AIRLINE RESERVATION SYSTEM

Kalidindi Nagendra Varma

INTRODUCTION:

The Airline Reservation System is designed to automate the process of airline ticket booking and reservation management. It aims to provide a user-friendly platform for travelers to book tickets and cancel tickets.

SCOPE OF THE PROJECT:

- **User Interface**: Users are able to book, view and cancel tickets.
- **Database Design**: The system will include a well-structured database to store flight details and reservations.

The project's scope is to create a user-friendly, secure, and efficient airline reservation system.

FEATURES AND FUNCTIONALITIES:

- **Booking**: The user can book the ticket by entering personal details (name, phone number, email, and gender), travel date, time, airline, source, and destination.
- **Checking**: The user can check the ticket details by entering the name, phone number, and email.
- **Cancellation**: The user can cancel the ticket by entering the name, source, and destination.

USER INTERFACE:

1. **Home Page**:
    - Welcome Message.
    - It includes 3 fields: Book Ticket, Check Ticket, and Cancel Ticket. Select the preferred field.
2. **Booking Page**:
    - Enter the passenger details (name, phone number, email, age, and gender).
    - Enter the travel details (source, destination, travel date, and airline).
    - Press the book button to book the flight ticket.

3. **Checking Page**:
    - Enter the details (name, phone number, and email).
    - Press the check button to get the ticket details.
4. **Deleting Page**:
    - Enter details (name, phone number, email, source, and destination).
    - Press the delete button to cancel the ticket.
    - If you don't know the ticket details, press the 'click here' link to get the ticket details.

DATABASE DESIGN:

1. **Entities**:
    - **Flights**: FLIGHT_ID, AIRLNE, SOURCE, DESTINATION, PRICE, DEPATURE_TIME, ARRIVAL_TIME.
    - **Passengers**: NAME, AGE, GENDER, PHONENUMBER, EMAIL, TRAVELDATE, AIRLINE, SOURCE, DESTINATION, FLIGHT_ID, PRICE.
2. **Database Schema**:
    - **Flights Table**:

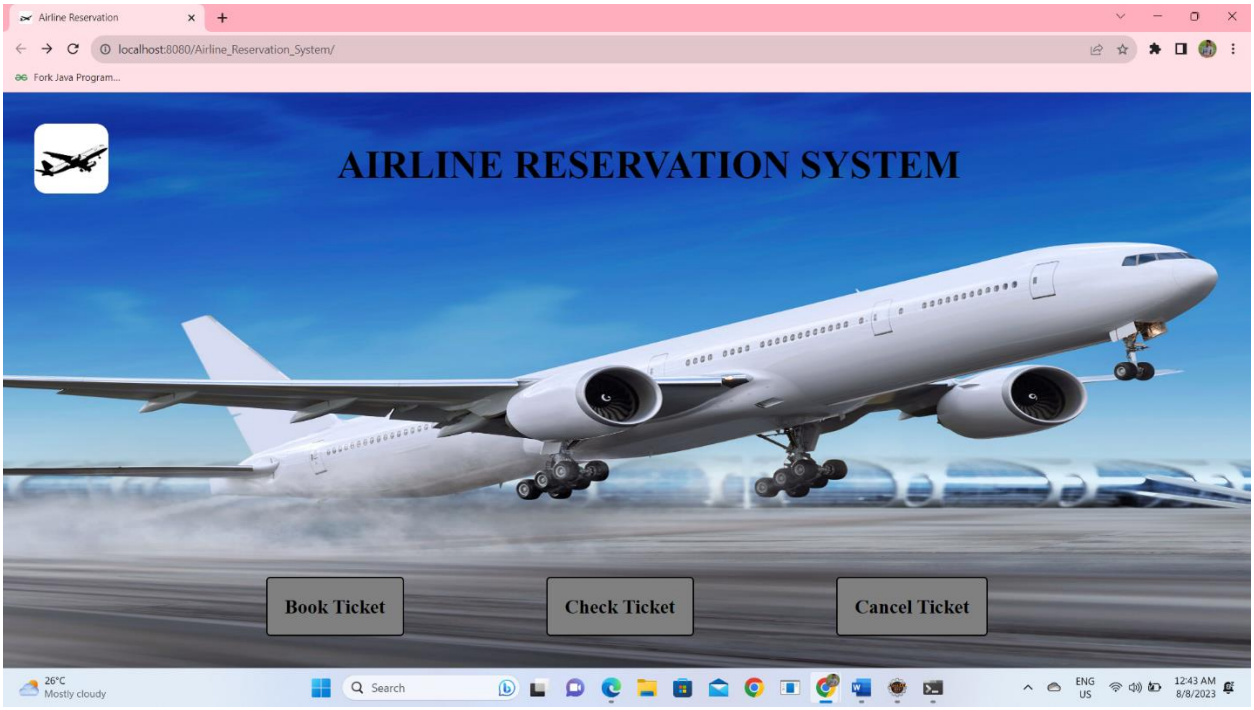
```
SQL> desc flights;
 Name                      Null?    Type
 ------------------------- -------- ----------------
 FLIGHT_ID                          VARCHAR2(4)
 AIRLINE                            VARCHAR2(15)
 SOURCE                             VARCHAR2(20)
 DESTINATION                        VARCHAR2(20)
 PRICE                              NUMBER(4)
 DEPATURE_TIME                      VARCHAR2(10)
 ARRIVAL_TIME                       VARCHAR2(10)
```

