

- What is SDLC

- Software Development Life Cycle is a process used to build software step by step.
- there are six stages of sdlc life cycle
  1. Requirement gathering
  2. Analysis
  3. Designing
  4. Implementation
  5. Testing
  6. Maintenance

### 1.Requirement gathering: -

- This stage is including a business analysis team and they gather requirement of software from the client.
- They gather with type requirement need client in the software functional and nonfunctional requirement
- Based on those they create BRD document
- Functional requirement describes system services or function
- Nonfunctional is a process of development

### 2.analysis: -

- This stage is defining the problem that the customer is trying to solve
- Analyse requirement document and they create a SRS document

- Evaluate whether the requirements can be met within budget, timeline, and technical constraints.

### 3. Designing: -

- This phase design some test cases
- Implementation plan
- Critical priority analysis
- create architecture
- Create some Test plan

### 4. Implementation: -

- This phase requires actual developer
- they Developed software using computer language
- this phase deals with issues of quality performance and debugging

### 5. Testing: -

- this phase requires a qa tester they test the quality of software
- regression testing
- unit testing
- application testing
- stress testing

### 6. Maintenance: -

- this phase is requires after deploying software
- implementing the new requirement
- fix some minor bugs
- identifying and repairing defects

➤ What is software testing?

Software testing is a process used to identify the correctness, completeness, and quality of developed computer software.

➤ What is agile methodology?

Agile model believes that every project needs to be handled differently and the existing methods need to be tailored to best suit the project requirements. In agile the tasks are divided to time boxes to deliver specific features for a release.

➤ Pros: -

- Is a vary realistic approach to software development
- Promotes team work and cross training.
- Suitable to flexible and changing requirement.
- Easy to manage.
- No planning required

➤ Cons: -

- Maintenance is complex due to less document

➤ What is SRS: -

- Software Requirement specification is describe of behaviour of software.
- They contain a software function requirement and nonfunction requirement

➤ What is oops: -

- Identifying object and assigning responsibility to these object
- An object like black box
- The internal details are hidden

➤ Write Basic Concepts of oops: -

- Class
- Object
- Encapsulation
- Inheritance
- Polymorphism
  - Overriding
  - Overloading
- Abstraction

➤ What is class

- Class is collection of data member and function member.

➤ What is object

- Object is gives permission to access functionality of class.

