

Make an Online Airline Reservation System. The activities of the Online Airline Reservation system are listed below: user, admin, LOGIN, MANAGE CLASSES, MANAGE WAITING LIST, MANAGE HOLDS, MANAGE DEADLINES, LOGOUT, using this has a step-by-step process draw a CLASS diagram.

## Aim

To develop an **Online Airline Reservation System** that allows users to book flights, manage reservations, and enables administrators to handle flight classes, waiting lists, holds, and deadlines efficiently.

## Procedure (Step-by-Step)

### Step 1: Identify the Key Components of the System

The system consists of two primary users:

1. **User** (Passengers booking tickets)
2. **Admin** (Manages flight schedules, bookings, and policies)

The system includes the following functionalities:

- **User Login/Registration**
- **Flight Search & Ticket Booking**
- **Class Management (Economy, Business, First Class)**
- **Waiting List Management**
- **Hold Management** (Temporary seat blocking)
- **Deadline Management** (Cancellation and refund policies)
- **Logout**

### Step 2: Define System Modules and Their Functionalities

#### 1. User Module

- **Register/Login:** Users create an account and log in.
- **Search Flights:** Users browse available flights based on date, destination, and class.
- **Book Tickets:** Users select a flight, choose a seat, and make payment.
- **View Booking Details:** Users check their booked flights.
- **Cancel Booking:** Users can cancel tickets if necessary.
- **Logout:** Ends the session securely.

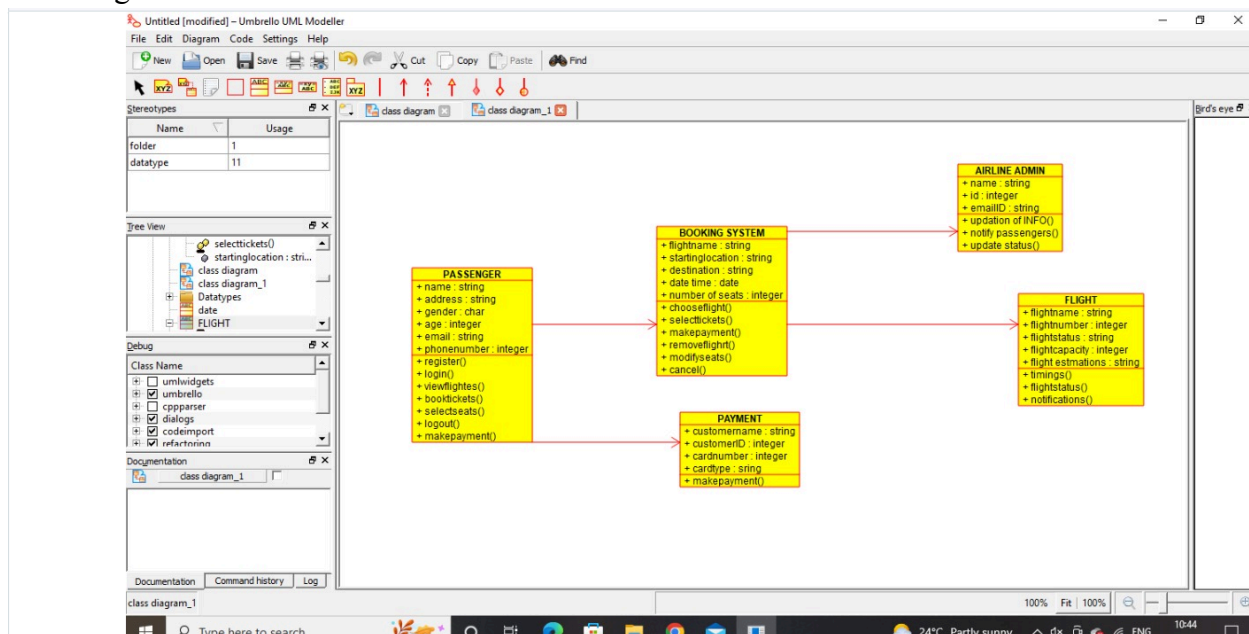
## 2. Admin Module

- **Login:** Admin authentication to access the system.
- **Manage Flight Classes:** Add, update, or remove classes (Economy, Business, First Class).
- **Manage Waiting List:** Handles users in the waiting queue for full flights.
- **Manage Holds:** Temporarily reserves seats for specific users.
- **Manage Deadlines:** Defines booking deadlines and cancellation policies.
- **Logout:** Ends the admin session.

## Step 3: Define System Flow

1. **User logs in** → Searches for flights → Selects a flight → Makes payment → Ticket is booked.
2. **If flight is full** → User is added to the waiting list.
3. **Admin logs in** → Updates flight availability → Manages waiting lists and holds.
4. **User or Admin logs out** → Session is terminated securely.

## Class diagram



## Result

The **Online Airline Reservation System** successfully facilitates **flight bookings, ticket management, and administrative operations**. It provides a seamless experience for passengers to search and book flights while enabling administrators to manage airline operations efficiently. The system enhances **convenience, reduces manual efforts, and improves overall efficiency** in airline reservations.

