

### **Exercise 3**

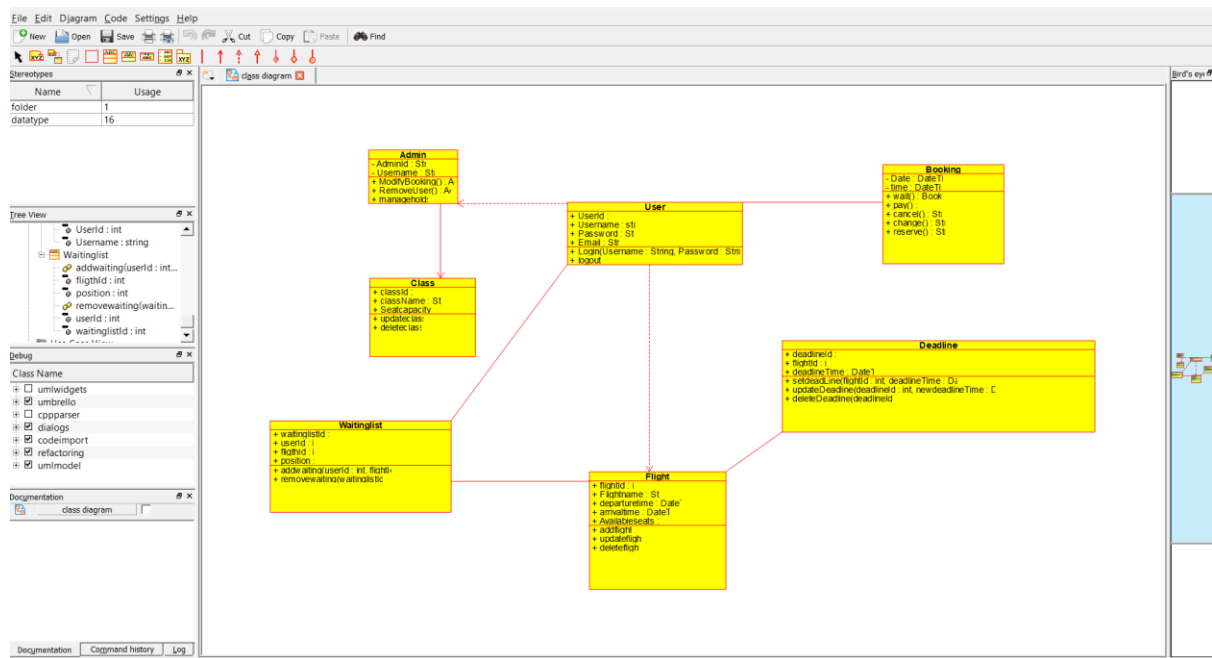
**Make an Online Airline Reservation System. The activities of the Online Airline Reservation system are listed below user, admin, LOGIN, MANANGE CLASSES, MANANGE WAITING LIST, MANAGE HOLDS, MANAGE DEADLINES, LOGOUT, using this has a step-by-step process draw a CLASS diagram.**

#### **Aim:**

To design a Class Diagram for an Online Airline Reservation System that represents the system's structure, including classes, attributes, methods, and relationships.

#### **Procedure:**

1. Identify Key Entities – Define the main classes like User, Admin, Flight, Reservation, Payment, and System.
2. Define Attributes & Methods – Assign attributes (e.g., username, flightNumber, seatClass, deadline) and methods (e.g., login(), bookTicket(), cancelTicket()).
3. Establish Relationships – Define associations (e.g., a User makes a Reservation, an Admin manages Flights, a Flight has multiple Seats).
4. Draw the Class Diagram – Represent classes, attributes, methods, and relationships (e.g., one-to-many between Flight and Reservation).
5. Include Functional Classes – Add classes for MANAGE CLASSES, MANAGE WAITING LIST, MANAGE HOLDS, MANAGE DEADLINES with necessary operations.
6. Create Authentication Flow – Implement LOGIN and LOGOUT classes/methods linked to User and Admin.
7. Validate and Optimize – Ensure correct relationships, refine the diagram for completeness, and optimize connections.



## Result

Thus the UML diagram for the Airline Reservation has been implemented successfully.