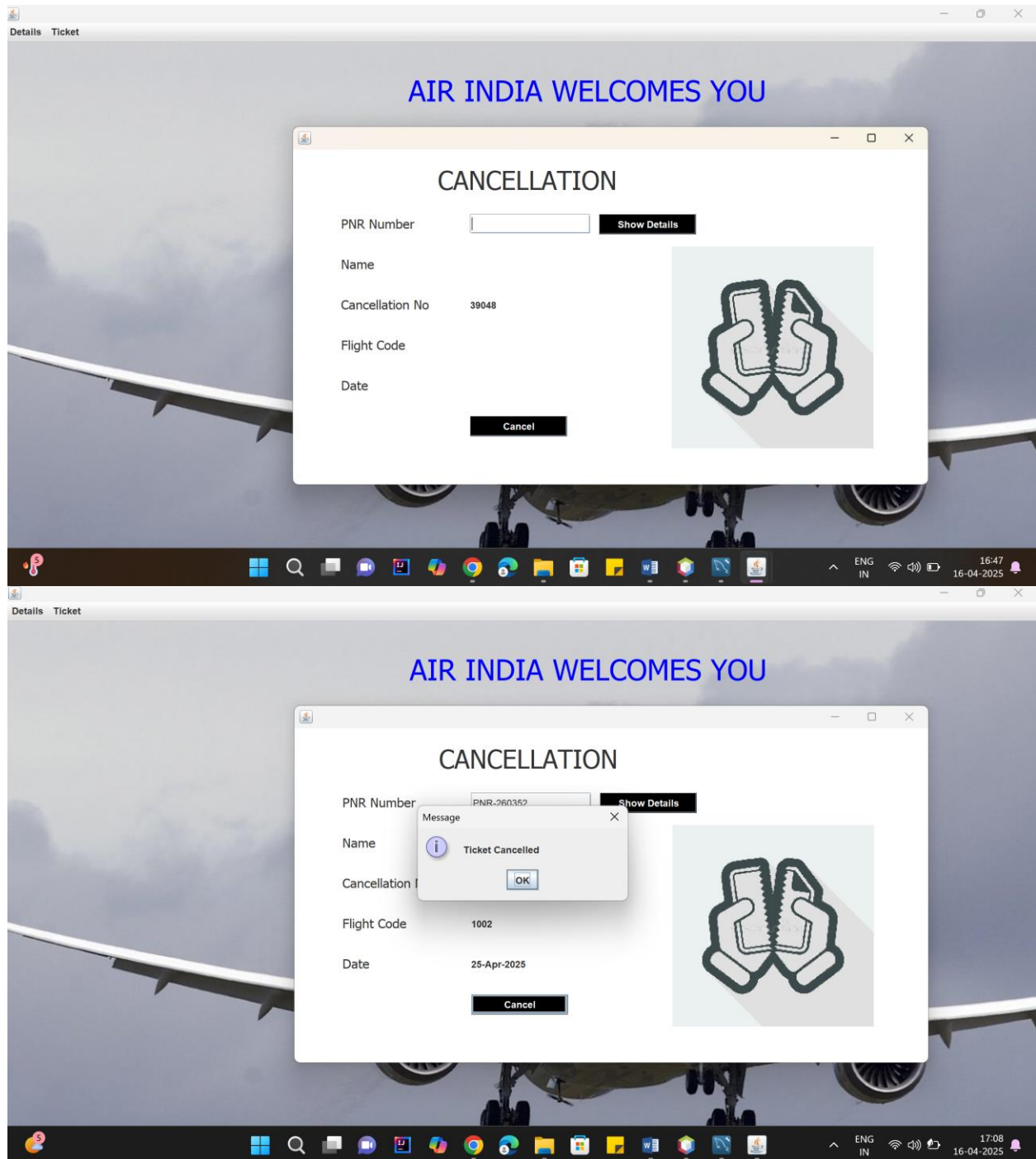
## Journey Details: Showing the Customer Flight Status.

The screenshot shows a desktop application window titled "Details Ticket". The background features a blue sky with clouds and the wing of an airplane. The text "AIR INDIA WELCOMES YOU" is displayed in blue. A smaller window titled "PNR Details" is overlaid on the main window. It contains a text input field with "PNR-31546" and a "Show Details" button. Below this is a table with flight details.

PNR	TICKET	aadhar	name	nationality	flightname	flightcode	src	des	ddate
PNR-31546	TIC-3044	758802282...	Shruti Shelke	Indian	AI-1112	1003	Mumbai	Chennai	19-Apr-2025

The Windows taskbar at the bottom shows various application icons, system status icons (including language set to "ENG IN", signal strength, and battery), and the date/time "17:03 16-04-2025".

**Cancel Flight:** Cancelling a flight refers to the formal process of an airline discontinuing a scheduled flight, often resulting in rebooking options or refunds for affected passengers



**Boarding Flight:** boarding pass is an official document provided by an airline that grants a passenger permission to enter the restricted area of an airport and board a specific flight.

