

LAB-4: TO PREPARE USE CASE, SEQUENCE, CLASS AND ACTIVITY DIAGRAMS FOR A PROJECT

TITLE: USE CASE, SEQUENCE, CLASS AND ACTIVITY DIAGRAMS FOR E-LEARNING MANAGEMENT SYSTEM

THEORY

Use Case Diagram

Use case diagrams are a set of use cases, actors, and their relationships. They represent the use case view of a system.

A use case represents a particular functionality of a system. Hence, use case diagram is used to describe the relationships among the functionalities and their internal/external controllers. These controllers are known as **actors**.

Sequence Diagram

A sequence diagram is an interaction diagram. From the name, it is clear that the diagram deals with some sequences, which are the sequence of messages flowing from one object to another.

Interaction among the components of a system is very important from implementation and execution perspective. Sequence diagram is used to visualize the sequence of calls in a system to perform a specific functionality.

Class Diagram

Class diagrams are the most common diagrams used in UML. Class diagram consists of classes, interfaces, associations, and collaboration. Class diagrams basically represent the object-oriented view of a system, which is static in nature.

Class diagram represents the object orientation of a system. Hence, it is generally used for development purpose. This is the most widely used diagram at the time of system construction.

Activity Diagram

Activity diagram describes the flow of control in a system. It consists of activities and links. The flow can be sequential, concurrent, or branched.

Activities are nothing but the functions of a system. Numbers of activity diagrams are prepared to capture the entire flow in a system.

Activity diagrams are used to visualize the flow of controls in a system. This is prepared to have an idea of how the system will work when executed.

