EXERCISE.NO:3

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 design a UML Class Diagram for an Online Airline Reservation System, representing key entities such as User, Admin, Flight, Reservation, and Payment. The diagram will illustrate system functionalities including Login, Manage Classes, Manage Waiting List, Manage Holds, Manage Deadlines, and Logout, ensuring a well-structured and efficient airline booking process.

PROCEDURE:

Step1:

Identify the main components of the system:

- User: Responsible for making reservations, logging in, and logging out.
- Admin: Manages flight schedules, waiting lists, holds, and deadlines.
- Flight: Stores flight details such as departure, destination, and time.
- Reservation: Handles booking information.
- Payment: Manages transaction details.

Step2:

Define class attributes and methods:

- User Class:
    - *Attributes*: userID, name, email
    - *Methods*: login(), logout()

- Admin Class:
    - *Attributes*: adminID
    - *Methods*: manageClasses(), manageWaitingList(), manageHolds(), manageDeadlines()
- Flight Class:
    - *Attributes*: flightID, source, destination, departureTime
    - *Methods*: checkAvailability()

Step3:

Establish relationships between classes:

- A User can make multiple Reservations.
- An Admin manages Flights and oversees Reservations.
- Each Flight can be linked to multiple Reservations.
- Every Reservation is associated with a corresponding Payment.

Step4:

Represent the system using UML notations:

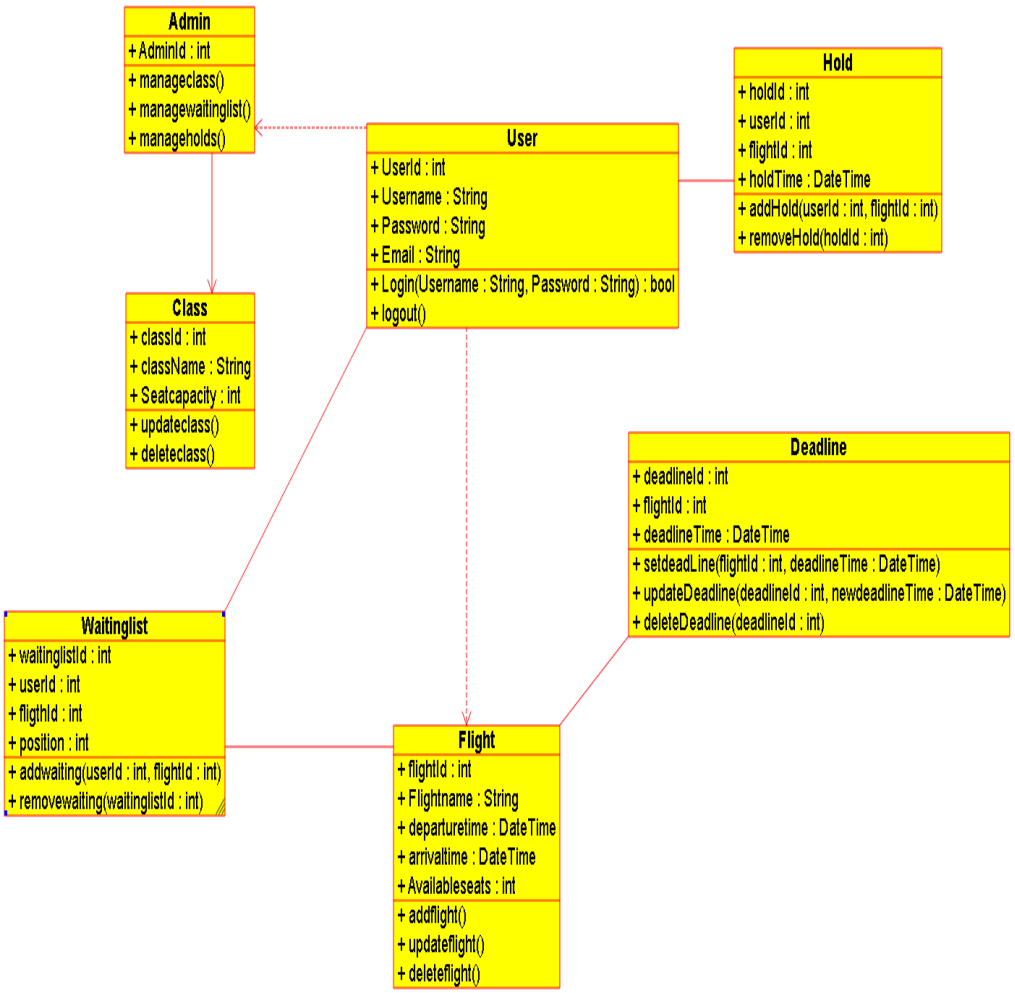
- Include classes with their respective attributes and methods.
- Define associations (e.g., User-Reservation), aggregations (e.g., Flight-Reservation), and dependencies (e.g., Reservation-Payment) to depict interactions accurately.

Step5:

Validate the diagram:

- Ensure all entities, attributes, methods, and relationships are accurately represented.
- Review for completeness, consistency, and structural accuracy, ensuring the system can handle all intended functionalities efficiently.

DIAGRAM:



RESULT:

Thus the UML diagram for Online airline reservation has been implemented successfully.