Activity Diagram

Activity Diagram is another important diagram in UML to describe dynamic aspects of the system. Activity Diagram is basically a flow chart to represent the flow from one activity to another activity. The Activity can be described as an operation of the system. The flow can be sequential branched or concurrent. It deals with all type of flow control by using different elements like fork, join, and merge decision node.

Purpose

-Draw the activity flow of a system

-describe the sequence from one activity to another

-Describe the parallel, branched and concurrent flow of the system

Basic Activity Diagram and Symbols

-Initial state or Start point

A small filled circle followed by an arrow represents the initial action state or the start point for any activity diagram. For activity diagram using swim lanes, make sure the start point is placed in the top left corner of the first column.

* Activity or Action State
* Action Flow
* Object Flow

Object flow refers to the creation and modification of objects by activities. An object flow arrow from an action to an object means that the action creates or influence the object. An object flow arrow from an object indicates that the action sate uses the object.

The following diagram depicts a simple Object flow between two actions,

Fill Order and ship order, both accessing order information.

Decision and Branching

* A diamond represents a decision with alternate paths. When an activity require a decision prior to moving on to the next activity add a diamond between the two activities. The outgoing alternates should be labeled with a condition or ground expression. You can also label one of the paths “else”.

Guards

* In UML guards