

## USE CASE DIAGRAM

Use Case diagram model the behavior of the system

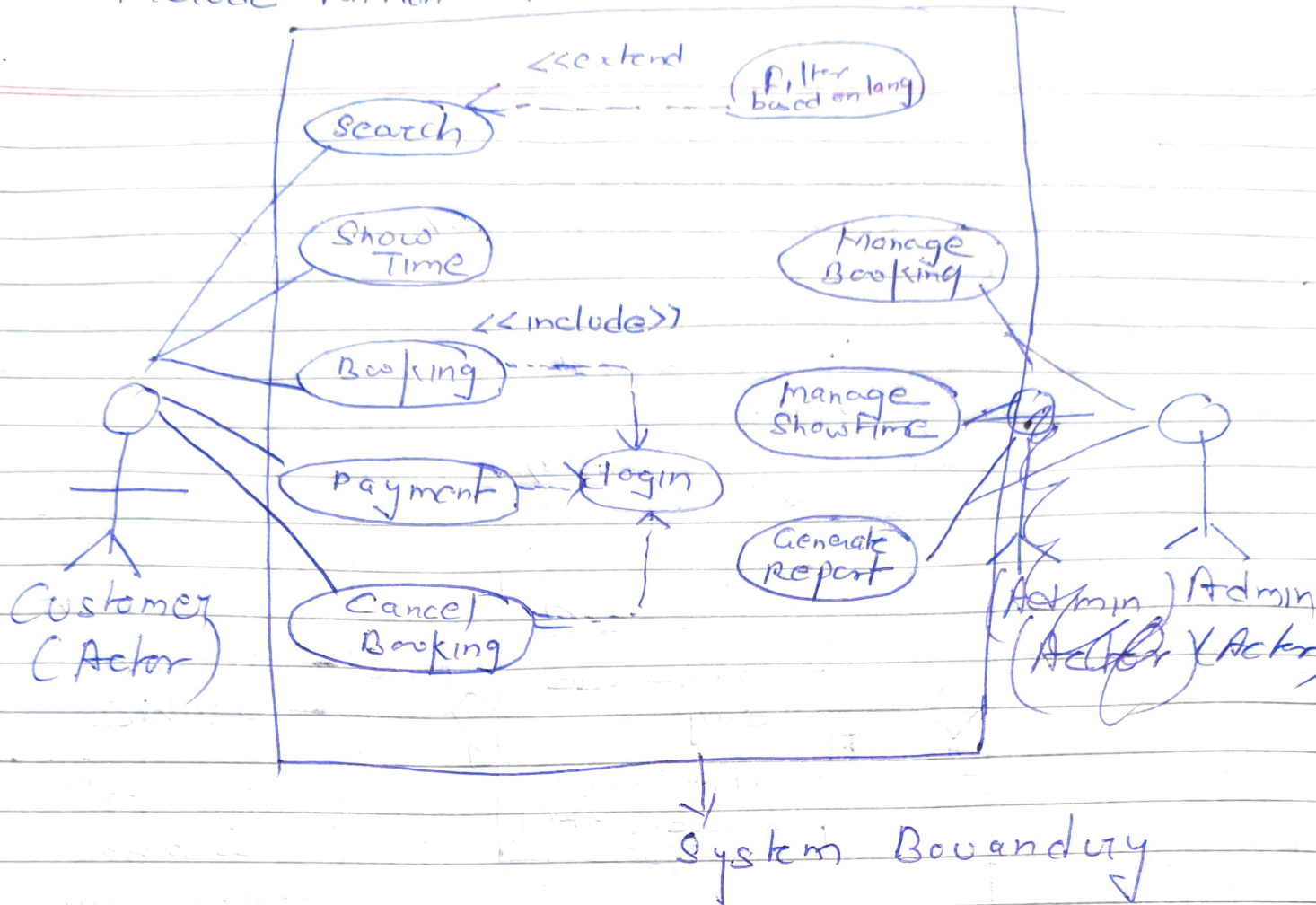
- It is used to illustrate the function requirement of the system and its interaction with external agent (actors)
- A use case diagram give us high level view of the system without going into the implementation details.

Example : Book My Show

- The first functionality is Search
- In Search we can see all movies with filter whether it is English, hindi, Punjabi, Telugu etc.
- There are many other filter like Show timing, Different show
- It provide functionality to book ticket or cancel ticket
- Here customers are Actor

extend function — explicit  
include function implicit

(Shalini Verma)



### Terms Used

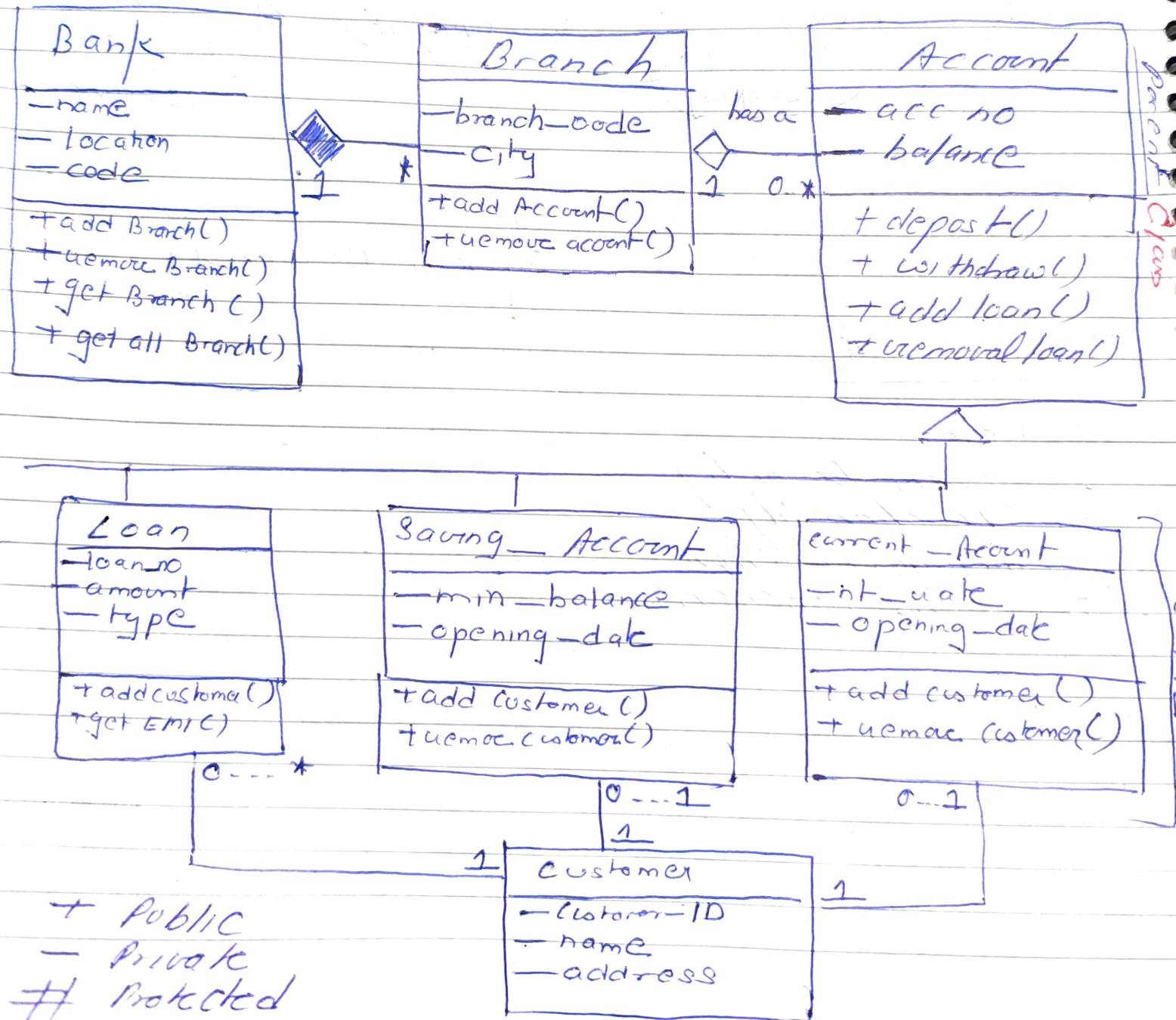
- (1) Actors
- (2) System Boundary
- (3) Functionality
- (4) Include function
- (5) Extend function

# CLASS DIAGRAM in UML

(Shahini Verma)

- Class Diagram is a structural diagram
- It uses the component concept of OOPS.
- It has class
- It has Attributes
- It has methods

