

# USE CASE DIAGRAM

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# WHAT IS USE CASE DIAGRAM?

- A simple, but very effective model, used during the analysis phase for analysing requirements through the process of exploring user interactions with the system.
- Use case diagrams are closely connected to scenarios. A **scenario** is an example of what happens when someone interacts with the system.



# WHY USE CASE?

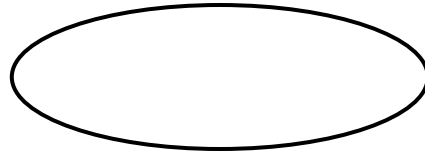
- Scenarios are useful in discussing a proposed system with a client, but requirements need to be made more precise before a system is fully understood.
- This is the purpose of requirements modeling.
- A **use case** provides such a model.
- Example of a scenario: A patient calls the clinic to make an appointment for a yearly checkup. The receptionist finds the nearest empty time slot in the appointment book and schedules the appointment for that time slot.

## USE CASE: OBJECTIVES

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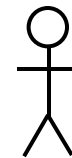
# COMPONENTS OF USE CASE DIAGRAM

- **Use case:** A summary of scenarios for a single task or goal. Generally named by verb.



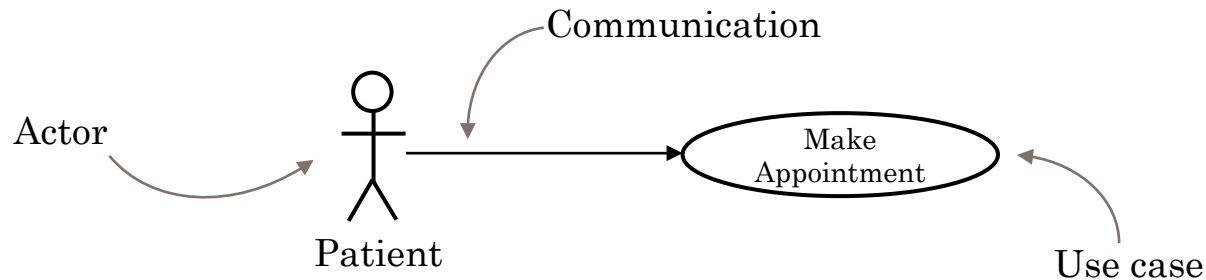
- **Actor:** Who or what initiates the events involved in the task of the use case. Actors are simply roles that people or objects play.

e.g. human, machines, external  
systems, organizational units



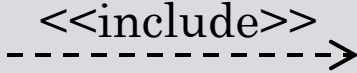
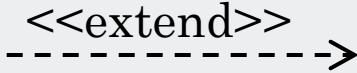


# A SIMPLE EXAMPLE OF USE CASE DIAGRAM

- A patient calls the clinic to make an appointment for a yearly checkup. The receptionist finds the nearest empty time slot in the appointment book and schedules the appointment for that time slot.