    - **Passengers Table**:

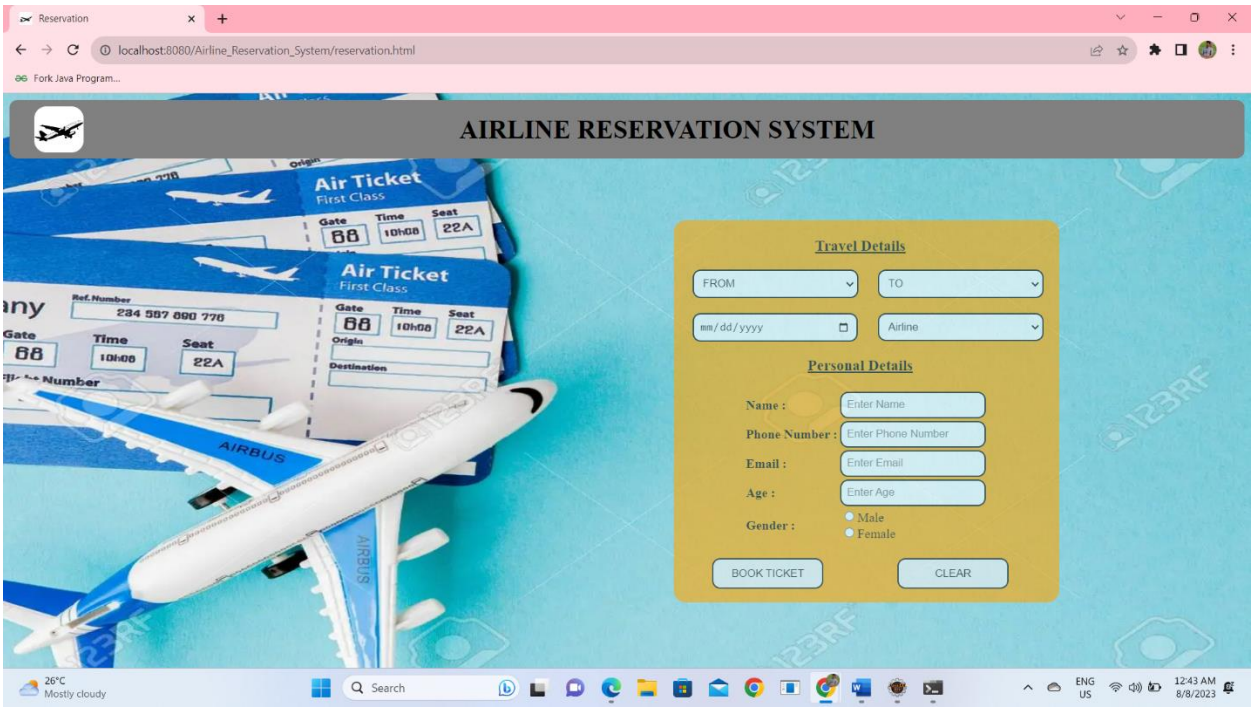
```
SQL> desc passengers;
 Name                      Null?    Type
 ------------------------- -------- ----------------
 NAME                               VARCHAR2(20)
 AGE                                NUMBER(3)
 GENDER                             VARCHAR2(6)
 PHONENUMBER                        NUMBER(10)
 EMAIL                              VARCHAR2(20)
 TRAVELDATE                         DATE
 AIRLINE                            VARCHAR2(15)
 SOURCE                             VARCHAR2(20)
 DESTINATION                        VARCHAR2(20)
 FLIGHT_ID                          VARCHAR2(4)
 PRICE                              NUMBER(4)
```

PROJECT WORKFLOW:

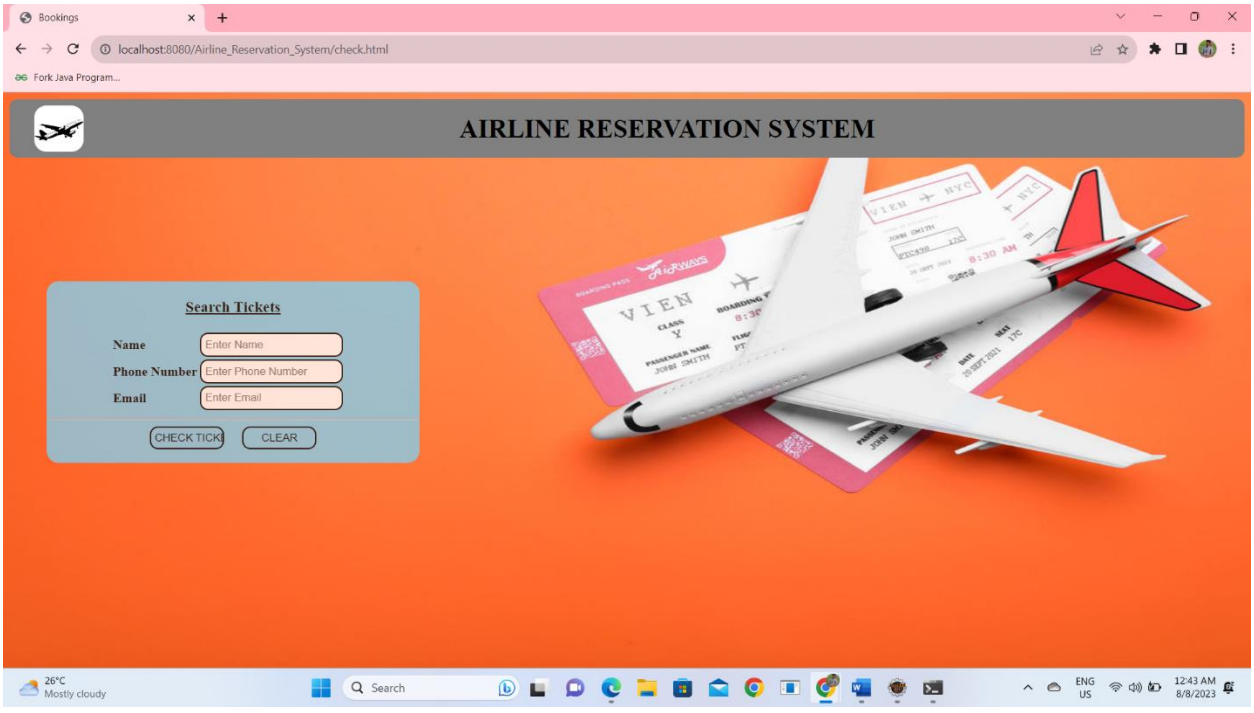
1. **Home Page**:
    - The user has 3 buttons: Book Ticket, Check Ticket, and Cancel Ticket.
    - If the user presses the ‘Book Ticket’ button, it goes to the reservation page.
    - If the user presses the ‘Check Ticket’ button, it goes to the ticket-checking page.
    - If the user presses the ‘Delete Ticket’ button, it goes to the ticket deletion page.



