

Ex No: 9

UML State Chart Diagram for Library Management System

Aim: To draw UML State Chart diagram for library management system.

Procedure:

A state diagram shows the behaviour of classes in response to external or internal event. State Chart diagrams model the states that an object or system can be in, the events that cause state transitions, and the actions that occur in response to these transitions. Purpose of State Chart Diagram

- To model the dynamic behaviour of the system
- Identify the events responsible for change in state.

State chart diagram show the changes in states of the class and not the commands that cause the change

State Chart Diagram Notations

- Initial State
 - A filled black circle is used to represent the initial state of the system or a class.



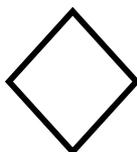
- State
 - States represent situations during the life of an object. Rounded rectangle is used to represent the state.



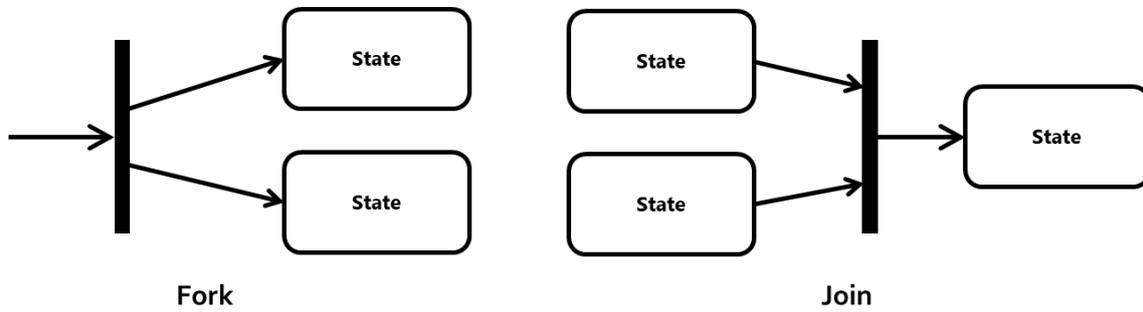
- State Transition
 - A solid arrow represents the path between different states of an object. The arrow is labeled with the event that causes the change



- Dynamic Condition
 - A diamond symbol that indicates a dynamic condition with branched potential results.



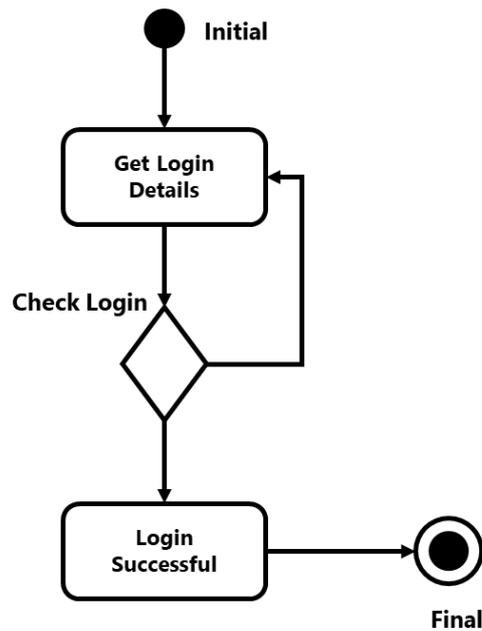
- Compound Flow
 - A *compound flow* is composed of several transition segments connected by intermediate nodes



- Final State
 - A circle with a dot in it that indicates that a process is terminated.



Sample



Result:

Thus UML State Chart diagram for library management system is drawn successfully.

Ex9

