

**Ex No: 7**

**UML Sequence Diagram for Library Management System**

**Aim:** To draw UML Sequence diagram for library management system.

**Procedure:**

A sequence diagram showcases the interaction between the objects in the system in sequential order. Message exchanged between the objects are shown. It is also called as event diagram. Represent the details of a UML Use Case. It is used to model high level interaction between active objects in a system. It is easy to identify system issues. Used to generate code directly from diagram

**Sequence Diagram Notations**

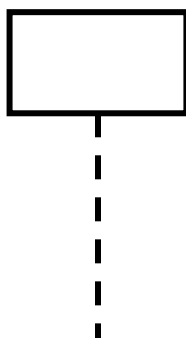
- Actor
  - An actor represents a role of a user that interacts with the system that you are modeling. The user can be a human user, an organization, a machine, or another external system.



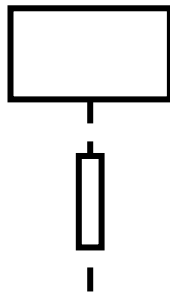
- Lifeline
  - Lifelines represent the lifespan of an object or a component. They are vertical dashed lines that extend from the top of the diagram to the bottom.



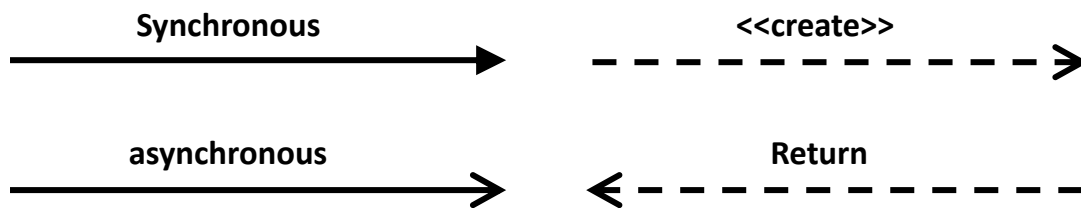
- Objects
  - Objects are represented as rectangles on a lifeline. They represent the instances of a class or a component.



- Activation Bar
  - It is represented by a thin rectangle on the lifeline. It represents the time that an object is performing an action.



- Messages
  - Messages represent the interactions between objects in the system. They are shown as arrows between the objects.
  - Message can be synchronous, asynchronous, return, self, recursive, create and destroy



**Result:**

Thus UML Sequence diagram for library management system is drawn successfully.

Ex7

