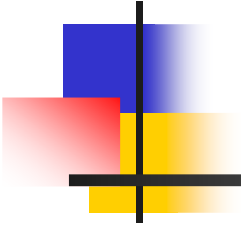


# Use Case specification for quality



# Use cases

- A use-case is a description of how one of the actors uses the system to accomplish a certain goal
- Use-cases describe in natural language the complete functionality of a system. Each use-case is a snapshot of a particular aspect of a system.
- A use case diagram shows the relationship among actors and use cases within a system. An actor is a role of object or objects outside of a system that interacts directly with it

# Development of New Use case Template

## Approach Used:

- Identify all the actors who use the system
- Identify the Use cases of the system
- Identify the interaction between actors and various Use cases
- Develop High level Use case Diagram
- Find out the priority of Use case by using a Prioritization Algorithm
- Develop Detailed Use case Diagram showing all includes and extends (based on priority of steps)
- Provide descriptions for each Use case

## Template:Use case Description

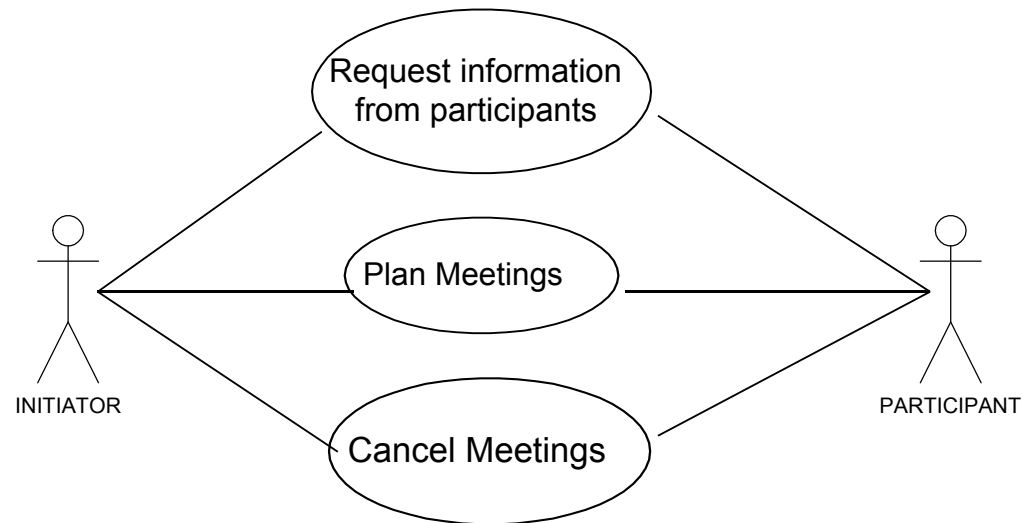
Use case	Name of the use case
Goal	Main goal to be achieved by Use case
Scope&Level	Scope and level of Use case
Pre-Condition	A list of conditions that must be met before the Use case starts
Success end condition	Successful condition with the implementation of Use case
Failed end condition	Failed condition with the implementation of Use case
Actors	Actors that initiates Use case
Trigger	Anything that starts a train of actions

## Template(contd)

Description	Steps                      Action
Extends	Mention the Use case that adds to the existing functionality and characteristics of parent use case
Includes	Mention the Use case that is depicted as using the functionality of another Use case
Sub-variation	A list of branching actions
Stakeholders and interests	What is the interest of stakeholders to this Use case
Frequency of Use case	How often this Use case is used
Level of risk	What is the risk with the failure of this Use case
Priority	How important is this Use case

