Software Testing Assignment

Module 1(Fundamental)

1) What is SDLC ?

Software Development Life Cycle is a structure imposed on the development of a software product that defines the process for planning,implementation,testing,documentation,deployment,and ongoing maintenance and support

2) What is Software Testing ?

Testing is the process of evaluating a system or its components with the intent to find that whether it satisfies the specified requirements or not

3) What is agile methodology ?

Agile SDLC model is a combination of iterative and incremental process models with focus on process adaptability and customer satisfactions by rapid delivery of working software product

4) What is SRS ?

Software Requirement Specification (SRS) is a complete description of an application which is to be developed

It include a set of use case that describe all the interaction that the user will have with the software

5) What is oops ?

Object Oriented Programming (OPPS) is way of writing the programs in organized way

6) Write basic concept of oops?

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

- Abstraction

7) What is object ?

Object gives the permission to access functionality of class

8) What is class ?

Class is a collection of data member and member function

9) What is encapsulation ?

The process wrapping the data in a single unit to secure the data from outside word
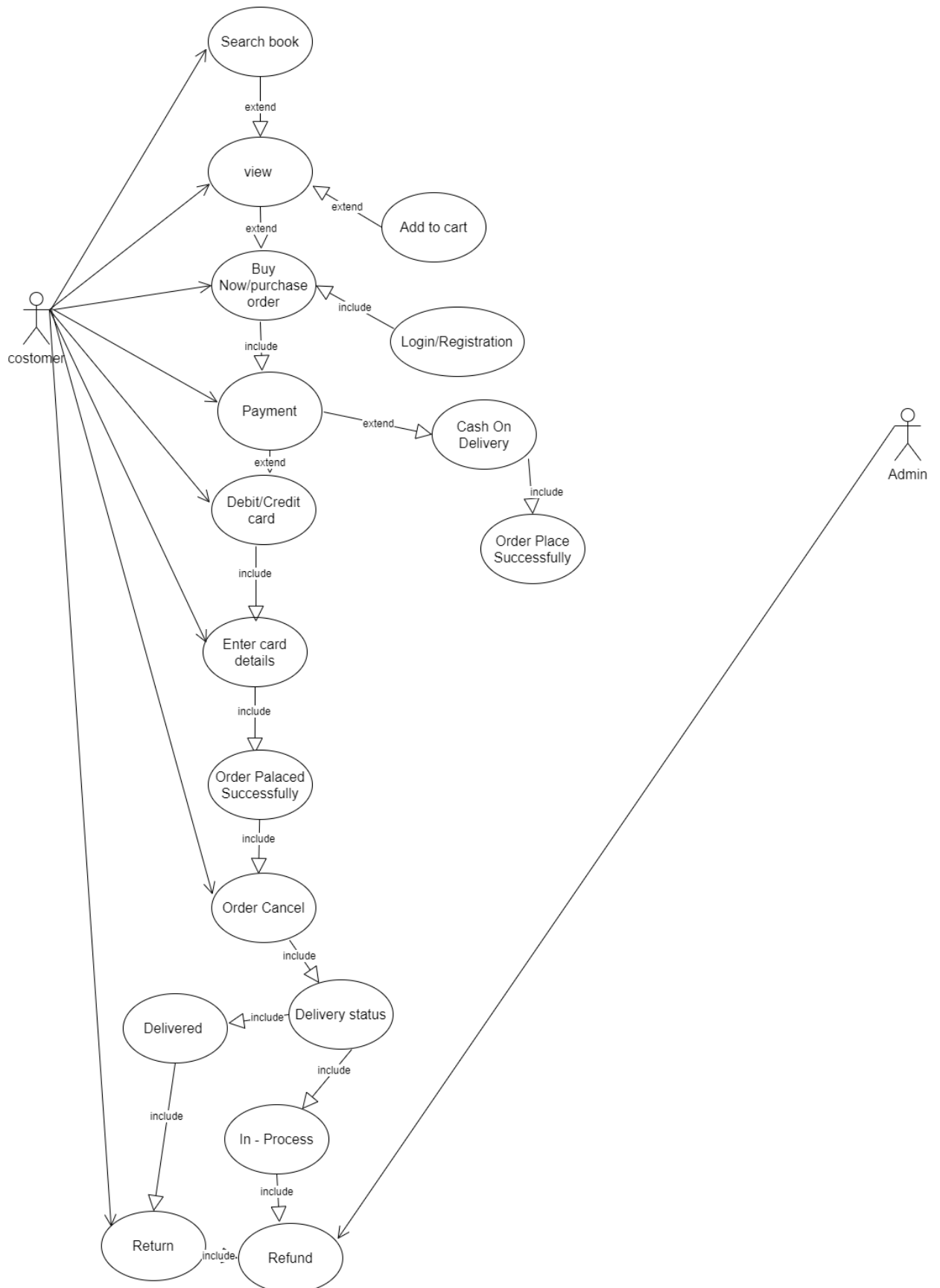
10)   What is inheritance ?

