STATE CHART DIAGRAM

INTRODUCTION

- states of a component in a system
- States - condition in which an object exists and it changes when some event is triggered.
- specific to a component/object of a system.
- describes a state machine
- defined as a machine which defines different states of an object
- controlled by external or internal events.

Purpose

- model the dynamic nature of a system
- useful to model the reactive systems.
- describes the flow of control from one state to another state
- model lifetime of an object from creation to termination.

Summary:-

- Following are the main purposes of using State chart diagrams –
- To model the dynamic aspect of a system.
- To model the life time of a reactive system.
- To describe different states of an object during its life time.
- Define a state machine to model the states of an object.

ELEMENTS :-

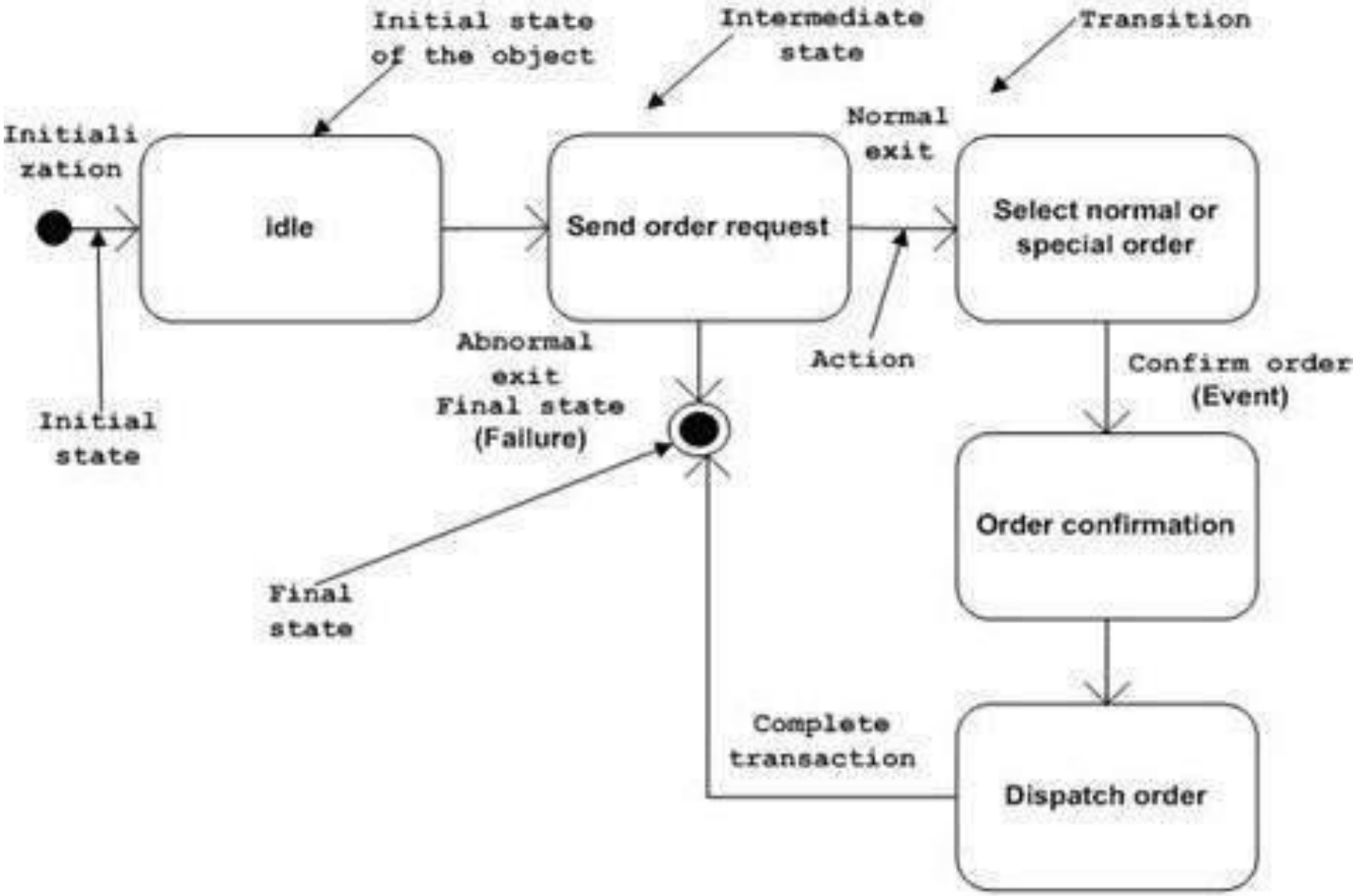
- **Initial State:** This state shows the first activity of the flow.
- **State:** A state represents the state of an object at a particular given point of time.
- **Transition:** The transition from one state to another state of objects is represented by an arrow.
- **Event and Action:** A trigger that causes a transition to occur.

- **Signal:** When a message or a trigger caused by an event to a state, which causes a transition, this message is called as a signal.
- **Final State:** The state diagram ends with a diagram that depicts a bull's eye is known as Final State

An example of a State chart diagram where the state of Order object is analyzed

AS when we order something online we encounter the following events of actions

Statechart diagram of an order management system



THANK YOU

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