# OTHER COMPONENTS OF USE CASE

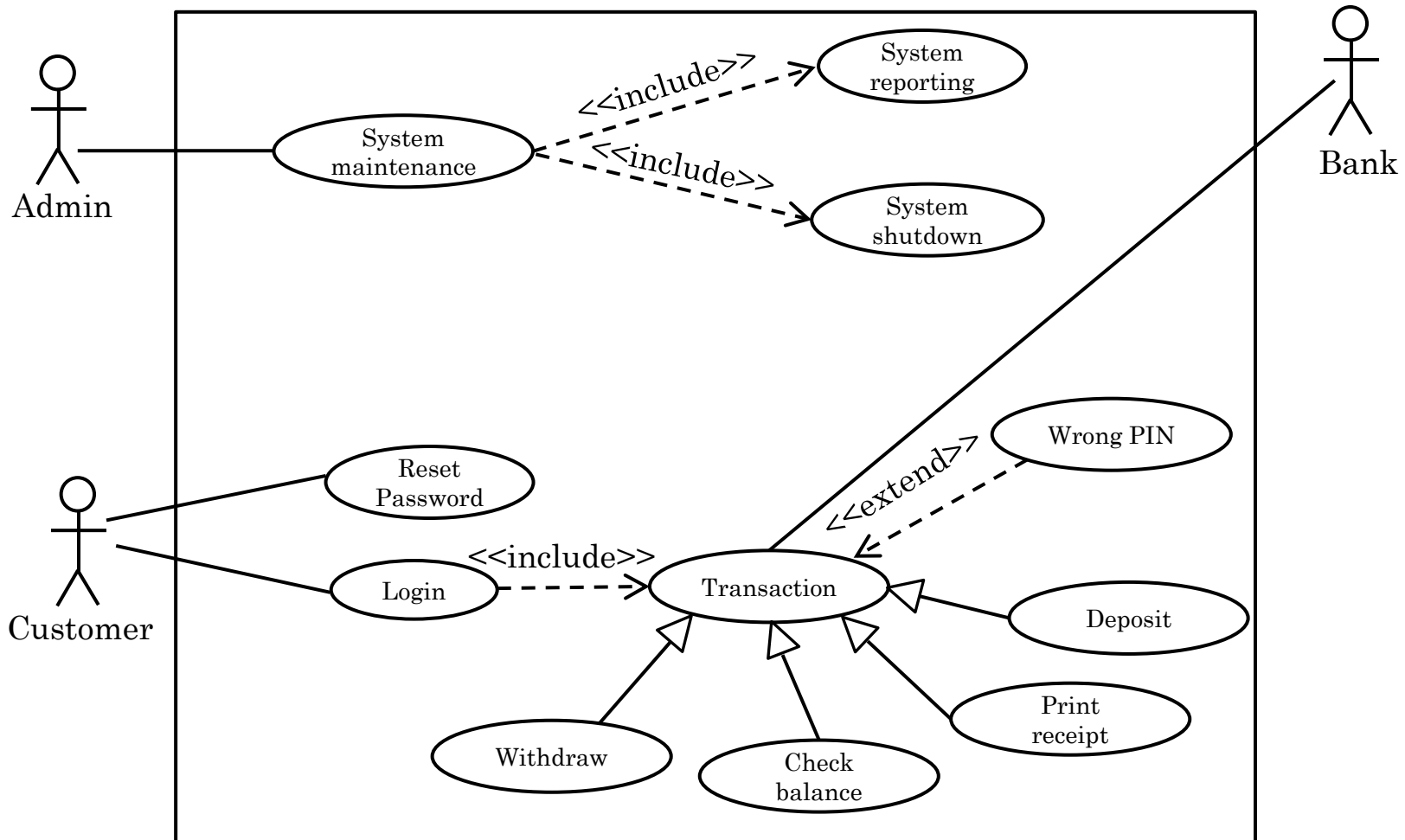
Symbol	Description
	Connection between Actor and Use Case
	Boundary of system
	Include relationship between Use Cases (one UC must call another; e.g., Login UC includes User Authentication UC)
	Extend relationship between Use Cases (one UC calls another under certain condition; think of if-then decision points)

# LINKING USE CASE

- Association relationships
- Generalization relationships
  - One element (child) "is based on" another element (parent)
- Include relationships
  - One use case (base) includes the functionality of another (inclusion case)
  - Supports re-use of functionality
- Extend relationships
  - One use case (extension) extends the behavior of another (base)



