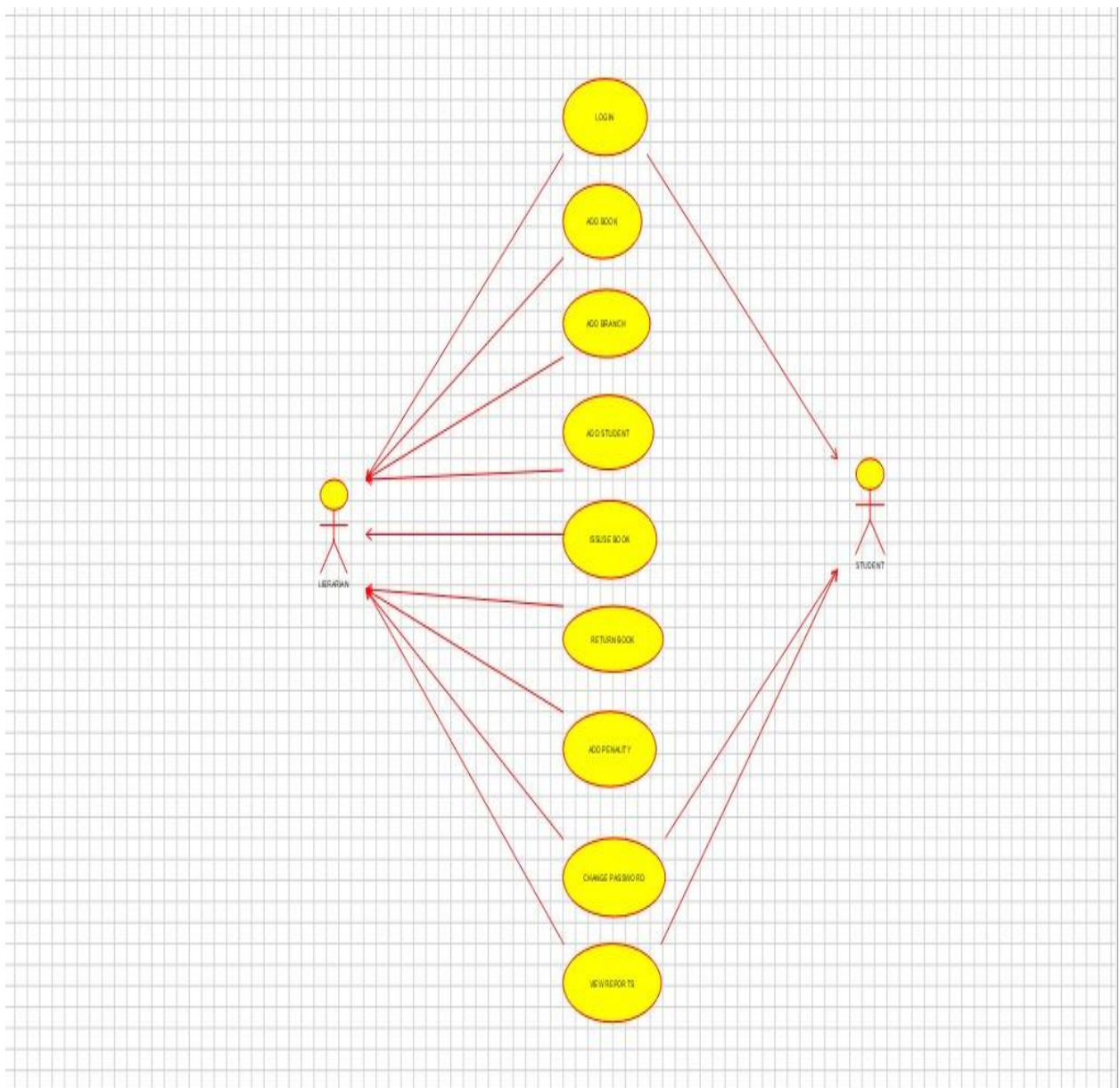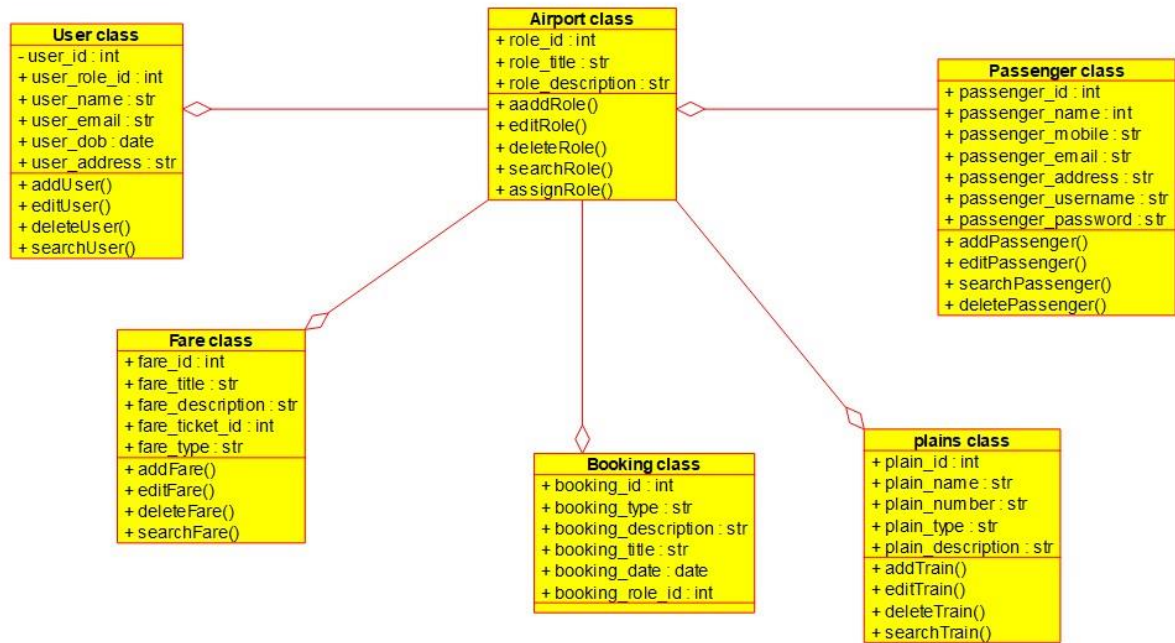# 1. Uml Diagram for Library Management System

