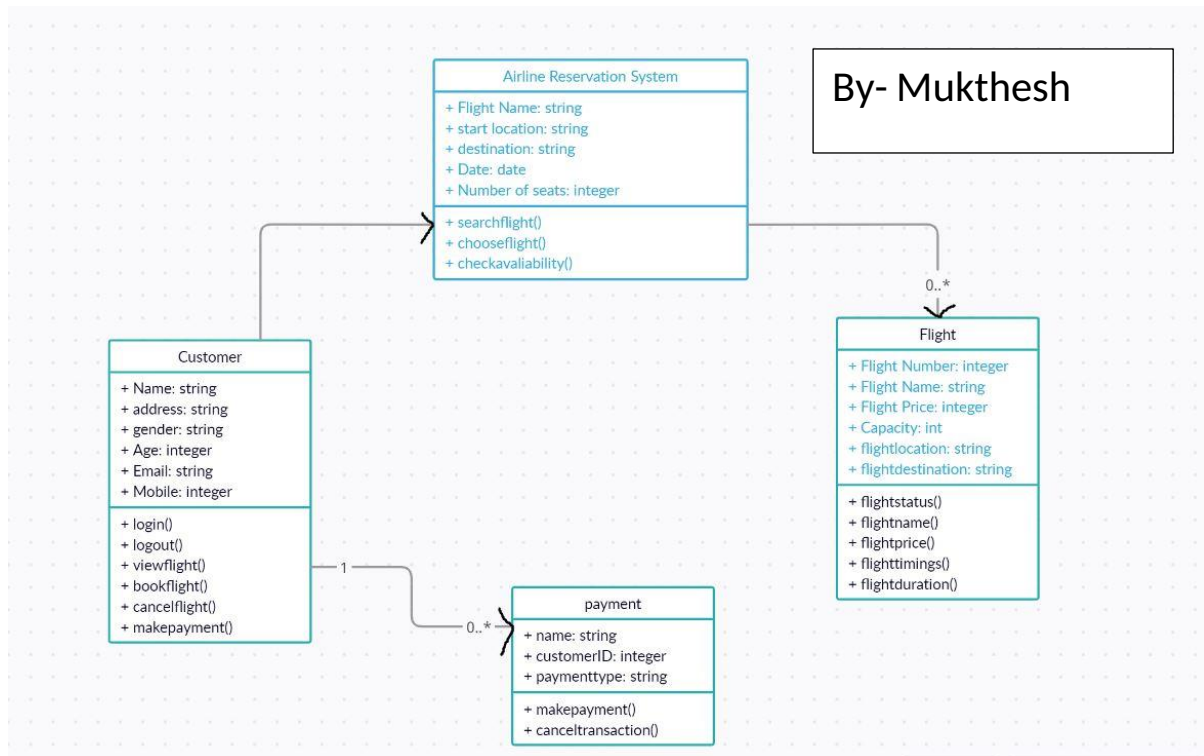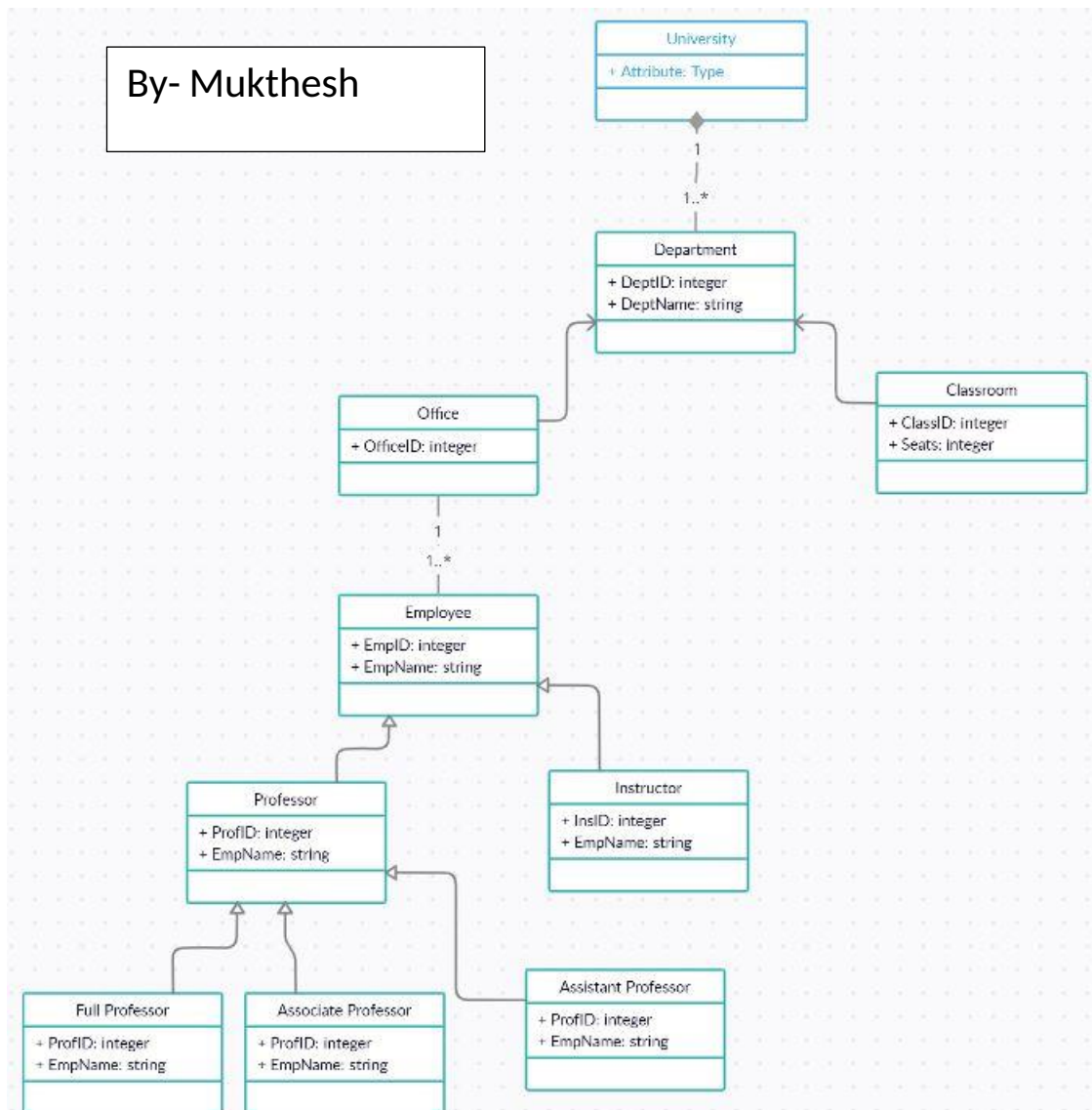# UML Assignments