# Case study-A Meeting Scheduler System

## High Level Use case Diagram

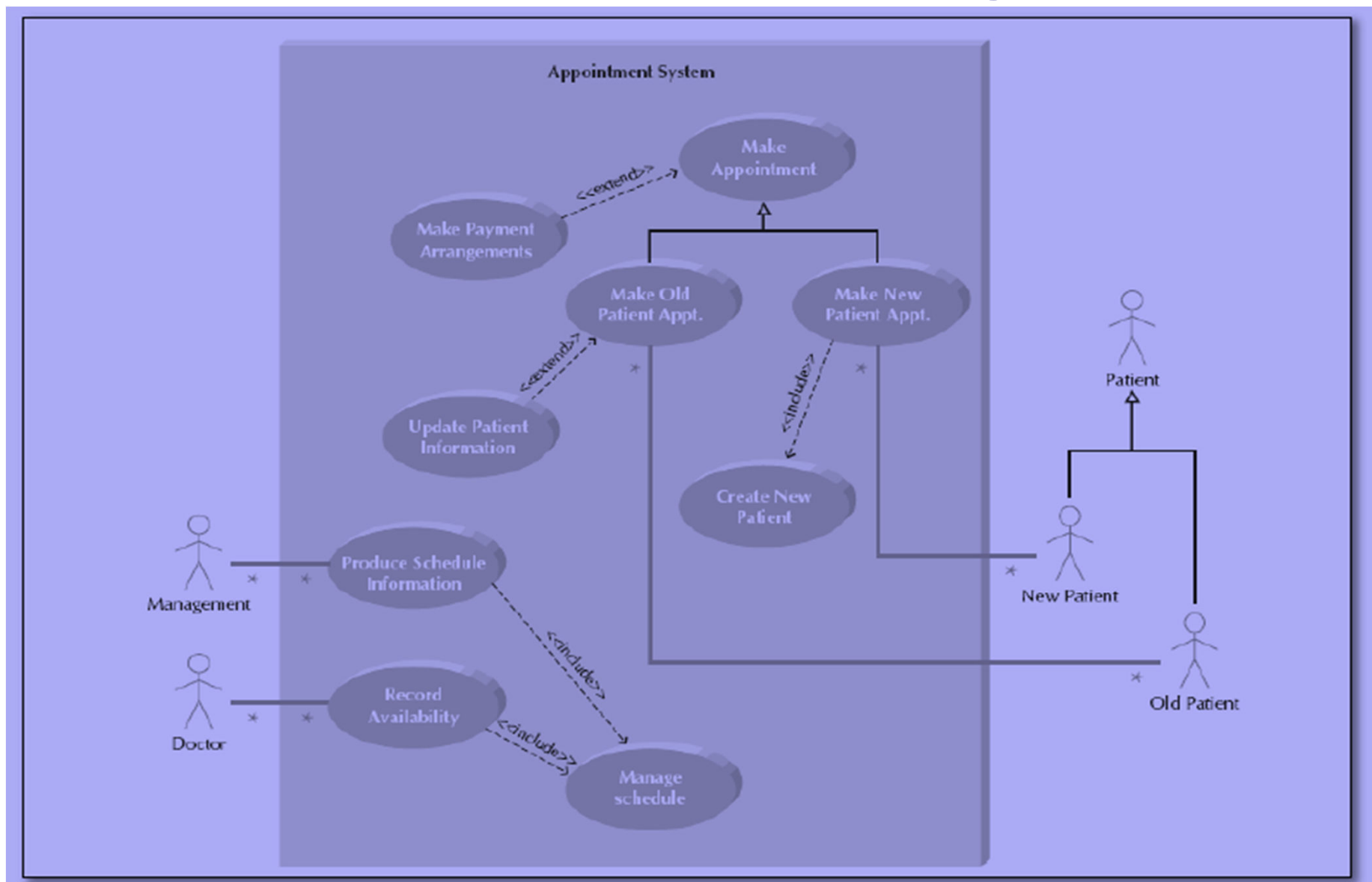


# Notation for Use Case Diagram

- Actor: person or system that derives benefit from and is external to the subject
- Use Case: Represents a major piece of system functionality
- Association Relationship Between a use-case and an actor involved in it
- Include Relationship
- Extend Relationship
- Generalization Relationship



# Example of use case diagram





# Use Case Diagram

- Actors are outside the “subject boundary” system box
- - Name of system is put near top of subject boundary
- Association is between use-case and actor (not between actors, not between use-cases)
- Usecase U1 includes usecase U2:
  - - Arrow from U1 to U2
  - - U2 occurs (always) during the processing of U1
- Usecase U3 extends usecase U4
  - - Arrow from U3 to U4
  - - U3 doesn't always occur when U4 does
  - - But sometimes U3 happens as part of processing U4

# Use case Description

Use case1	Request Information from participants
Goal	To make requests to participants to provide information regarding their preferences on meeting date and location
Scope&Level	Organization,Participants
Preconditions	Initiator knows the participants who are to be informed and also their contact details
Success end condition	Initiator gets the right details of participants, forwards request to participants for information and participants receive request on time
Failed end condition	Initiator couldn't identify the participants and their contact details
Actors	Initiator,Participants
Trigger	Initiator has to take a decision for a matter

## Use case description(contd)

Description	Step                      Actions
	<ol style="list-style-type: none"><li>1. Initiator checks the details needed from participants</li><li>2. He/She determines the details of potential attendees of meeting</li><li>3. Decides to collect preferences of participants</li><li>4. Check preference list</li><li>5. Sends messages to participants to provide information about their preferences of meeting</li></ol>
Extends	Remind participant
Includes	Provide date range State preferences by important participants
Sub variations	Initiator sends request for information by means of Email, letter or fax

## Use case description (contd)

Stake holders and interests	<ul style="list-style-type: none"><li>■ Initiator collect information from participants to plan meeting</li><li>■ Participants need to provide their preferences in order to make meeting of their convenience</li><li>■ Client wants to take decision on time</li></ul>
Frequency of use	Very frequently used
Level of risk	High risk if this Use case is not considered in depth
Priority	1