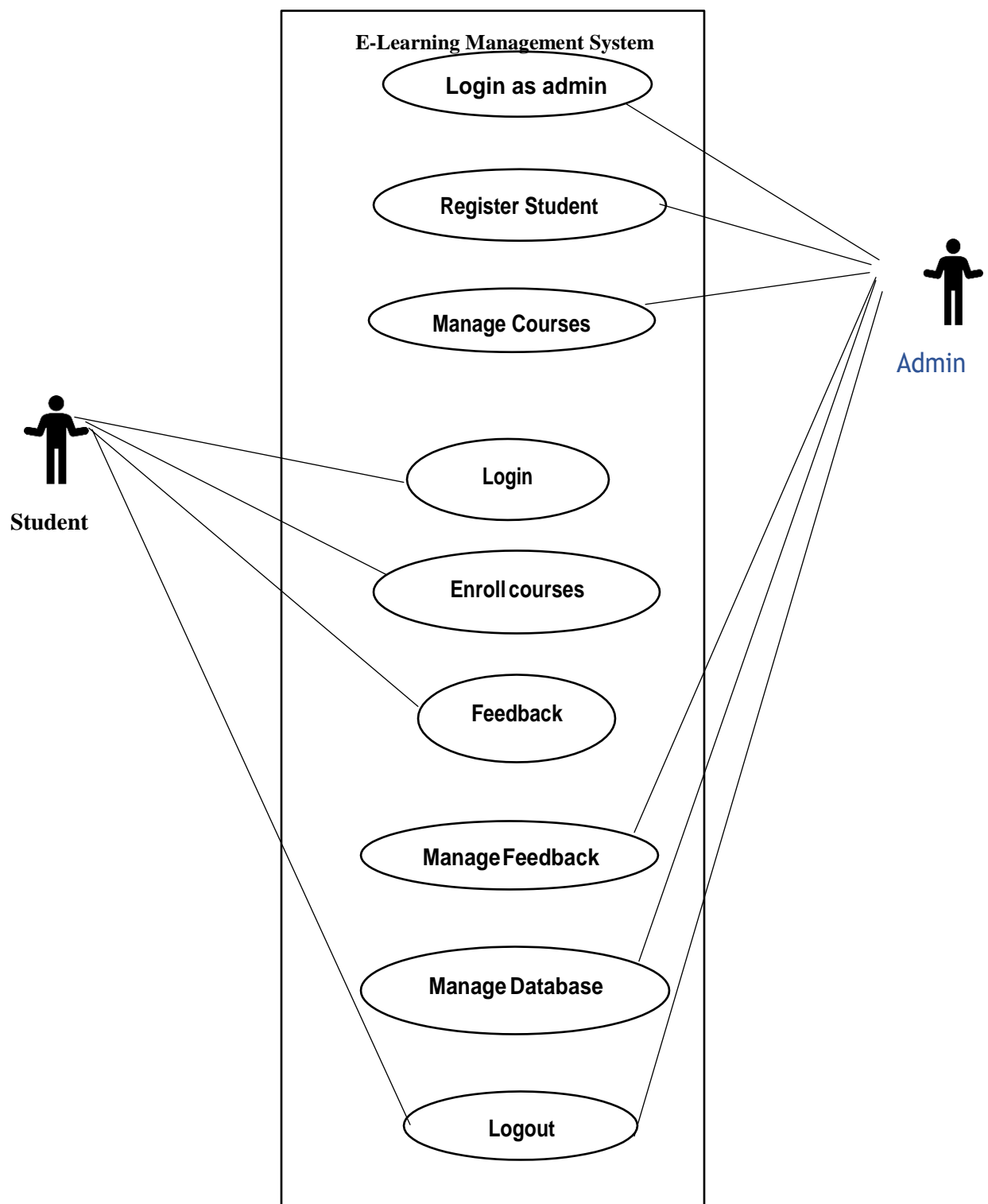


Figure: Use case Diagram for E-Learning Management System (eLMS)