Mukthesh

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.

Class Diagram:

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.
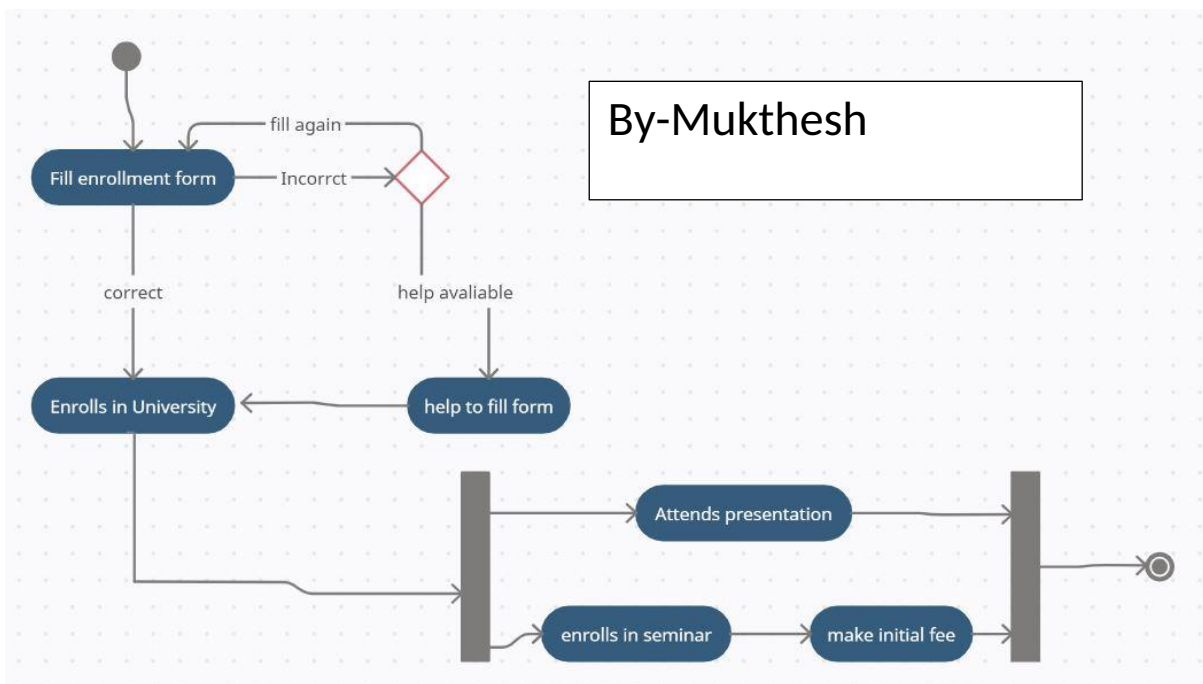
Class Diagram:

3. Draw an activity diagram for the given scenario where a student needs to enroll with the university for the given course.
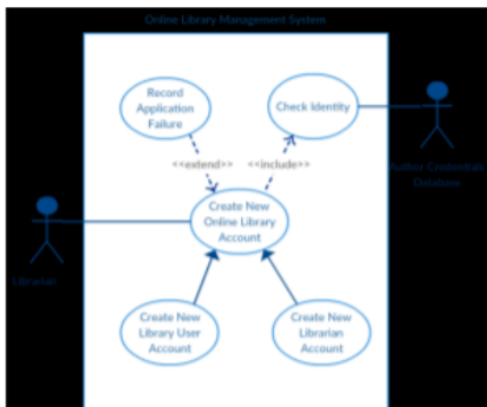
Process for student enrolment in the university is as follows:
• An applicant wants to enroll in the university.
• The applicant hands a filled-out copy of Enrolment Form.
• The registrar inspects the forms.
• The registrar determines that the forms have been filled out properly.
• The registrar informs student to attend in university overview presentation.
• The registrar helps the student to enroll in seminars
• The registrar asks the student to pay for the initial tuition.

Activity Diagram:

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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

Sequence Diagram: