

Software Testing Assignment

Module -1(Fundamental)

1) What is SDLC?

Ans:- SDLC-software development life cycle

- Requirement gathering
 - Analysis
 - Designing
 - Implementation
 - Testing
 - maintenance
-
- SDLC is the process for the development of software or application.
 - For planning, implementation, testing, documentation, deployment and maintenance.
 - Software development life cycle process used by software industry to design, develop and test software's

2) What is software testing?

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

- Software testing is the part of software development process.

3) What is agile methodology?

Ans:-agile SDLC model is a combination of iterative and incremental process models with focus on process adaptability and customer satisfaction by rapid delivery of working software product.

- Agile method break the product into small incremental builds.

Pros:-

- Resource requirements are minimum
- Little or no planning required
- Easy to manage

Cons:-

- Not suitable for handling complex dependencies
- More risk of sustainability, maintainability and extensibility

4) What is SRS?

Ans:- a software requirements specification (SRS) is a complete description of the behaviour of the system to be developed.

SRS:-software requirement specification

- Functional requirements
- Non-functional requirements
- Customer requirements

5) What is oop?

Ans:-object oriented programming (OOP)

- Programming is like writing.
- So, programming is also easy.
- An object is like a black box.
- The internal details are hidden

6) Write basic concepts of OOPS?

Ans:-this is the basic unit of object oriented programming (oop)

That is both data and function that operate on data are bundled as a unit called as object.

- Concepts of OO :- Object
- Class
- Encapsulation
- Inheritance
- Polymorphism (overriding , overloading)
- Abstraction

7) What is object?

Ans :- “Object” is anything to which a concept applies.

Object is individual, identifiable item, unit, or entity, either real or abstract, with a well-defined role in the problem domain.

Any entity which has own state and behavior that is called an object.

EX:- any living things.

8) What is class?

Ans:- collection of objects.

- When you define a class, you define a blueprint for an object.
- A class requirements an abstraction of the object and abstracts the properties and behavior of that object.

EX:- human body

9) What is encapsulation?

Ans:- binding of data / wrapping up of data.

Encapsulation in java is the process of wrapping up of data.

- Encapsulation is the practice of including in an object everything it needs hidden from other objects.

EX:- capsule

10) What is inheritance?

Ans:- when one object acquire all the properties and behavior of parent class.

Inheritance means that one class inherits the characteristics of another class.

This is also called a “is a” relationship.

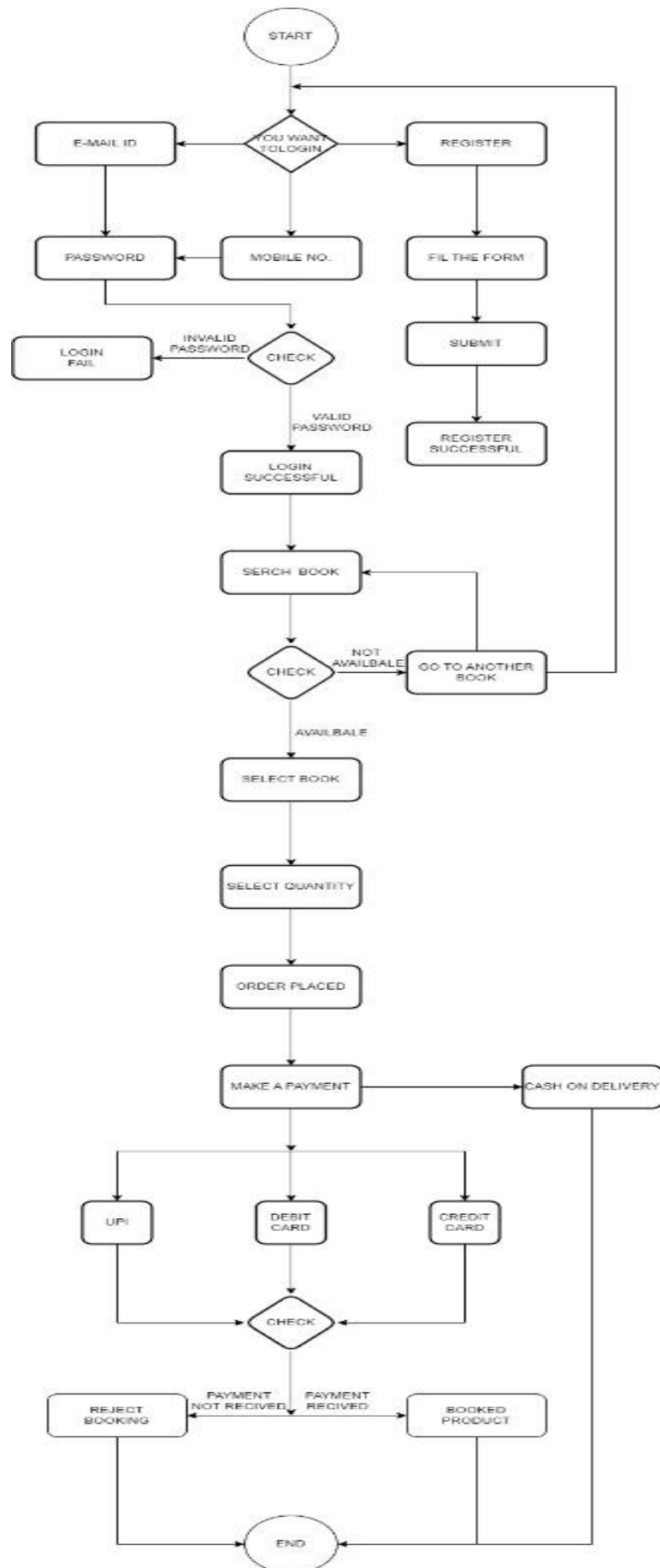
EX:-father-son

11) What is polymorphism?

