

Software Testing Assignment

Module—1(Fundamental)

Q1. What is SDLC?

: - SDLC stands for software development life cycle. it's a structure to impose on a software development that defines the process. for planning, implementation, testing, documentation, deployment, and ongoing maintenance and support.

Q2. What is software testing?

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

Correctness is the process of correct the product according client's requirement.

Completeness is the process of fulfil the requirement of the client.

Quality is the process to maintain the quality of client's requirement.

: - In software testing there is static testing and the dynamic testing.

: - In static testing we can do test before the execution of code. in dynamic testing we test after the execution of code.

: - Test execution is only a part of testing because testing is whole process. we can test before and after the execution of code.

Q3. What is agile methodology?

: - The agile methodology is a group of a software and is a combination of iterative and incremental process models and it provide flexibility and adaptability. it's works on customer feedback.

: - in agile model we can break the product and build in a small incremental way and work according to client satisfaction.

: - There is some pros and cons in the agile methodology

PROS

- It's suitable for fixed or changing requirements.
- It's very easy to manage and gives flexibility to developers.

CONS

- Depends heavily on customer interaction if customer is not clear about the requirements project can be driven in the wrong direction.

Q4. What is SRS?

: - SRS stands for software requirement specification it's describe the requirement of the software's functionality, performance and design.

: - Types of Requirements are as under

- Customer Requirements

In customer requirement we have to work on where customer want to use the system.

- Functional Requirements

In functional requirement we have to work on what type of the functionality user wants in system.

- Non-Functional Requirements

In non-functional requirement we have to work on what type of the non-functionality user wants like how well system performs, how much load can be handled by the system without dropping performance.

Q5. What is oops?

: - OOPS stands for object-oriented programming a programming model that uses objects. It's working on an object instead of a function.

Q6. Write Basic Concepts of oops.

: - The concept of oops are as under:

- Object

- Class

- Abstraction

- Inheritance

- Encapsulation

- Polymorphism

Q7. What is object?

- : - Object is an entity that has its own state and behaviour.
- For exm: Pen, Paper etc...

Q8. What is Class?

- : - Collection of objects it's called class.
- For exm: Human body, car etc...

Q9 What is encapsulation?

- : - Wrapping up or binding of data it' called encapsulation.
- For exm: capsule.

Q10. What is inheritance?

- : - When one object acquires the properties of parent class it's called inheritance.
- For exm: Login Page.

Q11. What is polymorphism?

- : - Many ways to perform anything it's called polymorphism.
- There are two types of polymorphism
 1. Overloading
 2. Overriding

Q12. Write SDLC phases with basic introduction?

: - There are six phases of SDLC are as under

- 1) Requirement gathering
- 2) Analysis
- 3) Design
- 4) Implementation
- 5) Testing
- 6) Maintenance

1) Requirement gathering

- we have to take requirements of customer needs what they want in their software. Requirements may be documented in written form; they may be incomplete incorrect because most of the time customer not sure about what they want.

- There are two types of requirements are there

- 1) Functional requirement
- 2) Non- Functional requirement

2) Analysis

- The analysis phase defines the requirements of the system how these requirements will be complete.

- There two phases in analysis What and How.

3) Design

- In design phase we have to work on design according to client's documentation.

- We plan implementation according to design.

4) Implementation

- In implementation phase we have to done coding according to design of the project.

- In implementation phase we have to work with issues of quality, performance and debugging.

5) Testing

- In testing phase, we have test project and find the defect and inform to developers' team.

6) Maintenance

- In maintenance phase we have to maintain resolve the errors and update the system after the client uses the system.

- There is Three types of maintenance are there:

- Corrective maintenance: - we have to identifying and repairing the defects.

- Adaptive maintenance: - adapt the system on new platforms.

- Perfective Maintenance: - implementing the new requirements.

Q13. Explain working methodology of agile model and also write pros and cons?

: - The agile model works with combination of two models' Iterative model and incremental process and the work of agile model is to break down the large projects into small frames and we can work simultaneously on various areas like planning, requirements analysis, design, coding, testing.

: - Pros and Cons of agile model

PROS

- It's suitable for fixed or changing requirements.
- It's very easy to manage and gives flexibility to developers.
- Suitable for fixed or changing requirements.
- Functionality can be developed rapidly and demonstrated.

