

Software Testing Assignment

Module-1(Fundamental)

1. What is SDLC

- SDLC(software Development Life cycle) is a process used to create and maintain software. It consists of various phases such as- Requirement, Analysis, Design, implementation, Testing, Deployment, maintenance.

2. What is Software Testing?

- Software Testing is a process in which software is tested to ensure that is working properly. The main purpose of testing is to find bugs, error, and defects.

3. What is Agile Methodology?

- Agile Methodology is a process of software Development in which software is developed and delivered in small parts. In this emphasis is given on continuous feedback and customer collaboration.

4. What is SRS?

- SRS(Software Requirement specification) is a document in which the requirements of the client are written in detail.it includes both functional and non-functional requirements.

5. What is OOP?

- OOP(Object Oriented Programming system) is a programming concept in which programs are written using objects and classes. This makes the code reusable and manageable.

6. Write Basic concepts of oops

- Object - instance of a class
- Class - Template of Blueprint
- Encapsulation - Binding data and methods in one place.
- Inheritance- Taking properties of one class into another class.
- Polymorphism- The same function can work in different ways.
- Abstraction- Hiding the implementation and showing only important details.

7. What is object

- Object is an instance of a class. It takes space in memory and holds both data + functions.

8. What is class?

- Class is a template or blueprint in which the properties and methods of the object are defined.

9. What is Encapsulation?

- Encapsulation is a concept in which data and methods are bound in a unit (class) and outside access is restricted.

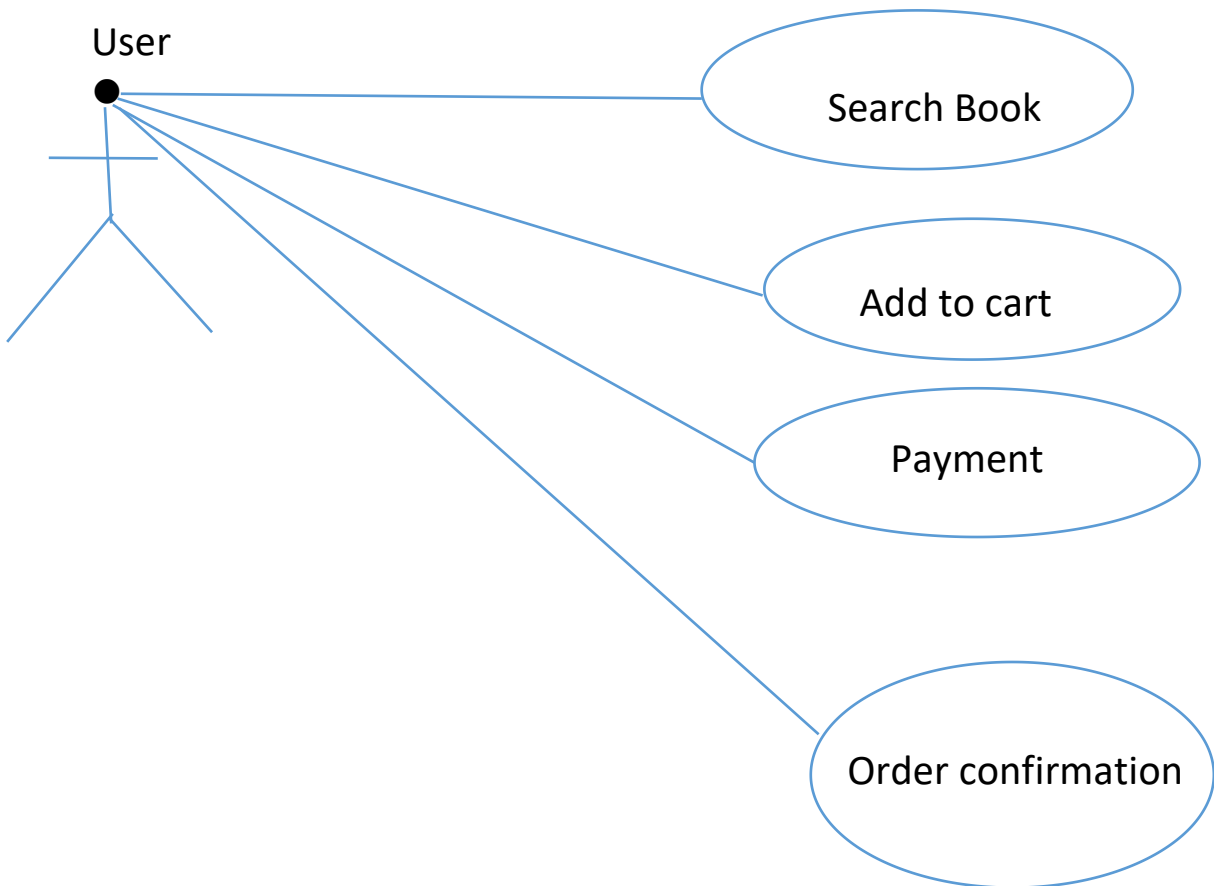
10. What is Inheritance?