**Aim:** To draw the UML diagram for library management system using Umbrello tool.
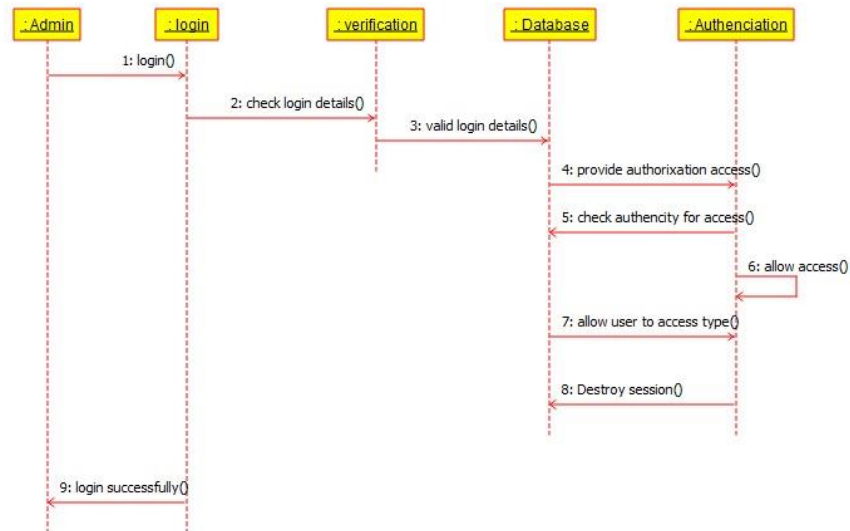
**Use case diagram:**
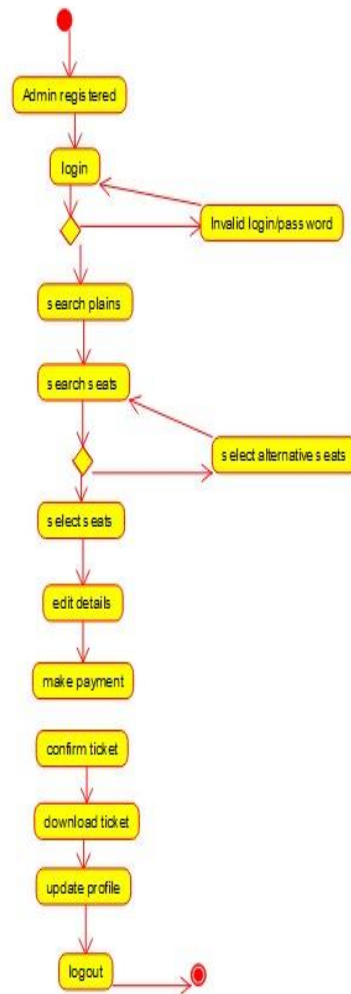
# Class diagram:

**User class**
- user_id : int
+ user_role_id : int
+ user_name : str
+ user_email : str
+ user_dob : date
+ user_address : str
+ addUser()
+ editUser()
+ deleteUser()
+ searchUser()

**Airport class**
+ role_id : int
+ role_title : str
+ role_description : str
+ aaddRole()
+ editRole()
+ deleteRole()
+ searchRole()
+ assignRole()

**Passenger class**
+ passenger_id : int
+ passenger_name : int
+ passenger_mobile : str
+ passenger_email : str
+ passenger_address : str
+ passenger_username : str
+ passenger_password : str
+ addPassenger()
+ editPassenger()
+ searchPassenger()
+ deletePassenger()

**Fare class**
+ fare_id : int
+ fare_title : str
+ fare_description : str
+ fare_ticket_id : int
+ fare_type : str
+ addFare()
+ editFare()
+ deleteFare()
+ searchFare()

**Booking class**
+ booking_id : int
+ booking_type : str
+ booking_description : str
+ booking_title : str
+ booking_date : date
+ booking_role_id : int

**plains class**
+ plain_id : int
+ plain_name : str
+ plain_number : str
+ plain_type : str
+ plain_description : str
+ addTrain()
+ editTrain()
+ deleteTrain()
+ searchTrain()

# Sequence diagram:

: Admin    : login    : verification    : Database    : Authenciation

1: login()
2: check login details()
3: valid login details()
4: provide authorixation access()
5: check authencity for access()
6: allow access()
7: allow user to access type()
8: Destroy session()
9: login successfully()

**Activity diagram:**



**Result: Hence, the library management system drawn successfully.**