CONS

- Depends heavily on customer interaction if customer is not clear about the requirements project can be driven in the wrong direction.
- Not suitable for handling complex dependencies.
- Depends on client because there is minimum documentation.

Q14. Explain Phases of the waterfall model?

: - The phases of waterfall model are as under:

1) Requirement gathering

- we have to take requirements of customer need what they want in their software. Requirements may be documented in written form they may be incomplete incorrect because most of the time customer not sure about what they want.

- There are two types of requirements are there

1) Functional requirement

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Q15. Write phases of spiral model?

: - The Phases of spiral model are as under:

1) Planning: -

- In planning phase, we have to define objectives, gather requirements.

2) Risk analysis: -

- In risk analysis phase we have to identify potential risk.

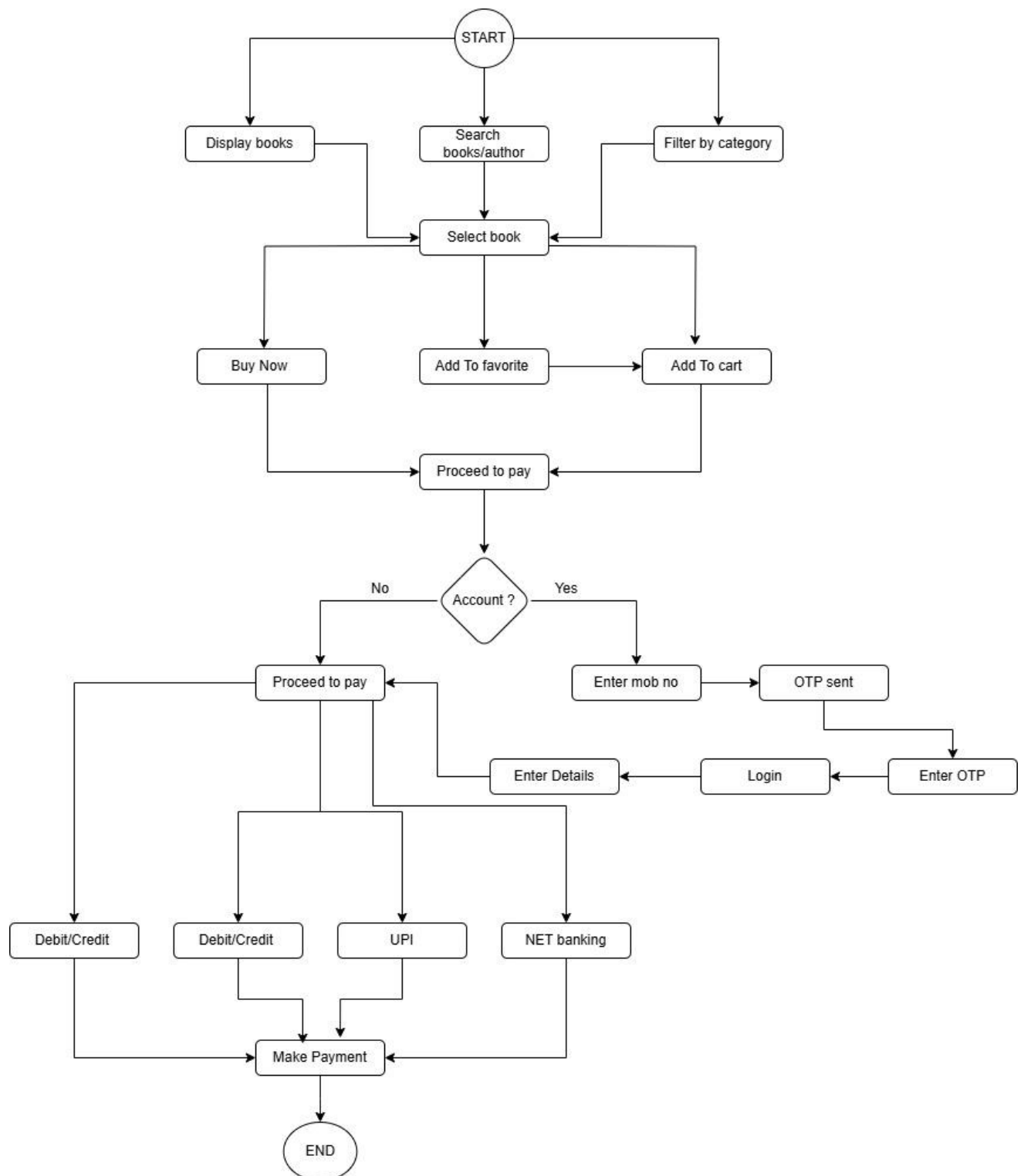
3) Engineering: -

- In engineering phase, we have to develop the planed product and test the product.

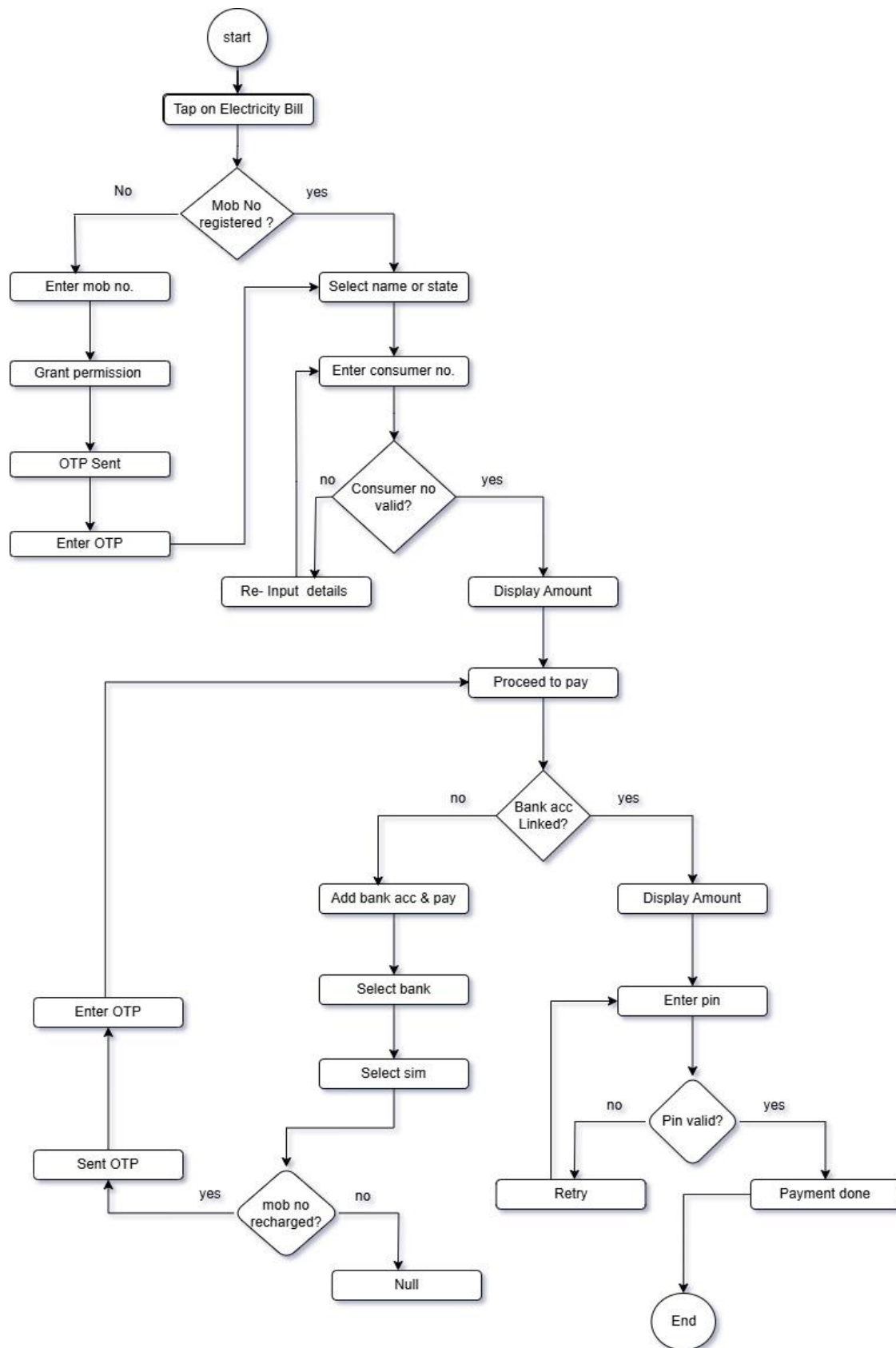
4) Evaluation: -

- In evaluation phase we have to test and evaluate the software product.