- Inheritance is the process in which a class uses the properties and methods of another class.

11. What is Polyomorphism?

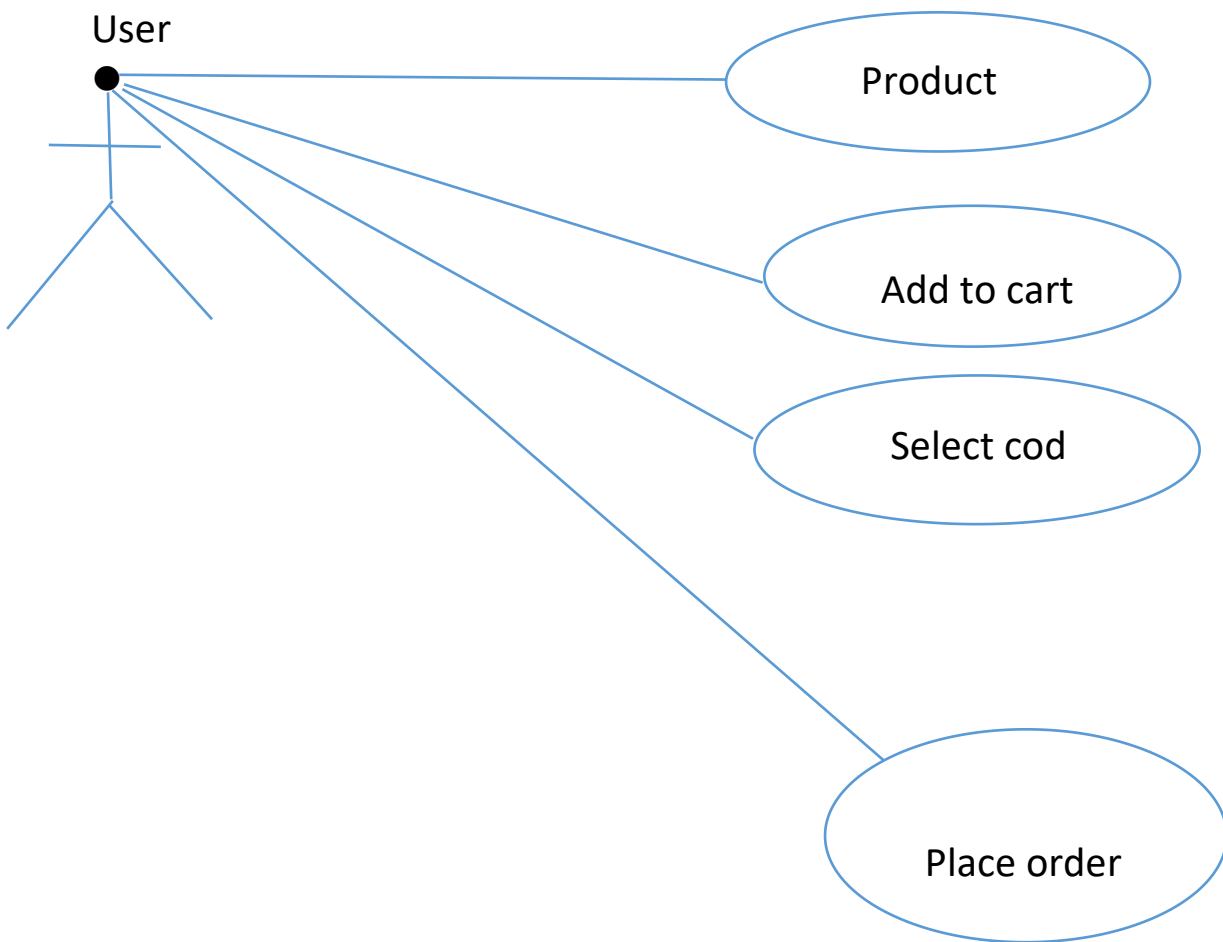
- Polyomorphism means many forms in this the same function behaves differently in different contexts. Such as- function overloading , function overriding.