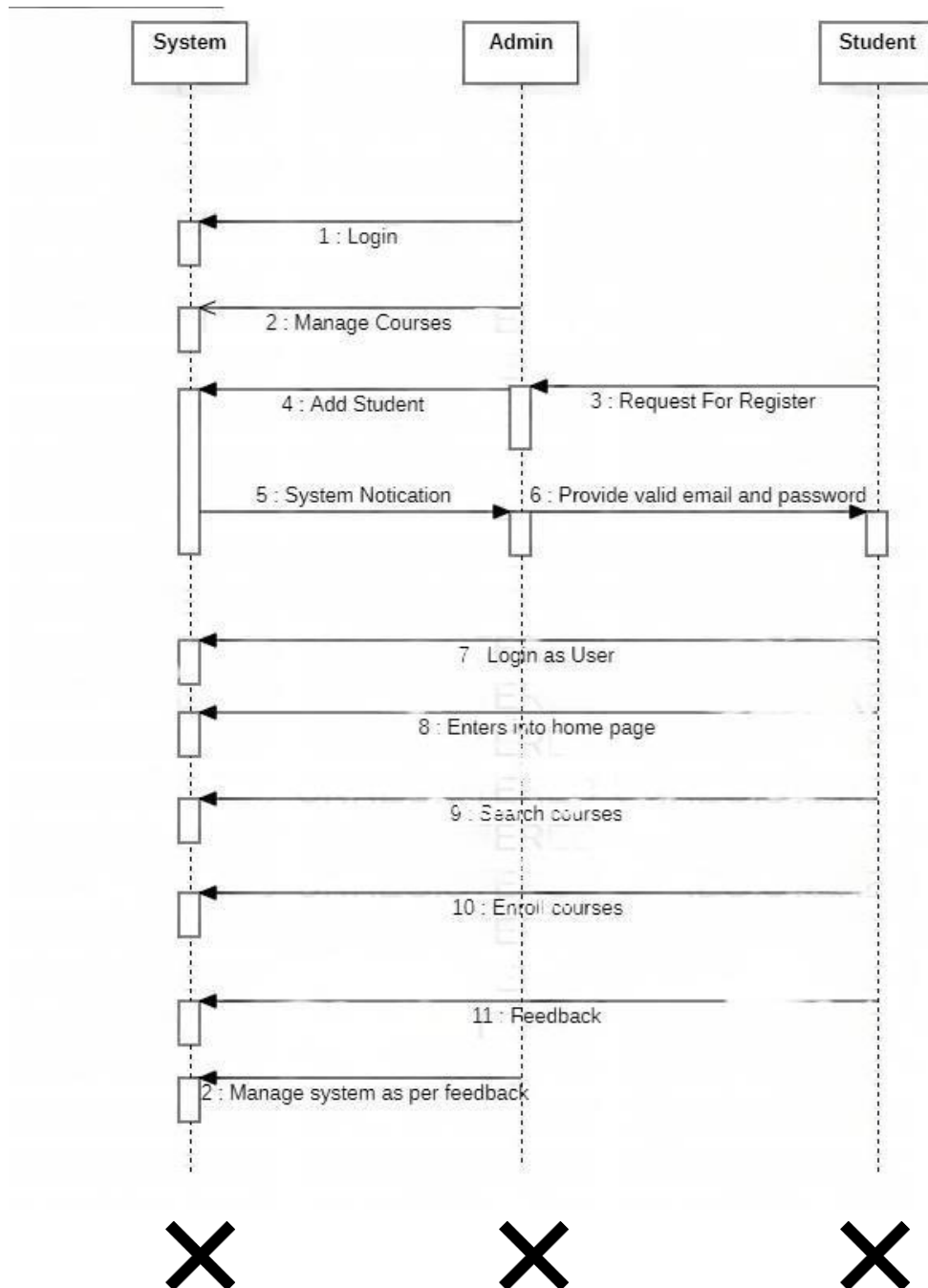


Figure: Sequence Diagram for E-Learning Management System (eLMS)

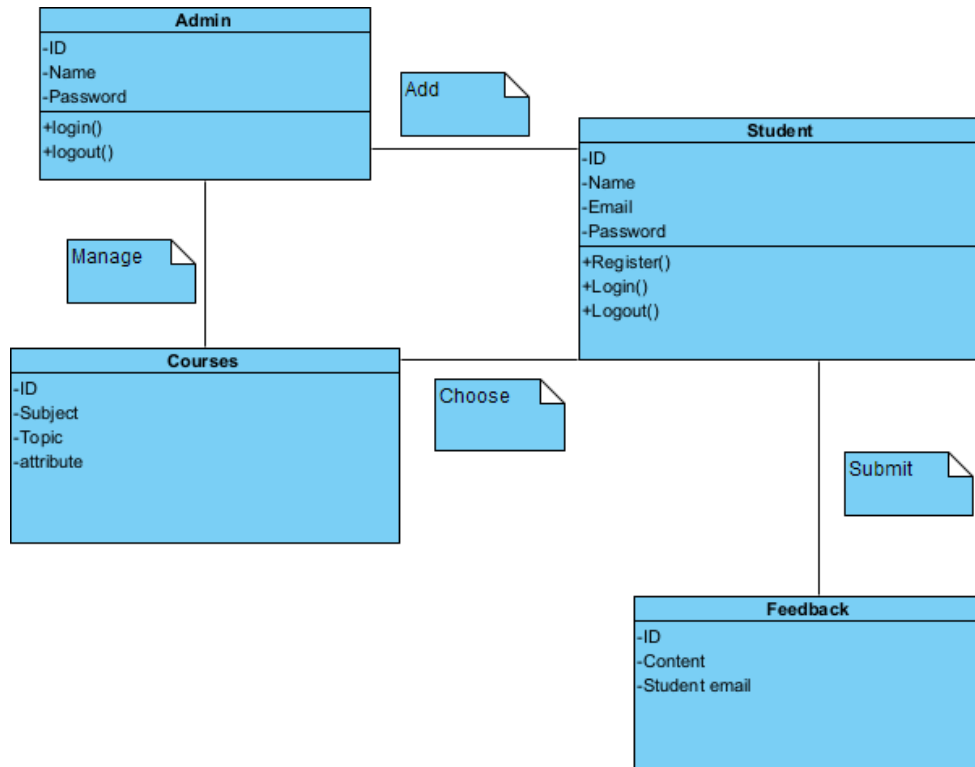


Figure: Class Diagram For E-Learning Management System (eLMS)