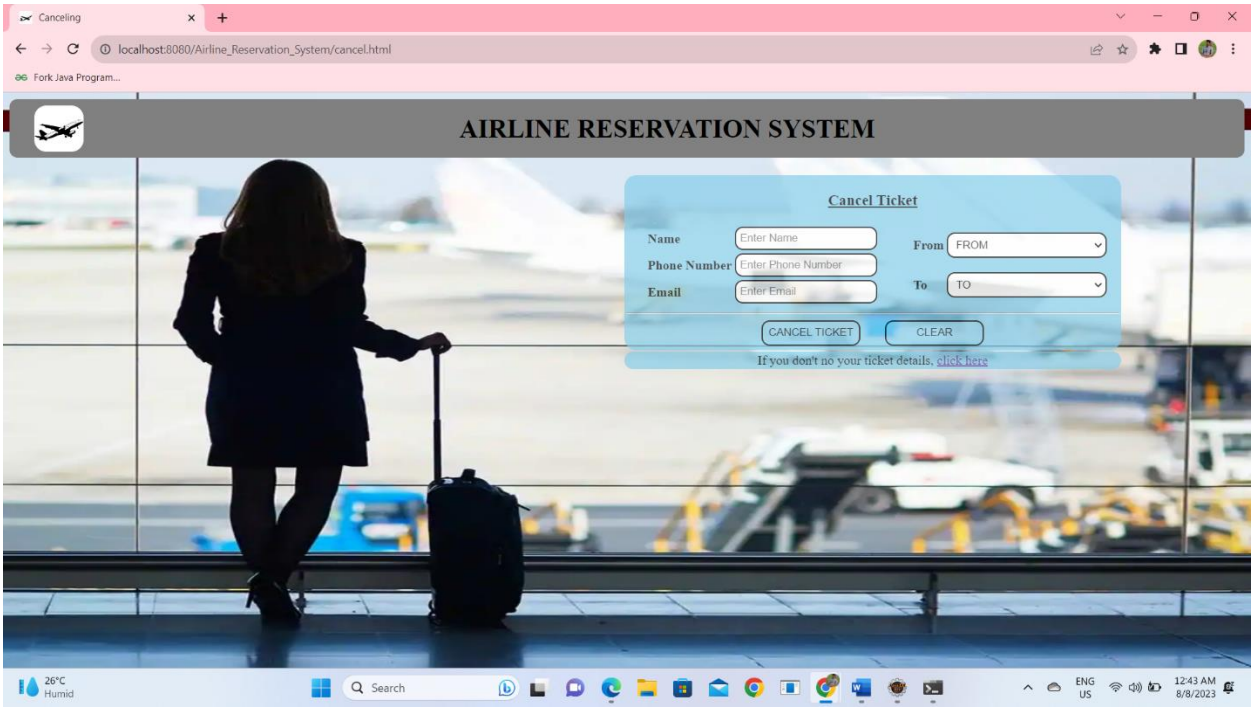
2. **Ticket Reservation**:
    - The user enters the travel details.
    - The user enters the personal details.
    - If the user presses the ‘Book Ticket’ button, the ticket will be booked.
    - If the user presses the ‘Clear’ button, the data entered in the input fields will be erased.



3. **Checking Ticket**:
    - The user enters the required details.
    - If the user presses the ‘Check Ticket’ button, the ticket will appear.
    - If the user presses the ‘Clear’ button, the data entered in the input fields will be erased.



4. **Deleting Ticket:**
    - The user enters the required details.
    - If the user presses the ‘Cancel Ticket’ button, the ticket will be canceled.
    - If the user presses the ‘Clear’ button, the data entered in the input fields will be erased.
    - If the user presses the ‘click here’ link, the user will get the ticket details to enter.



TECHNOLOGIES:

These technologies are chosen based on factor such as project requirements.

1. **Front End**: HTML, CSS, and JavaScript.
2. **Back End**: Java.
3. **Database**: SQL.
4. **Server**: Apache Tomcat.
5. **IDE**: Eclipse.

CONCLUSION:

In conclusion, this project is all about making flight booking easier for travelers. With a friendly interface and smart backend, it helps people to choose flights. At the same time, it is easy to manage smoothly. This project aims to improve how we book and cancel flights and it make more convenient for everyone.