# **AIRLINE RESERVATION SYSTEM**

#### **INTRODUCTION AND OBJECTIVES:**

The world is evolving with technology, and the demand for seamless travel experiences is increasing. The "Airline Reservation System" project aims to revolutionize the way travelers book flights and airlines manage their operations. The objective of the project is to design and implement a secure and user-friendly platform that allows travelers to easily book flights, access detailed information, and manage their reservations. This project caters to the needs of both travelers and airline administrators, offering a comprehensive solution to enhance efficiency and reliability in the booking process.

### **PROBLEM DEFINITION**

Create an Airline Reservation System for users to search, book, and manage flights. The system should have secure user management, a user-friendly interface for searching and booking flights, and display detailed flight information and seat availability. An admin panel should be available for airline staff to manage flights, and reservations, and ensure system efficiency and security.

### **BASIC FUNCTIONALITIES**

- 1. **User Registration and Login:** Allow users to create accounts by providing necessary information like name, email, and password. Implement a secure login system to authenticate registered users.
- 2. Flight Search and Booking: Enable users to search for flights based on criteria such as departure city, destination city, departure date, and the number of passengers. Display a list of available flights that match the search criteria. Allow users to select a flight and book tickets for it.

- 3. **Flight Information Display:** Show detailed flight information for each search result, including departure and arrival times, flight duration, ticket price, and available seats.
- 4. **Reservation Management:** Allow users to view and manage their reservations, including the ability to cancel or modify bookings.
- 5. **Admin Panel:** Create an admin panel with secure access for airline staff to manage flights, including adding new flights, updating flight details, and viewing reservation data.
- 6. **Search Filters and Sorting:** Provide filters and sorting options to help users refine their flight search results based on various criteria such as price, duration, and airline.

## **TOOLS/PLATFORM, HARDWARE AND SOFTWARE REQUIREMENTS**

- Visual Studio Code
- ➤ 12th Gen Intel(R) Core (TM) i5-1235U 1.30 GHz
- > Python
- > HTML, CSS
- ➤ MySQL