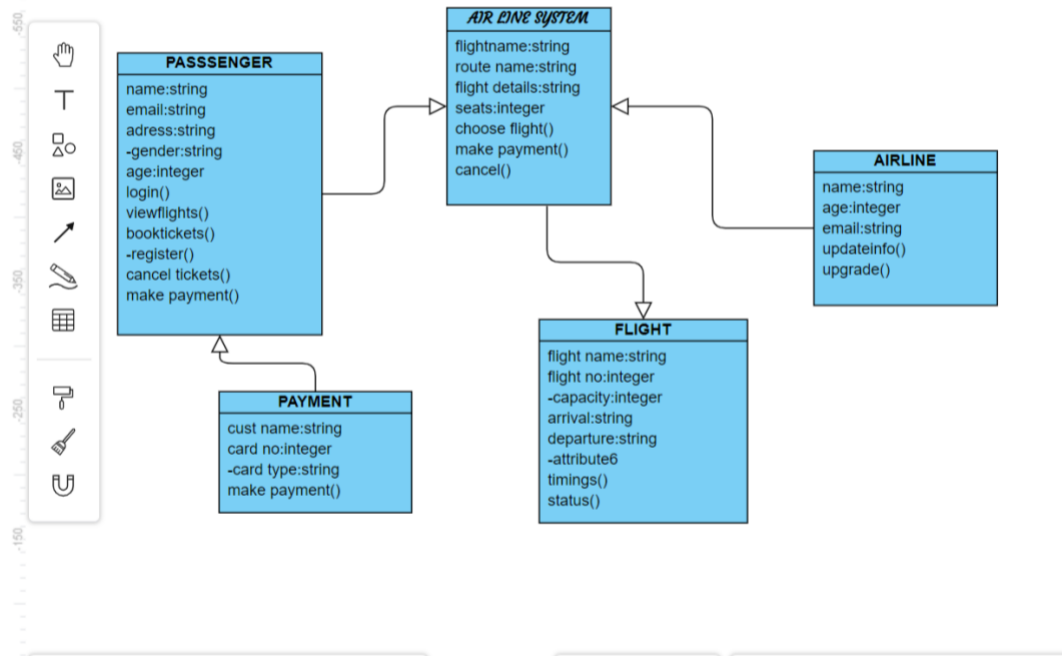


1. Design and draw UML class diagram to represent an airline reservation system. The system enables the customer to search for airline flight on a specified date and choose a flight based on some details like availability. The customer can reserve a flight or cancel his reservation. The system displays all the flight details such as flight number, name, price and duration of journey.

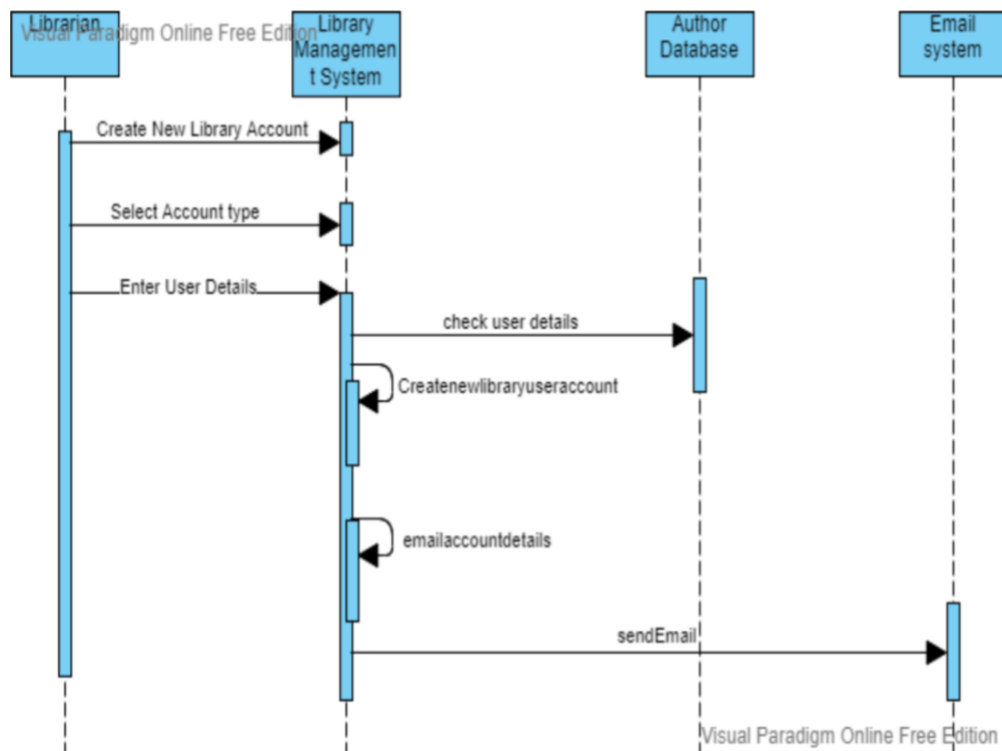


- 4) A scenario of Online Library Management System is given below.