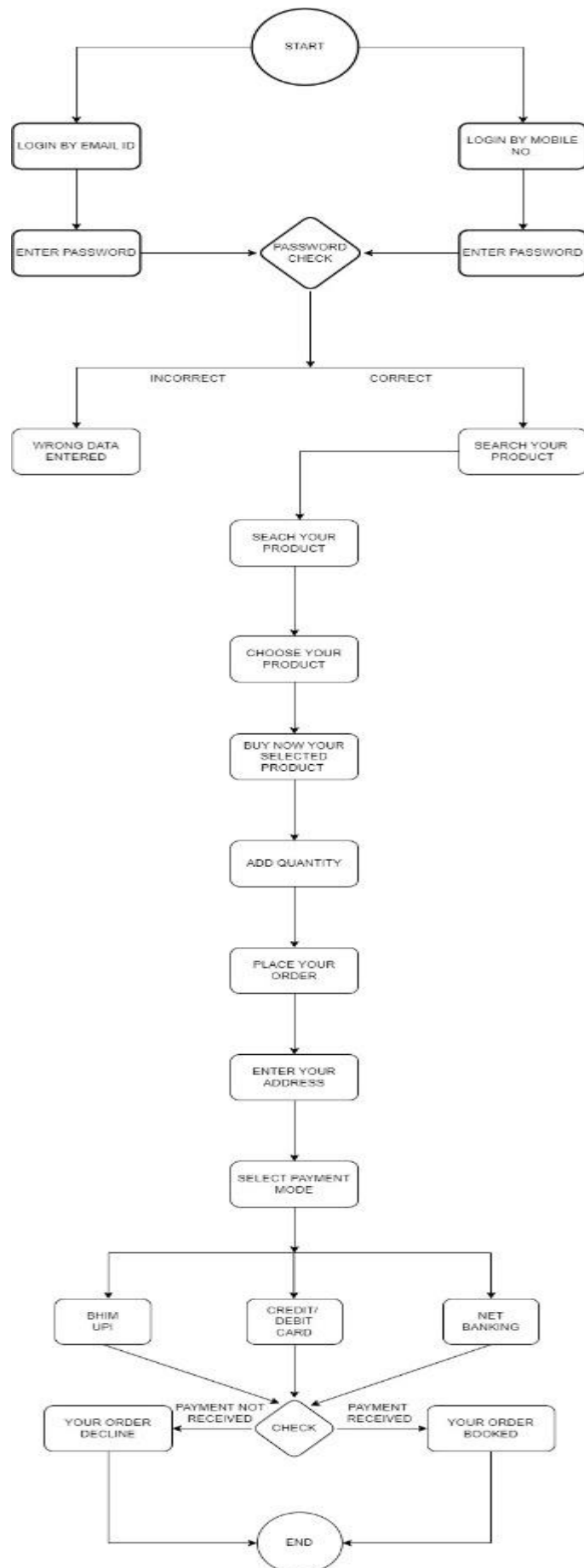
Ans:- polymorphism means “having many forms”.

- Compile time polymorphism (overloading)
- Runtime polymorphism (overriding)
- The most important aspect of an object is its behavior.
Many ways to perform anything
EX:- road ways.

12) Draw usecase on online book shopping diagram?



13) Draw usecase on online bill payment system (paytm)?



14) Write SDLC phases with basic introduction?

- **Ans:-** Requirement gathering
 - Analysis
 - Design
 - Implementation
 - Testing
 - Maintenance
 - 1 .corrective maintenance
 - 2. adaptive maintenance
 - 3. perfective maintenance
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- Requirement gathering:- the first phase of SDLC is requirement gathering customer. Here we gathered requirement of functional and non-functional requirements by customer
 - Analysis:- the second phase of SDLC is analysis of gathered requirements from customer.
 - Design:- the third phase of SDLC is design phase, on the basis of analysis of gathered requirement. In this phase the software design documents are prepared.
 - Implementation:- the forth phase of SDLC is implementation in this phase developer start the develop build by writing the code.
 - Testing:- the fifth phase of SDLC is testing, testing for giving bug free and quality product to the customer.

- Maintenance:- the sixth phase of SDLC is maintenance, the maintenance phase comes after deployment of software.

15) Explain phases of the water fall model?

Ans:- the waterfall is unrealistic for many reasons, especially

Requirements must be “frozen” too early in the life cycle

Requirements are validated too late

- Requirement gathering
- Analysis
- Designing
- Implementation
- Testing
- maintenance

➤ Pros:-simple and easy to understand and use

➤ Well understood milestones.