➤ What is encapsulation

- Wrapping of data in single unit

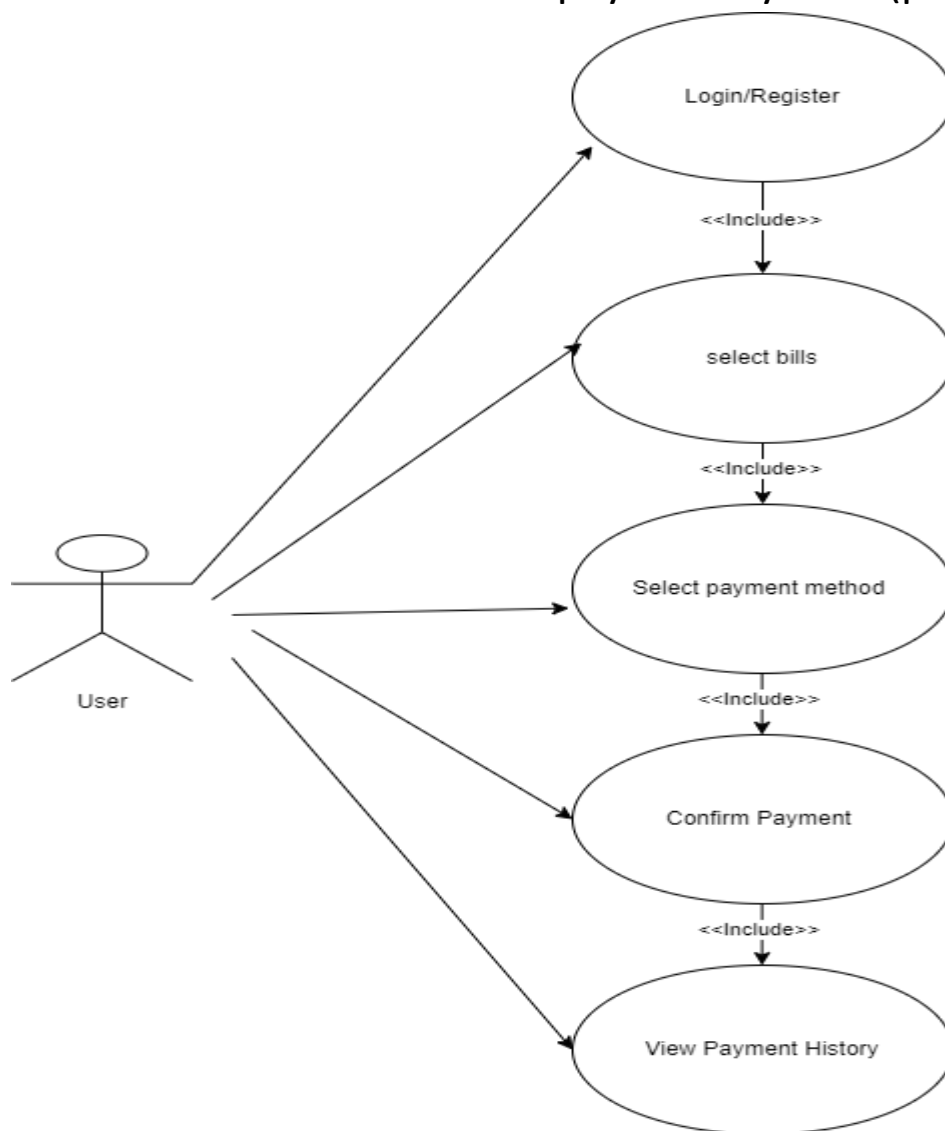
➤ What is inheritance

- Deriving the attribute of some other class

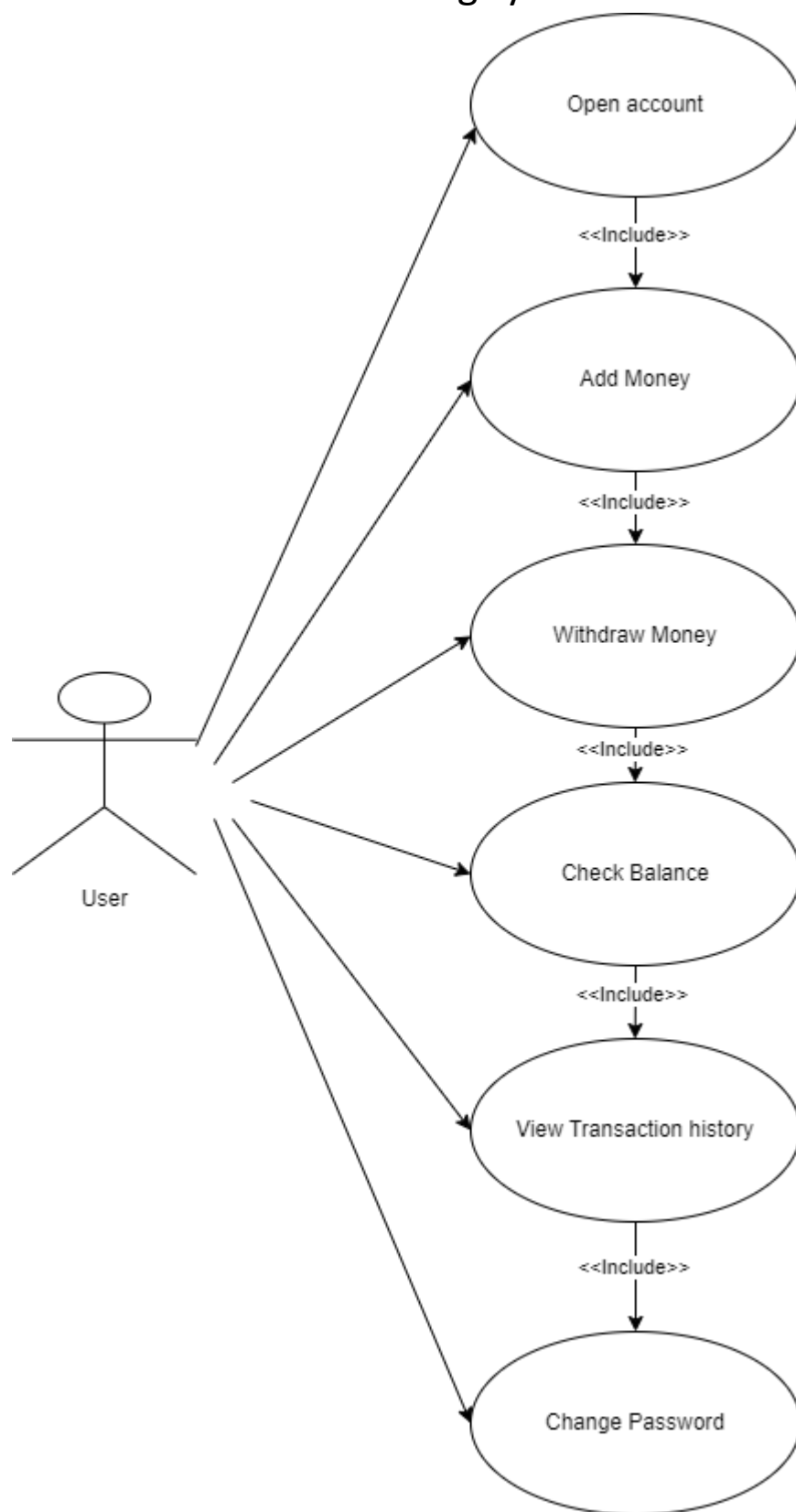
➤ What is polymorphism

- One name many form