You need to refer the use case diagram and moving further need to create a sequence diagram for the same.

Here are the steps that occur in the given use case named 'Create New Library User Account'.

- The librarian requests the system to create a new online library account
- The librarian then selects the library user account type
- The librarian enters the user's details
- The user's details are checked using the user Credentials Database
- The new library user account is created
- A summary of the new account's details is then emailed to the user.



- 3) Draw an activity diagram for the given scenario where a student needs to enroll with the university for the given course.

Process for student enrolment in the university is as follows:

- An applicant wants to enrol in the university

- The applicant hands a filled-out copy of Enrolment Form.

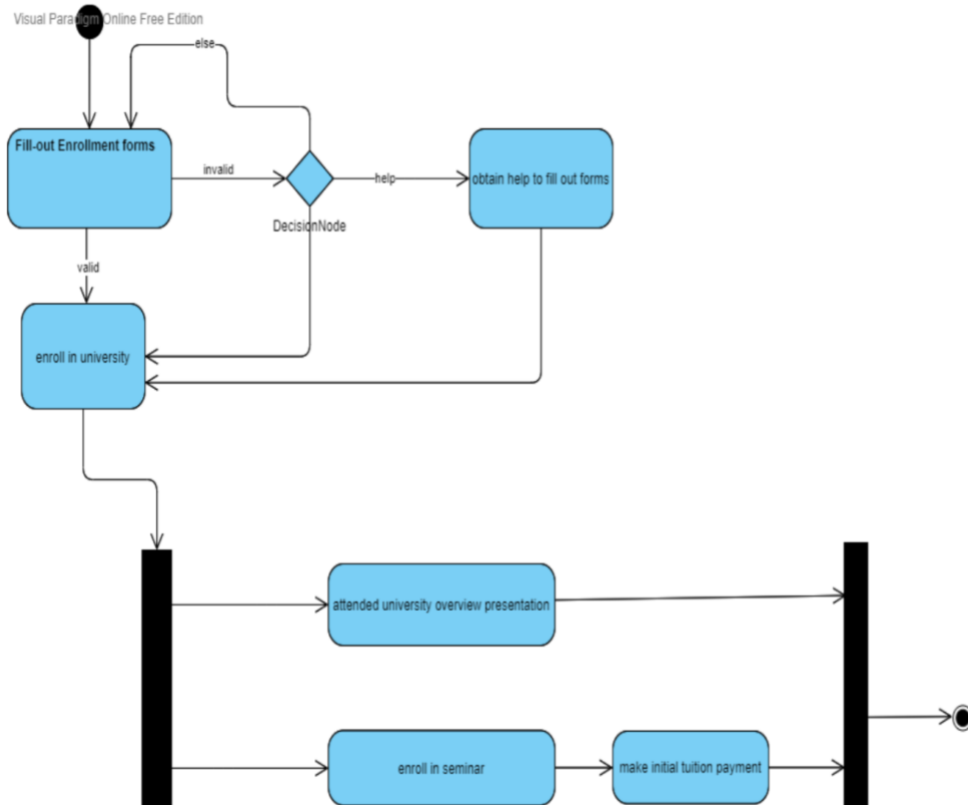
- The registrar inspects the forms.

- The registrar determines that the forms have been filled out properly.

- The registrar informs student to attend in university overview presentation.

- The registrar helps the student to enrol in seminars

- The registrar asks the student to pay for the initial tuition..



2.

Design and draw UML class diagram with attributes, behaviour, and class relationships for the following scenario. In a university there are various departments.

A department has a name and is associated to classrooms and offices. An employee working at the university has a unique Id and can be a professor or an instructor.

A professor can be a full professor or associate professor, or assistant professor and he/she belongs to a department in the university. Offices and classrooms also have unique IDs and classrooms have fixed number of seats. Also, every employee is assigned an office.