# USE CASE: BANKING SYSTEM

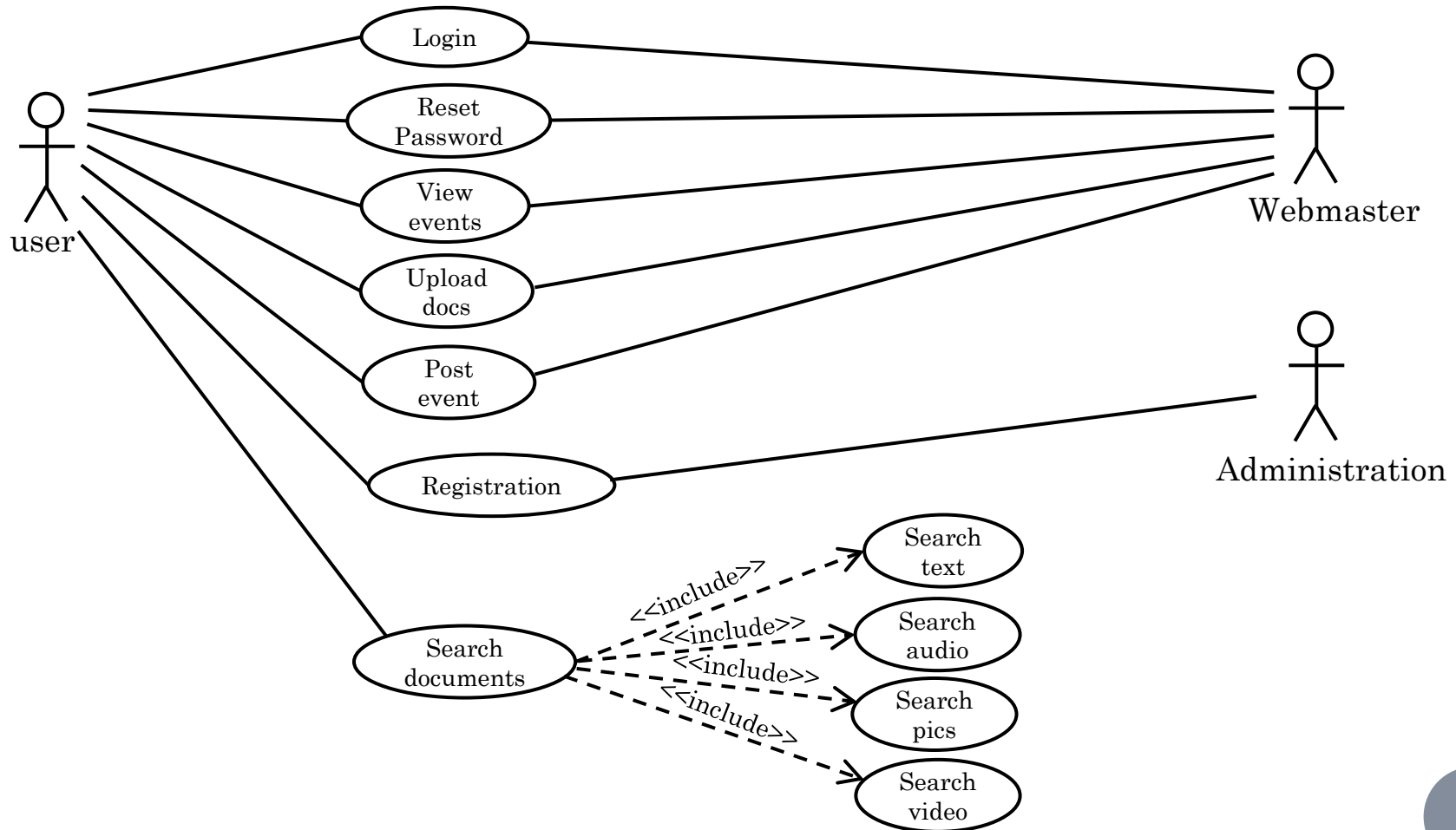


## ASSIGNMENT: USE CASE OF WEBSITE MANAGEMENT SYSTEM

- Identify the possible actors present in the system and use cases.
- Hints: Actor can be user, webmaster, admin



# SOLUTION: USE CASE OF WEBSITE MANAGEMENT SYSTEM



THANK YOU