Example: Banking System





## It uses Relationship

- (1) Aggregation (has a relationship)
- (2) Generalization (Inheritance) or Account
- (3) ~~Comp~~ Association
- (4) Composition

has a  
Loan Acc  
Saving Acc  
Current Acc

## Relationship

0 --- x

1 --- x

0 --- 1

zero or many

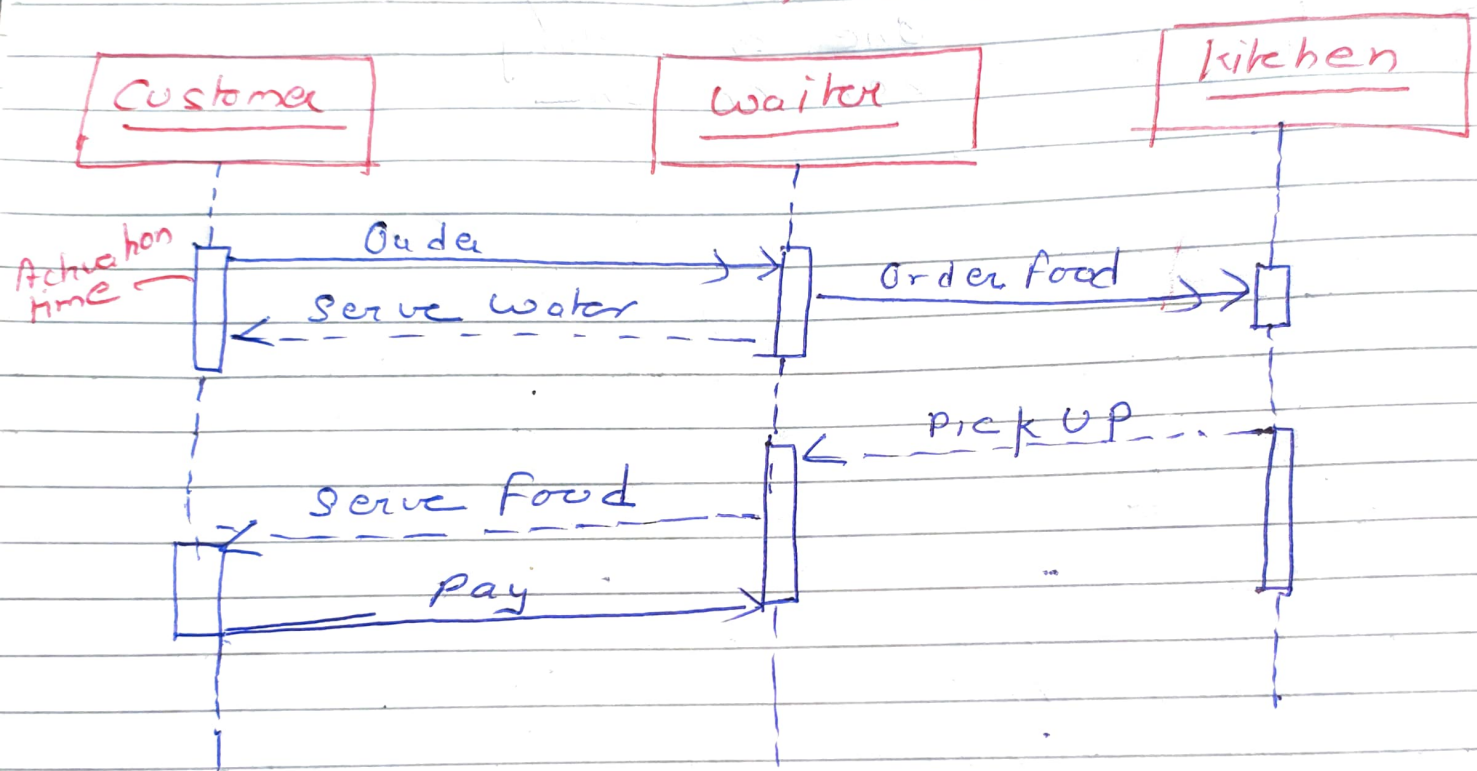
one or many

zero or one

# SEQUENCE DIAGRAM in UML

- It is Behaviour Diagram
- It covers dynamic aspect (what action to be performed and what interaction should be done)
- It has multiple Objects
- All events performed in timely manner

