Ex No: 5	ACTIVITY DIAGRAM
Date : 23/08/2021	

OBJECTIVE

Activity diagrams are used to document workflows in a system, from the business level down to the operational level. When looking at an Activity diagram, you'll notice elements from state diagrams. In fact, the Activity diagram is a variation of the state diagram where the "states" represent operations, and the transitions represent the activities that happen when the operation is complete. The general purpose of Activity diagrams is to focus on flows driven by internal processing vs. external events.

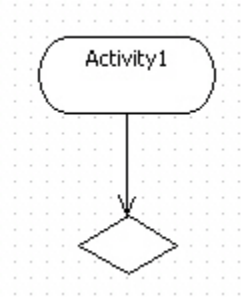
DESCRIPTION

Activity states

Activity states mark an action by an object. The notation for these states are rounded rectangles, the same notation as found in Statechart diagrams.

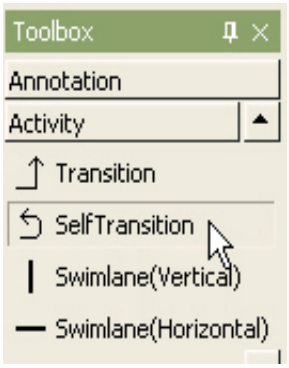
Transition

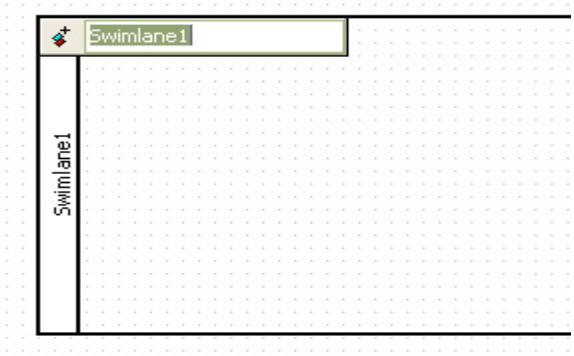
When an Activity state is completed, processing moves to another Activity state. Transitions are used to mark this movement. Transitions are modeled using arrows.



Swimlane

Swimlanes divide activities according to objects by arranging objects in column format and placing activities by that object within that column. Objects are listed at the top of the column, and vertical bars separate the columns to form the swimlanes.





Initial State

The Initial State marks the entry point and the Initial Activity State. The notation for the Initial State is the same as in Statechart diagrams, a solid circle. There can only be one Initial State on a diagram.

Final State

Final States mark the end of the modeled workflow. There can be multiple Final States on a diagram, and these states are modeled using a solid circle surrounded by another circle.

Synchronization Bar

Activities often can be done in parallel. To split processing (“fork”), or to resume processing when multiple activities have been completed (“join”), Synchronization Bars are used. These are modeled as solid rectangles, with multiple transitions going in and/or out

ALGORITHM

Step 1: Identify the operations and transformations that are triggered by the completion of an operation, which is referred as activities.

Step 2: Represent those activities by a rounded rectangle.

Step 3: Link the activities by automatic transactions, represented by arrows.

Step 4: If needed a decision which is represented by a diamond with many transitions coming out of it.

Step 5: Design the Activity diagram using the information obtained from the above steps using the tools provided.

OUTPUT

OUTPUT:

PASTE ACTIVITY DIAGRAM OF YOUR APPLICATION HERE

RESULT:

The activity diagrams are used in the Analysis phase of software development to articulate the high level requirements of the system are drawn successfully.