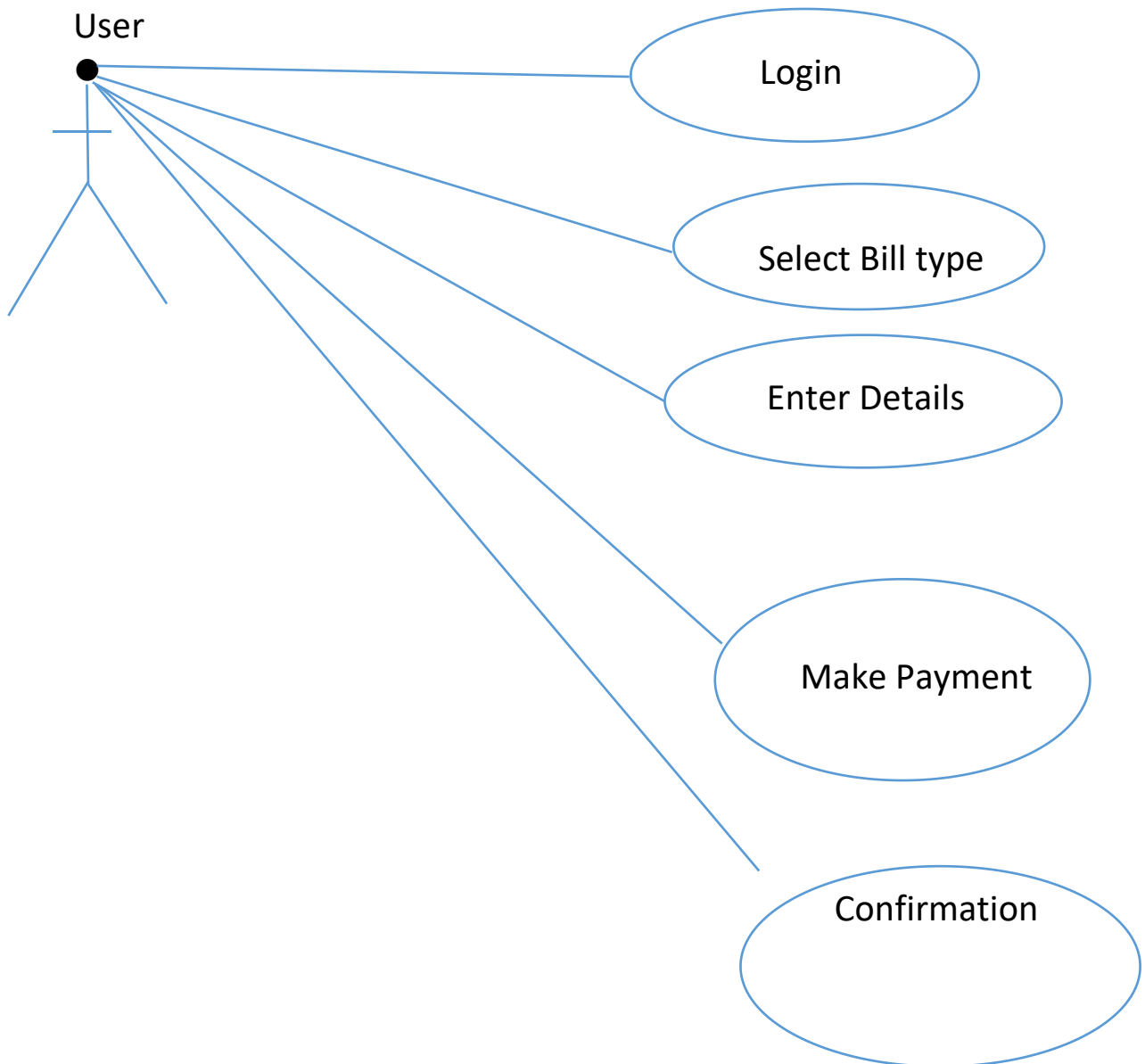
12. Draw usecase on online book shooping



13. Use case of online shooping with cod

➤ Cash on delivery



14. Draw usecase on online bill payment system(payment)

15. Write SDLC phases with basic introduction

- Requirement Analysis - understanding the user needs.
- Design - creating software architecture
- Implementation(coding) - writing the code
- Testing - fixing bugs and errors.
- Deployment- Delivering to the client
- Maintenance- Providing updates and support.

16. Explain Phases of the waterfall model

Waterfall model is a linear step-by-step model. Each Phase is completed before the next one starts.

Best for Small projects Requirements are clear and fixed

- Requirement Gathering
- System Design
- Implementation
- Testing
- Deployment
- Maintenance

16. Write Phases of Spiral Model

spiral Model is risk-based model It combines iterative development with risk analysis. Each cycle has four steps: planning, risk analysis, development & testing, customer review. The project goes through many spirals Best for large, complex, and high-risk projects

- Planning
- Risk Analysis
- Engineering (Development + Testing)
- Evaluation

17. Write Agile manifesto principles

- Customer Satisfaction by early delivery
- Welcome changing requirements
- Delivery working software frequently
- Close collaboration between business and developers
- Build projects around motivated individuals
- Face to face conversation is best communication
- Working software is the measure of progress
- Continuous attention to technical excellence
- Simplicity is essential
- Self-organizing teams
- Regular reflection for improvements

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

- Work is divided into small parts software is tested and delivered in each sprint. Customer gives feedback.

Pros:

- Fast delivery
- Flexible
- Good customer satisfaction

Cons:

- Less documentation
- Not good for big terms
- Needs experienced people

19. Use case of online shopping with payment Gateway