Making class from one existing class . Deriving the attribute of some other data
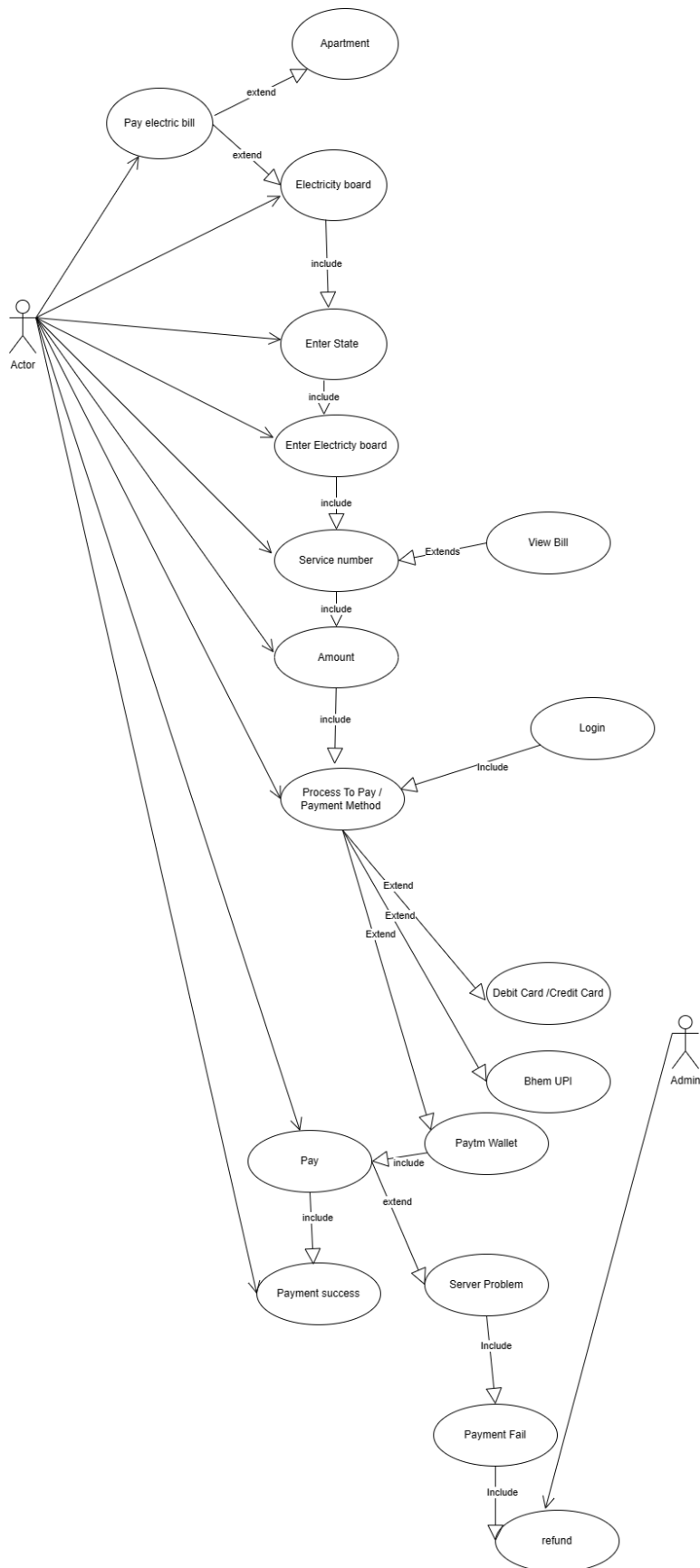
11)   What is polymorphism ?

Polymorphism mean "having many form "
Its allow different object to respond to the same message in different ways , the response specific to the object

12)   Draw Use case on online book shopping

13) **Draw Use case on online bill payment system (Paytm)**

14)   Write SDLC phase with basic introduction

- Requirement Collection/ Gathering :- Establish customer needs
- Analysis :- Model and specify the requirement "What"
- Design :- Model and specify a solution "why"
- Implementation :- Construct a solution in software
- Testing :- Validate the solution against the requirement
- Maintence: - Repair defect and adapt the solution to the new requirement.

15)   Explain phases of the waterfall model

The waterfall is unrealistic for many reason, especially requirement must be "frozen" to early in the lifecycle

- Requirement
- Analysis
- Design
- Implementation
- Testing
- Maintenance

16)   Write phases of spiral model

- Planning :- Determination of objective, alternatives and constraints initial requirements completion
- Risk Analysis :- Analysis of alternatives and identification/resolution of risk
- Customer Evaluation:- Assessment for result engineering
- Engineering :- Development of the "next level" product

17) **Write agile manifesto principles(Topic Pending)**

18) **Explain working methodology of agile model and also write pros and cons**

- It is a combination iterative and incremental model.
- It divides the software into small incremental builds, this build are provided in iteration, that means the project are divided into small chunks. (iteration)
- Each iteration last about one to three weeks.
- Each iteration involves all team member working simultaneously on areas like planning, requirement, analysis, design, codding, unit testing and acceptance testing.
- At the end of the iteration the working product is displayed to the customer or the important stake holder and it is released in the market.
- After the release we check for the feedback of the deployed software.

- If any enhancement is needed in the project then it's done and its re-released.

Pros

- Frequent delivery
- Face to face communication with the customer.
- less time
- Adaptability

Cons

- Less documentation
- Maintenance problem.

19)   Draw use case on online shopping product using COD

20) **Draw use case on Online shopping product using payment gateway**