## Flight Booking System

## **Project Summary**

This project is a Flight Booking System, designed to help users search for available flights, book tickets, and manage their travel plans online. It provides a smooth, user-friendly interface for travelers to plan and confirm their journeys without needing to visit a physical travel agency.

The system mimics the core functionality of popular platforms like MakeMyTrip, Skyscanner, or Cleartrip, but is built as a simplified version for learning, academic, or small-scale use.

### Purpose of the Project

The main goal of this project is to digitize and simplify the flight booking experience. It allows users to:

- Easily search for flights by selecting source, destination, and travel date.
- View available flights with full details such as airline, timing, price, and duration.
- Book flights by entering passenger information.
- Receive a booking confirmation and view or manage existing bookings.

# **Key Features**

Flight Search — Enter source, destination, and date to view available flights.

Flight Booking — Select a flight and confirm with passenger details.

Ticket Confirmation — Generate a ticket with a booking ID and details.

User Login (Optional) — Allow users to create accounts and manage bookings.

Admin Panel (Optional) — Admins can add or manage flights and track bookings.

### Technologies Used

Depending on your stack, it might include:

- Frontend: HTML, CSS, JavaScript / React / Vue

- Backend: Node.js + Express / Python Django / PHP

- Database: MongoDB / MySQL / PostgreSQL

- Others: REST APIs, Bootstrap/Tailwind, Authentication Libraries

## **Testing and Quality**

The project includes \*unit tests\* for critical functions such as flight search, booking, and data validation to ensure quality and performance. Test coverage is used to monitor reliability and prevent bugs during updates.

# Why This Project Matters

This system showcases how a real-world flight booking platform works — from backend logic to frontend design. It's a great learning project for:

- Web developers looking to practice full-stack development.
- Students working on academic projects.
- Anyone interested in building real-world applications.