Details Ticket

# AIR INDIA WELCOMES YOU

## AIR INDIA

### Boarding Pass

PNR DETAILS

Enter

NAME

NATIONALITY


SRC

Flight Name

Date

DEST

Flight Code



Details Ticket

# AIR INDIA WELCOMES YOU

## AIR INDIA

### Boarding Pass

PNR DETAILS

Enter

NAME

NATIONALITY

SRC

Flight Name

Date

Shruti Shelke

Indian

Mumbai

AI-1112


19-Apr-2025

DEST

Flight Code

Chennai

1003



## 4.2 Limitations:

1. **System Downtime or Crashes**
    - Technical failures can halt operations like booking, check-ins, or baggage handling.
  2. **Scalability Issues**
    - Legacy systems often struggle to handle high traffic during peak times (e.g., holiday seasons).
  3. **Integration Challenges**
    - Integrating with third-party services (e.g., global distribution systems, payment gateways, or loyalty programs) can be complex.
  4. **Cybersecurity Risks**
    - Sensitive data (passenger info, payments) is at risk if the system lacks robust security protocols.
- 

## ⊗ Operational Limitations

1. **Human Dependency**
  - Despite automation, human oversight is still needed—especially for exceptions, disruptions, or emergencies.
2. **Complex Route Management**
  - Managing dynamic flight routes, delays, and re-routings can still be inefficient or slow.
3. **Limited Customization**
  - Many systems offer limited flexibility for individual airline needs (like regional pricing, language, or service models).

## 4.3 Future Enhancement:

### 1. AI & Machine Learning Integration

- **Dynamic Pricing Models**  
Adjust ticket prices in real-time based on demand, competition, and customer behavior.
  - **Predictive Maintenance**  
Use sensors and ML to forecast equipment failures and reduce downtime.
  - **Customer Behavior Analytics**  
Tailor promotions and services based on passenger history and preferences.
- 

### 2. Smart Automation

- **Automated Rebooking & Rescheduling**  
During delays or cancellations, the system can offer instant alternative options.
  - **Baggage Tracking Automation**  
Real-time baggage tracking with mobile updates to reduce lost baggage issues.
  - **Chatbots for Customer Support**  
24/7 AI chat for handling common customer queries.
- 

### 3. Cloud-Based Architecture

- Improve system accessibility, scalability, and data recovery.
  - Easier integration with partners (hotels, car rentals, travel portals).
- 

### 4. Mobile-First Experience

- Full-feature mobile apps for passengers: real-time updates, mobile boarding, meal preferences, upgrades.
- Staff-side mobile tools for gate agents, maintenance teams, and crew.



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Retrieved from <https://www.boeing.com>  
→ Forecasts industry growth and discusses the impact of technology on airline operations.

## ANNEXTURE:Sample Code:

```
package airlinemanagementsystem;

import javax.swing.*;
import java.awt.*;
import java.awt.event.*;

public class Home extends JFrame implements ActionListener{

    public Home() {
        setLayout(null);

        ImageIcon i1 = new
        ImageIcon(ClassLoader.getResource("airlinemanagementsystem/icons/front.jpg"));
        JLabel image = new JLabel(i1);
        image.setBounds(0, 0, 1600, 800);
        add(image);

        JLabel heading = new JLabel("AIR INDIA WELCOMES YOU");
        heading.setBounds(500, 40, 1000, 40);
        heading.setForeground(Color.BLUE);
        heading.setFont(new Font("Tahoma", Font.PLAIN, 36));
        image.add(heading);

        JMenuBar menubar = new JMenuBar();
        setJMenuBar(menubar);

        JMenu details = new JMenu("Details");
        menubar.add(details);

        JMenuItem flightDetails = new JMenuItem("Flight Details");
        flightDetails.addActionListener(this);
        details.add(flightDetails);

        JMenuItem customerDetails = new JMenuItem("Add Customer Details");
        customerDetails.addActionListener(this);
        details.add(customerDetails);

        JMenuItem bookFlight = new JMenuItem("Book Flight");
        bookFlight.addActionListener(this);
        details.add(bookFlight);

        JMenuItem journeyDetails = new JMenuItem("Journey Details");
        journeyDetails.addActionListener(this);
        details.add(journeyDetails);
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JMenuItem ticketCancellation = new JMenuItem("Cancel Ticket");
ticketCancellation.addActionListener(this);
details.add(ticketCancellation);

JMenu ticket = new JMenu("Ticket");
menubar.add(ticket);

JMenuItem boardingPass = new JMenuItem("Boarding Pass");
ticket.add(boardingPass);

boardingPass.addActionListener(this);
ticket.add(boardingPass);
setExtendedState(JFrame.MAXIMIZED_BOTH);
setVisible(true);
}

public void actionPerformed(ActionEvent ae) {
    String text = ae.getActionCommand();

    if (text.equals("Add Customer Details")) {
        new AddCustomer();
    } else if (text.equals("Flight Details")) {
        new FlightInfo();
    } else if (text.equals("Book Flight")) {
        new BookFlight();
    } else if (text.equals("Journey Details")) {
        new JourneyDetails();
    } else if (text.equals("Cancel Ticket")) {
        new Cancel();
    } else if (text.equals("Boarding Pass")) {
        new BoardingPass();
    }
}

public static void main(String[] args) {
    new Home();
}
}

```