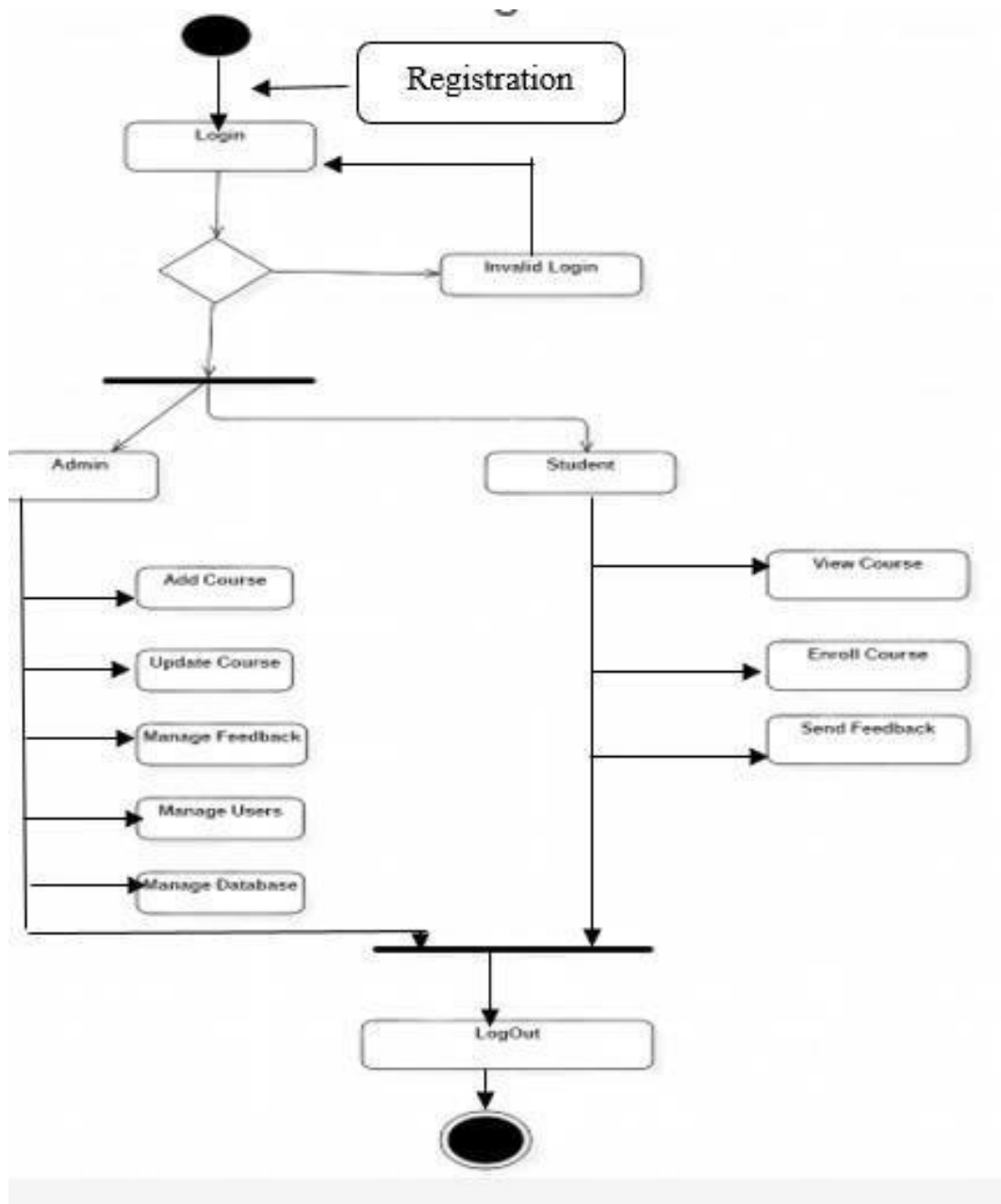


Figure 2.4: Activity Diagram for E-Learning Management System

Assignment

TO PREPARE USE CASE, SEQUENCE, CLASS AND ACTIVITY DIAGRAMS FOR ONLINE SHOPPING SYSTEM