

# Activity Diagrams



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We use Activity Diagrams to illustrate the flow of control in a system. An activity diagram shows the flow of control for a system functionality; it emphasizes the condition of flow and the sequence in which it happens. We can also use an activity diagram to refer to the steps involved in the execution of a use case.

Activity diagrams illustrate the dynamic nature of a system by modeling the flow of control from activity to activity. An activity represents an operation on some class in the system that results in a change in the state of the system. Typically, activity diagrams are used to model workflow or business processes and internal operations.

Following is an activity diagram for a user performing online shopping:



Sample activity diagram for online shopping

## What is the difference between Activity diagram and Sequence diagram?

**Activity diagram** captures the process flow. It is used for functional modeling. A functional model represents the flow of values from external inputs, through operations and internal data stores, to external outputs.

**Sequence diagram** tracks the interaction between the objects. It is used for dynamic modeling, which is represented by tracking states, transitions between states, and the events that trigger these transitions.