# **18CS2009 – 20CS2050 L-Software Engineering**

**URK20CS** 

Ex No: 3	
Date: 26/07/2021	USE CASE DIAGRAM

#### AIM:

Use case diagrams identify the functionality provided by the system (use cases), the users who interact with the system (actors), and the association between the users and the functionality. Use cases are used in the Analysis phase of software development to articulate the high level requirements of the system. The primary goals of Use case diagrams include:

- Providing a high-level view of what the system does.
- Identifying the users (actors) of the system.
- Determining areas needing human-computer interfaces.

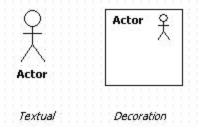
Use cases extend beyond pictorial diagrams. In fact, text-based use case descriptions are often used to supplement diagrams, and explore use case functionality in detail.

#### **DESCRIPTION**

The basic components of Use case diagrams are the Actor, the Use case and the Association.

#### Actor

An Actor, as mentioned, is a user of the system, and is depicted using a stick figure. The role of the user is written beneath the icon. Actors are not limited to users. If a system communicates with another application and expects input or delivers output then that application can also be considered an actor.



# **Use Case**

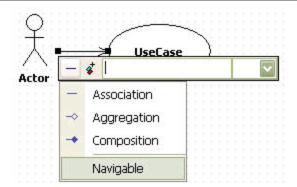
A Use Case is functionality provided by the system, typically described as verb + object (eg: Register Car, Delete User). Use cases are depicted with an ellipse. The name of the use case is written within the ellipse.



# Association

Associations are used to link Actors with Use cases, and indicate that an Actor participates in the Use case in some form. A line connecting the Actor and Use case depicts associations.

The following image shows how these three basic elements work together to form a use case diagram.



# **ALGORITHM**

- Step 1: Define the actors like member, circulation clerk and supplier for the Library Information System.
- Step 2: Determine the events that are necessary for developing a system.
- Step 3: Represent the communication relationship of an actor in the system by connecting the actor symbol to the Use-Case symbol with a solid path.
- Step 4: Represent the 'Uses' and 'Extends' relationship if required.
- Step 5: Use the necessary tools for developing the Library Information System.

# **OUTPUT**

Paste your Use case diagram here

# **RESULT:**

The Use cases are used in the Analysis phase of software development to articulate the higher level requirements of the system are drawn successfully.	gh