Software Testing Assignment

Module-1(Fundamental)

Assignment table

1. What is SDLC

Software Development Life cycle **(SDLC)** is a structure imposed on the development of a software product

That defines the process for planning, implementation testing, documentation, deployment, ongoing maintenance

And support. There are a number of different development models

SDLC Phases:

1. Requirement Collection/Gathering
2. Analysis
3. Design
4. Implementation
5. Testing
6. Maintenance

2. What is software testing?

- Software testing is a process of indentify correctness, completeness, and quality of development computer Software.

Phases of the waterfall model:

1. Requirement collection.
2. Analysis.
3. Design.
4. Coding.
5. Testing
6. Maintenance

3. What is agile methodology?

- The agile SDLC model is combination of iterative and incremental process model. With focus on adaptability and customer satisfaction by rapid delivery of working software product.

4. Explain working methodology of agile?

Agile model is 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.

1. Agile pros:

2. Is a very realistic approach to software development.
3. Promotes team work and cross training.
4. Resource requirement are minimum.
5. Suitable for fixed or change requirement.
6. Good model for environment that change steadily.

2. Agile cons:

1. Not suitable for handling complex dependencies.
2. More risk of sustainability, maintainability, extensibility.
3. There is very high individual dependency since there is minimum documentation generated.
4. Transfer of technology to new team members may be quite challenging due to lack of documentation use case.

Agile manifesto principle:

- Individual interaction
- Working software
- Customer collaboration
- Responding to change

5. What is SRS?

- Software requirement specification (SRS) is a complete description of the behaviour of the system to be developed.

6. What is oops?

- Indentifying objects and sending assigning responsibilities to these objects.
- Objects communicate to other object by sending massage.
- Massages are received by the methods of an object.
- An object is like a black box.
- The internal details are hidden.
- Object is derived from abstract data type.

Basic concept of oops:

1. Object
2. Class
3. Encapsulation
4. Inheritance
5. Polymorphism
6. Abstraction

7. What is object?

Object: (Is a collection of data)

Is an instance of a class. With the help of object to access the whole properties of a class accept private.

8. What is class?

Is a collection of data member (variable) and member junction (methods process) with is behaviour.

9. What is encapsulation?

Data hiding: wrapping up of data into single unit

:-Private your data member and member function.

10. What is inheritance?

- Properties of parent class extend into child class.

:-Main purpose is reusability, extendibility

:-There are mainly 5 types.

1) Singles: - only one parent having one child.

2) Multiple: - single inheritance having one on other child class.

3) Hierarchical: - one parent having 2 more children.

4) Multiple: - Java does not support directly.

5) Hybrid: - Java does not support directly.

11. What is polymorphism?

Polymorphism: - ability to take one name has many forms.

There are mainly two parts.

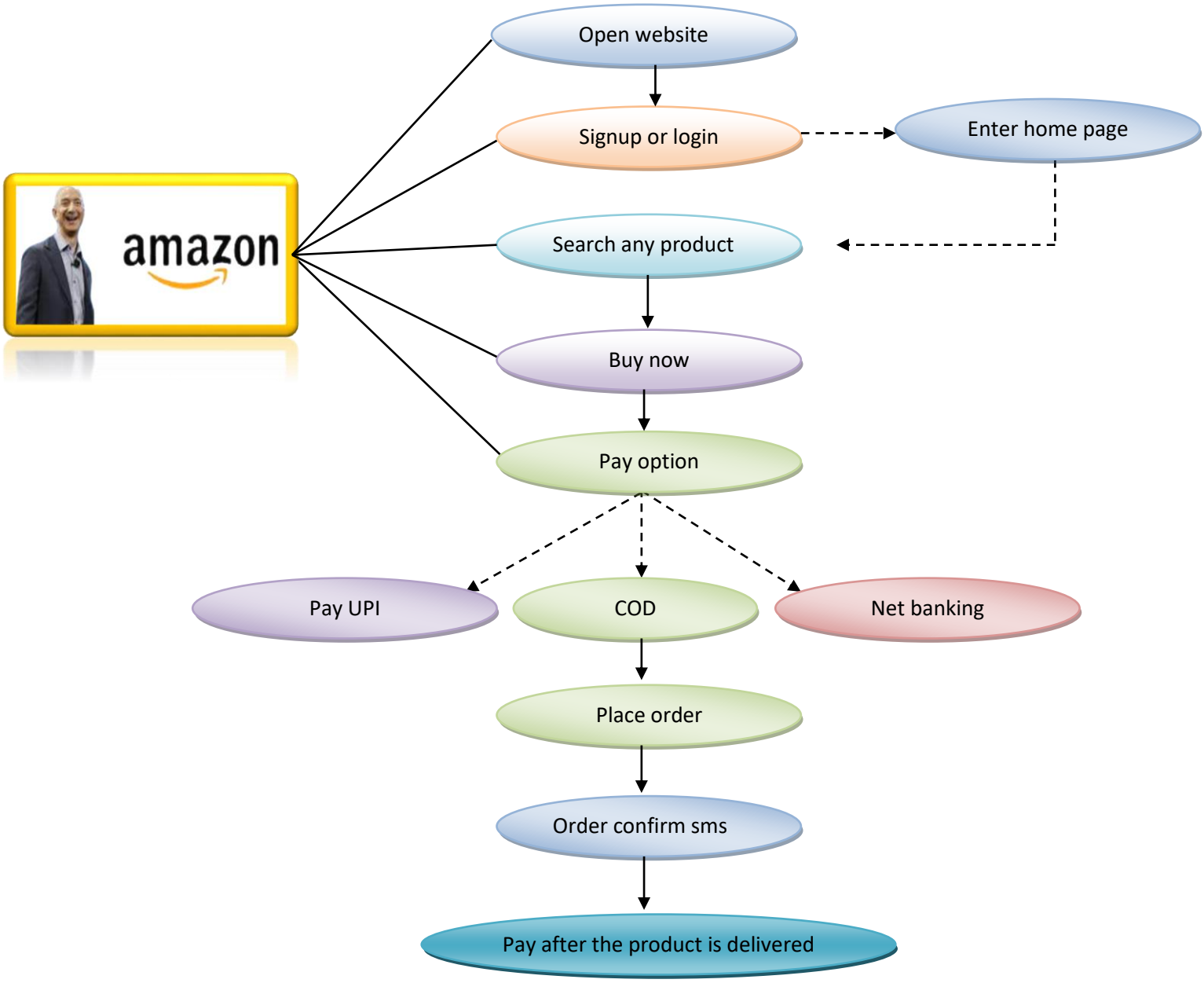
1) Method overloading.

2) Method overloading.

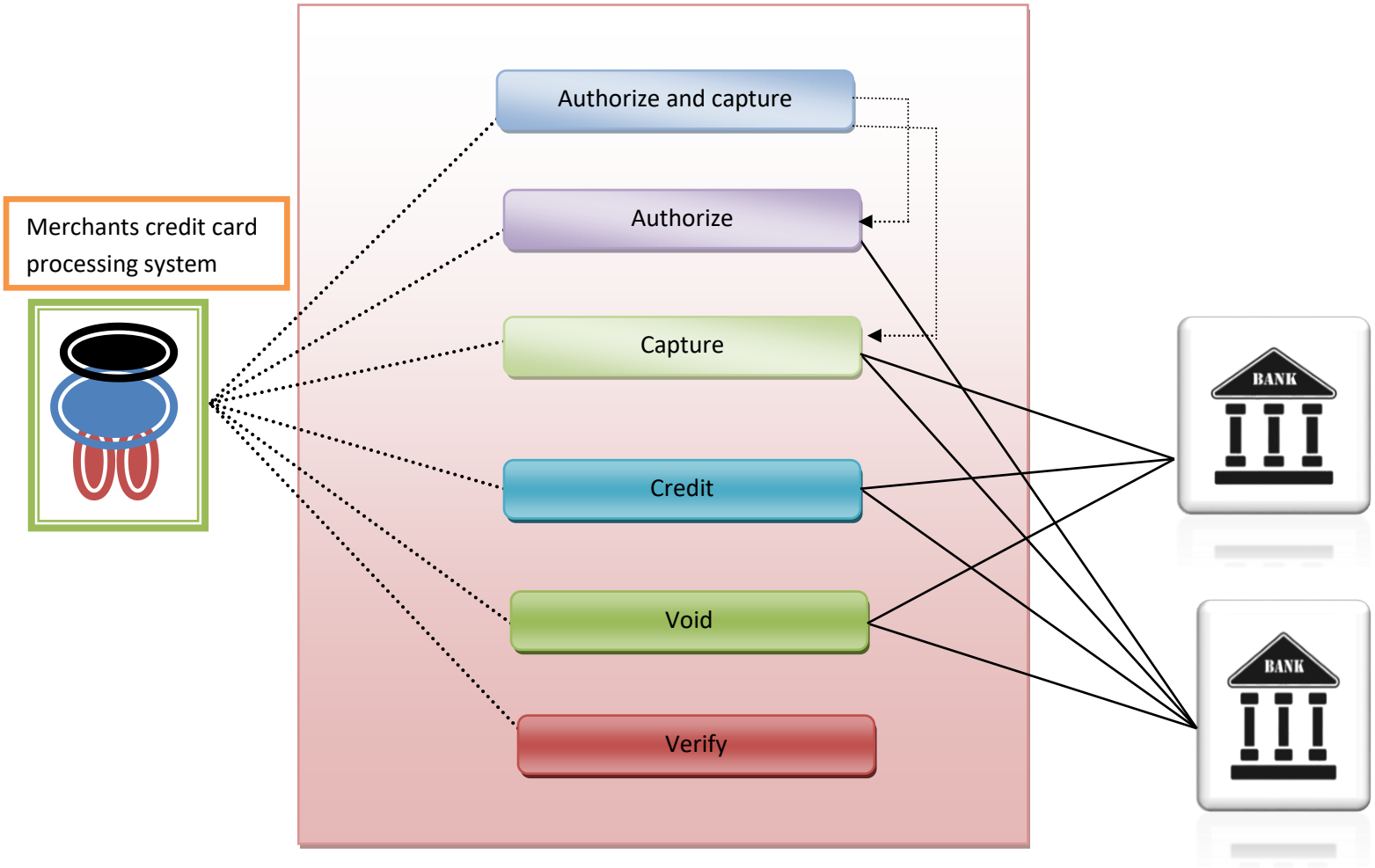
Phases of spiral model:

1. Planning: - determination of objectives, alternatives, constraints.
2. Risk analysis: - analysis of alternatives and identification/resolution of risk.
3. Engineering: - Development of the “Next level” product.
4. Customer evaluation: - Assessment of the results of engineering.

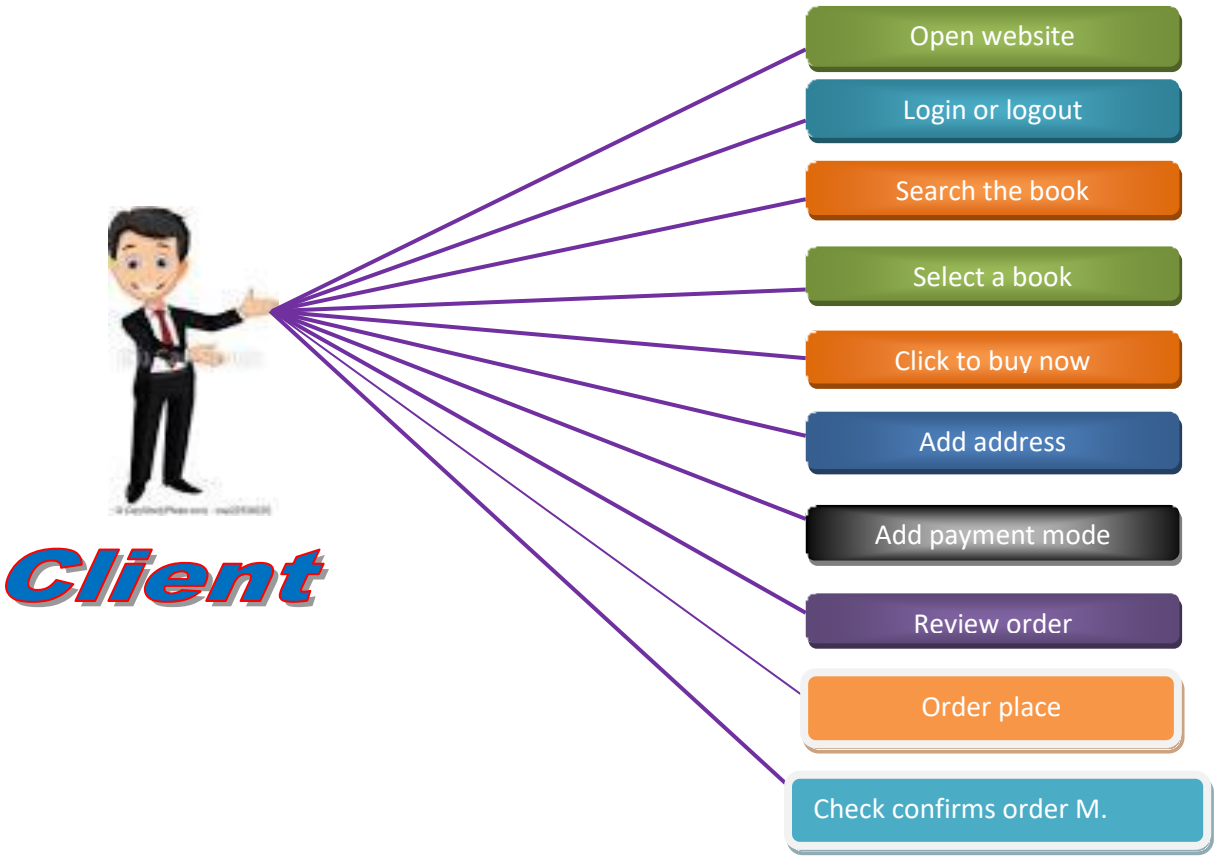
Draw Use case on online Shoping with amazone.



Draw use case on Online shopping product using payment gateway.



1) Draw use case on online book shopping.



Draw Use case on online bill payment system (paytm)