- Calc (10,20)
- Calc (10.5,21.2)
- Calc(a,b)

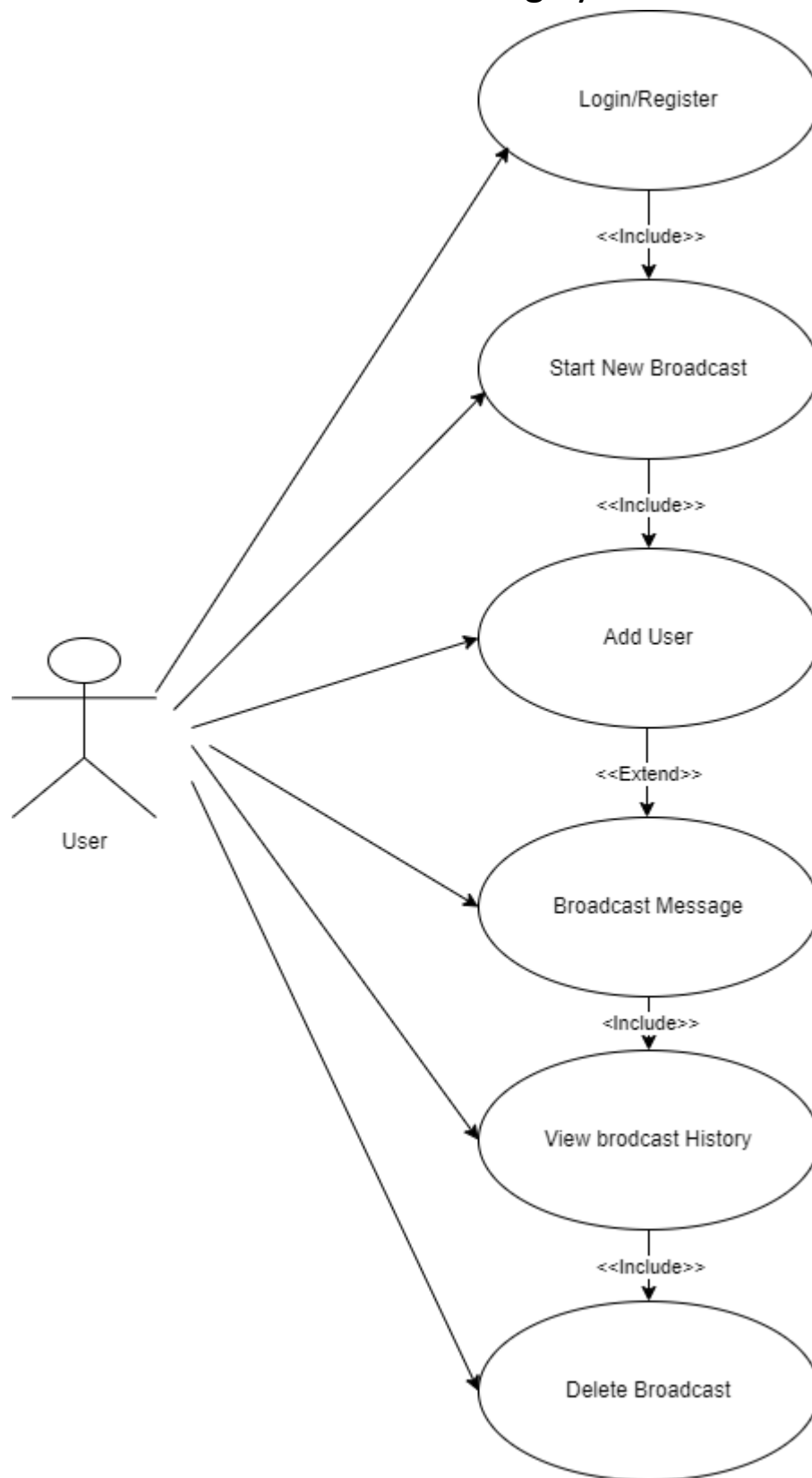
➤ Draw Usecase on online bill payment system (paytm)



➤ Draw Use case on banking system for customers



➤ Draw Usecase on Broadcasting System.