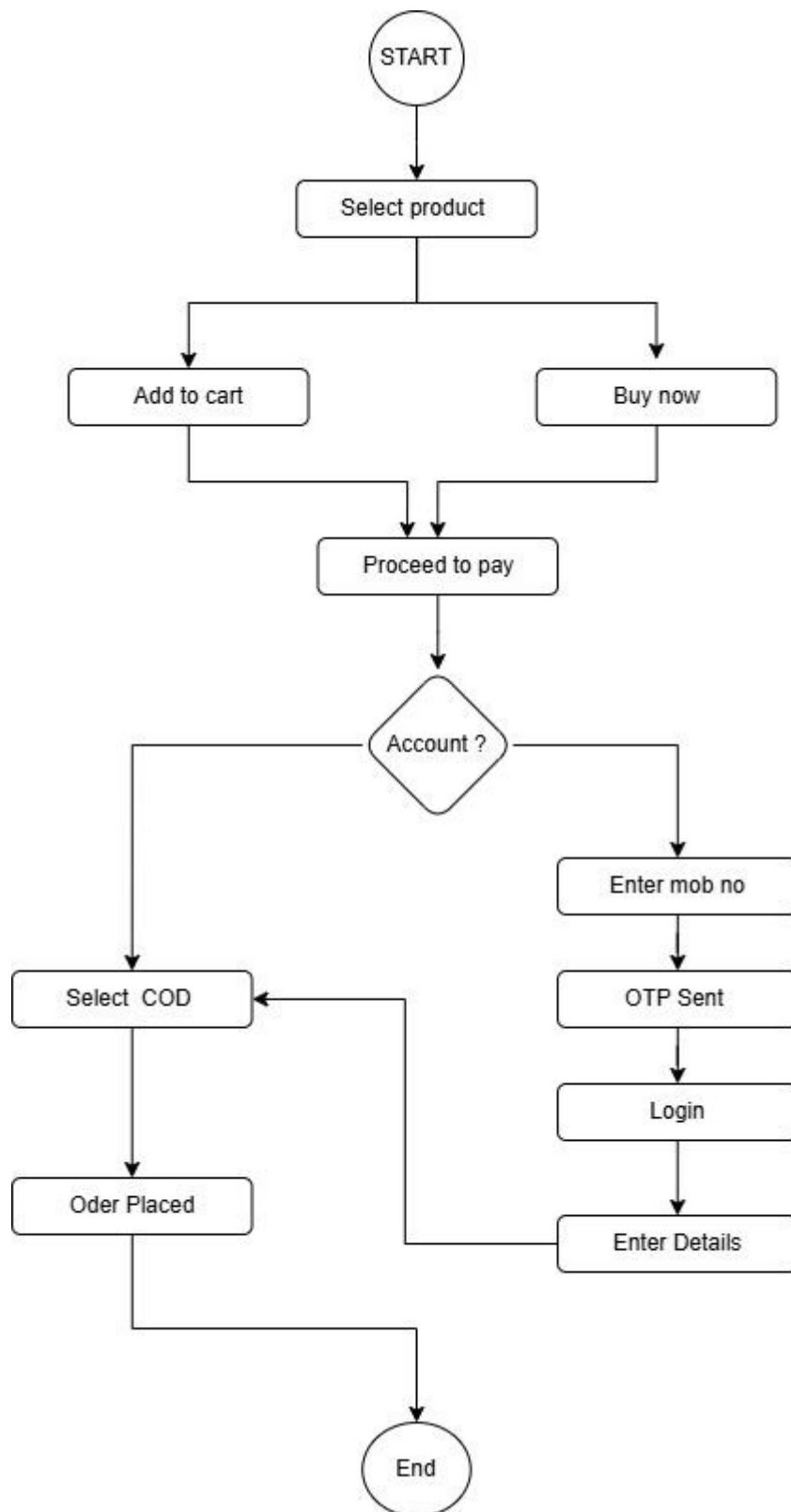
Q16. Draw Use case on Online book shopping?



Q17. Draw Use case on online bill payment system (Paytm)?



Q18. Draw use case on Online shopping product using COD.



Q19. Draw use case on Online shopping product using payment gateway.