➤ Easy to arrange tasks.

➤ Cons:- high amounts of risk and uncertainty.

➤ It is difficult to measure progress within stages.

➤ Cannot accommodate changing requirements.

16) Write phases of spiral model?

Ans:- spiral model is very widely used in the software industry as it is in synch with the natural development process. For medium to high-risk projects.

- Planning
- Preparation
- Evaluation
- Software related products

➤ **Pros:-** allows for extensive use of prototypes
➤ Users see the system early.

➤ **Cons:-** management is more complex.
➤ Process is complex

17) Explain working methodology of agile modal and also write pros and cons?

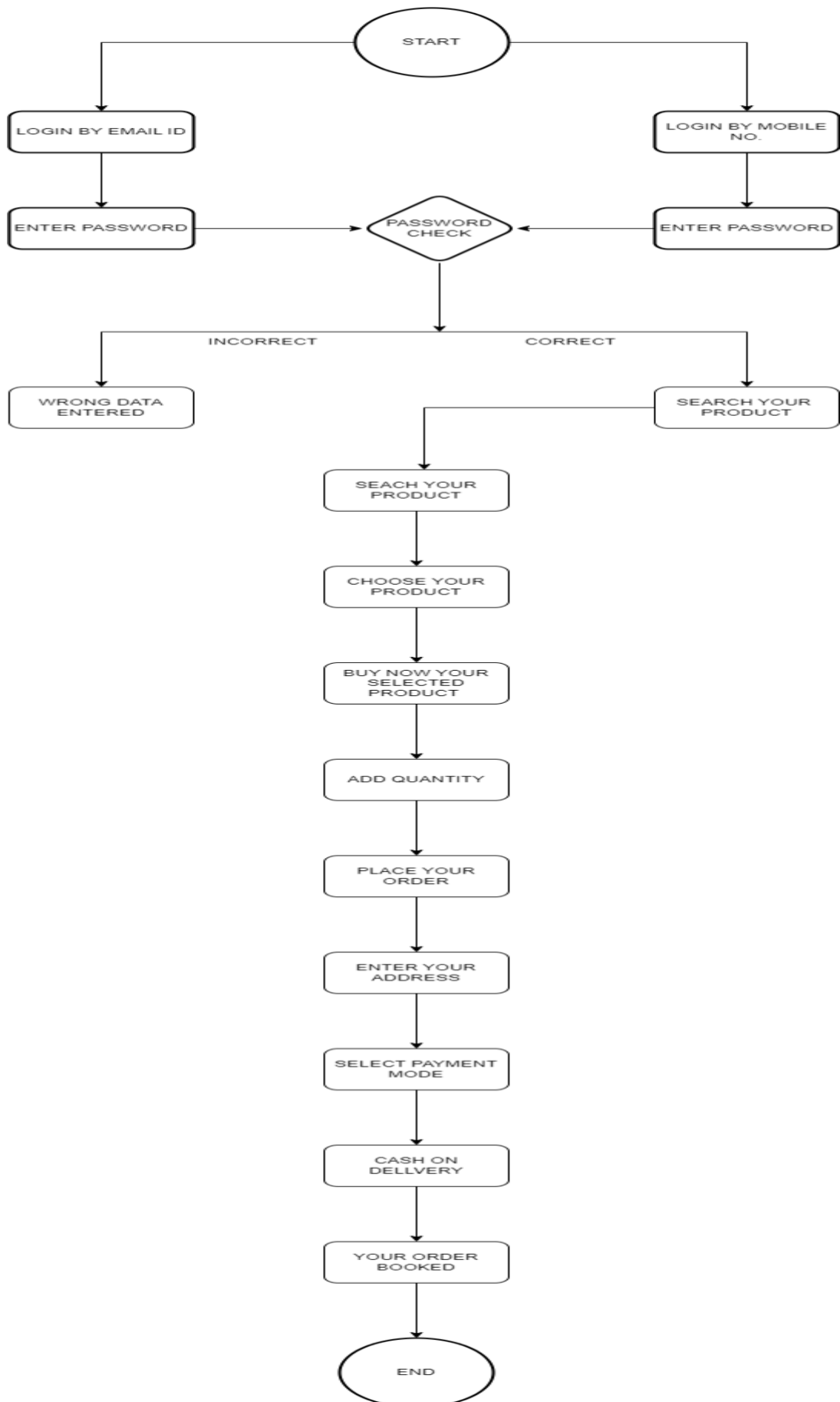
Ans:- agile methods break the product into small incremental builds.

- At the end of the iteration a working product is displayed to the customer and important stakeholders.
- These builds are provided in iterations.

➤ **Pros:-** promotes teamwork and cross training.
➤ Resource requirement are minimum.
➤ Good model for environments that change steadily.

- Little or no planning required
- **Cons**:- more risk of sustainability, maintainability and extensibility.
- There is very high individual dependency, since there is minimum documentation generated.

18) draw usecase on online shopping product using COD?



19) draw usecase on online shopping product using payment gateway.