➤ Write phases of spiral model

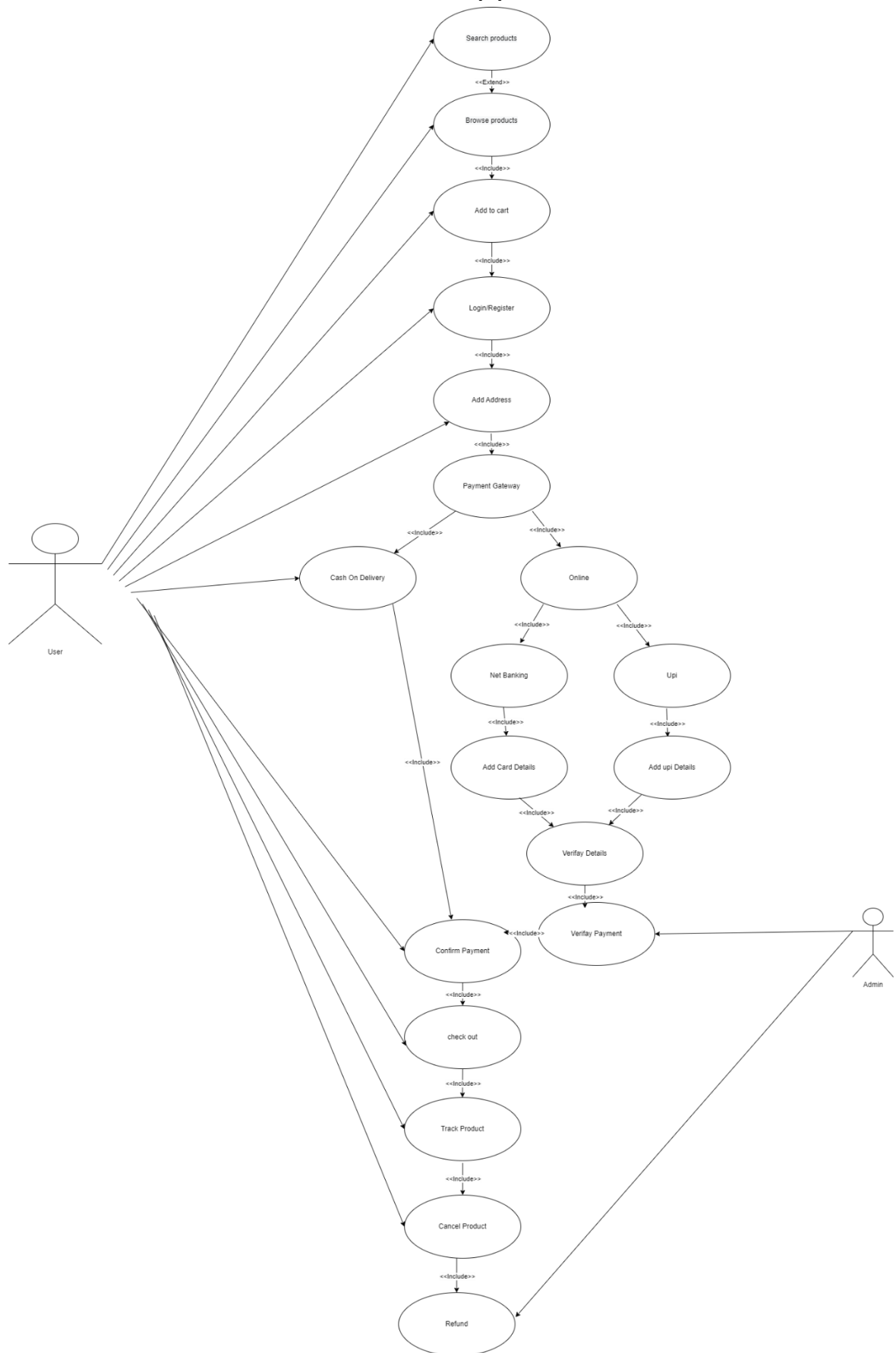
- There are 4 phases of spiral model
  1. Planning
  2. Risk analysis
  3. Engineering
  4. Customer evaluation



➤ Draw usecase on OTT Platform.



➤ Draw usecase on E-commerce application



➤ Draw usecase on Online shopping product using payment gateway