## Example: Sequence Diagram: Restaurant System



Request : Solid line

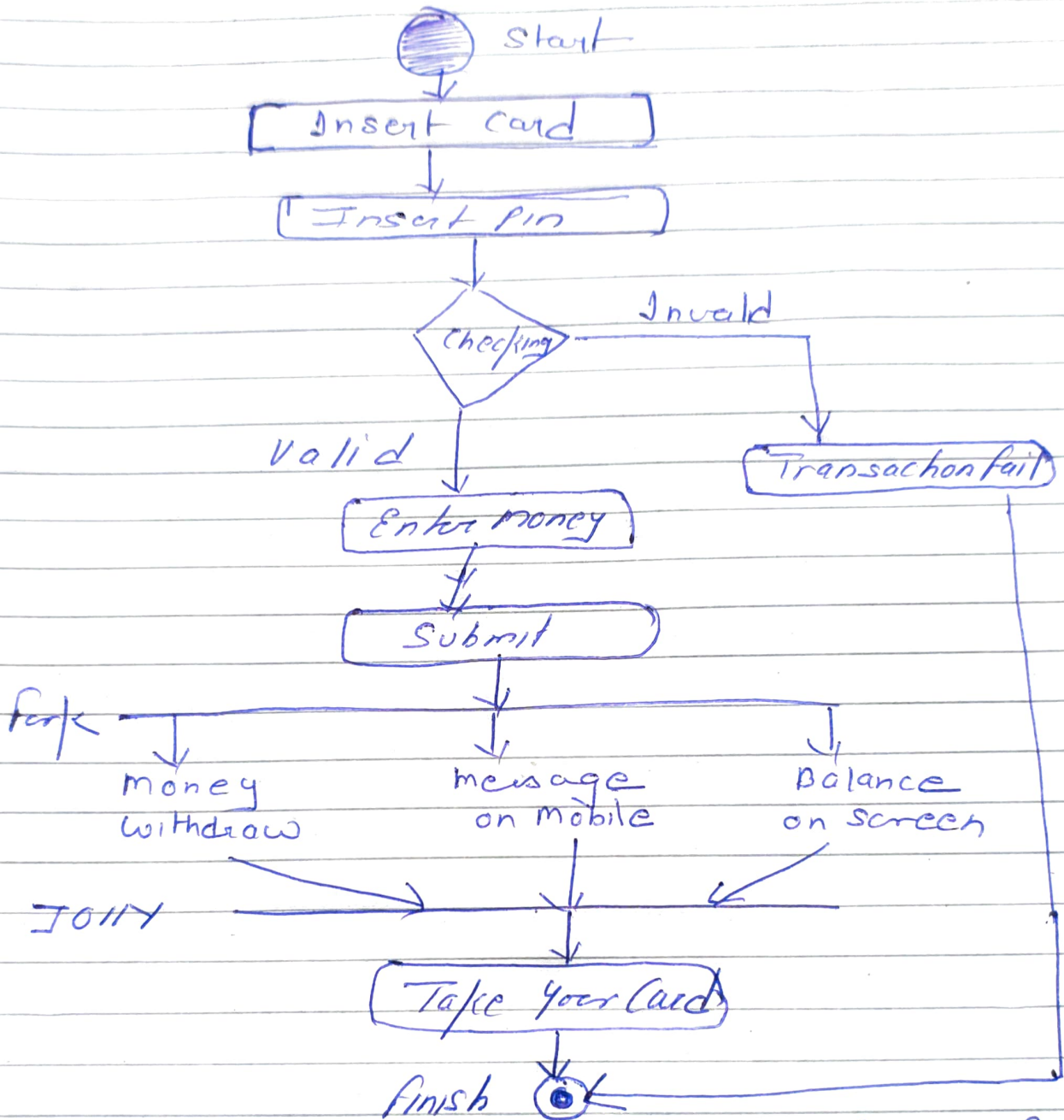
Response : Dotted line

Activation time : It is a time when Request is made after how much time response is done for that particular Request. So that particular time period is called activation time.

(Shalini Vema)

# Activity Diagram in UML

- It is Behaviour Diagram
- It covers Dynamic Aspects (Flow of actions, Sequence of action is visualized).



Arrow — Flow Shows flow of Control  
FORK — Shows Concurrent Action  
JOIN