

## Assignment

1. What is SDLC?

Ans:- SDLC is software development life cycle flow that different stage in building quality software product.

It states the starting point and the ending point of any software development. Each phase in the development process has a define input and output

2. What is software testing ?

Ans:- Software testing is the process of finding undiscovered error in the software

3. What is the Agile methodology?

Ans:- The Agile Model is an incremental and iterative process of software development. It defines each iteration's number, duration, and scope in advance. Every iteration is considered a short "frame" in the Agile process model, which mostly lasts from two to four weeks.

Agile Model divides tasks into time boxes to provide specific functionality for the release. Each build is incremental in terms of functionality, with the final build containing all the attributes. The division of the entire project into small parts helps minimize the project risk and the overall project delivery time.

4. What is SRS?

Ans:- The production of the requirements stage of the software development process is Software Requirements Specifications. This report lays a foundation for software engineering activities and is constructing when entire requirements are elicited and analyzed. SRS is a formal report, which acts as a representation of software that enables the customers to review whether it is according to their requirements. Also, it comprises user requirements for a system as well as detailed specifications of the system requirements.

5. What is OOP?

Ans:- OOP is a object oriented programming

6. Write the basic concepts of OOPS?

Ans:- The four basic concepts of object-oriented programming are inheritance, polymorphism, abstraction and encapsulation. The following explanation of these four basic concepts can help you get better insights into object-oriented programming

7. What is the object?

Ans:- identify the function, variable, and method

8. What is class?

Ans:- class is a combination of function, variable and method

9. What is Encapsulation?

Ans:- The acts of putting various components together.

10. What is inheritance?

Ans:- The acts deriving new things from existing things.

11. What is polymorphism?

Ans:- polymorphism is a one entity many forms.

12. Write SDCL phase with basic introduction

Ans:- SDLC is software development life cycle flow that different stage in building quality software product.

It states the starting point and the ending point of any software development. Each phase in the development process has a define input and output

1) Requirement and analysis

- all the relevant information is collected from the customer to develop a product as per their expectation. Any ambiguities must be resolved in this phase only.

2) Design

- all the relevant information is collected from the customer to develop a product as per their expectation. Any ambiguities must be resolved in this phase only.

3) Coding

- Coding starts once the developer gets the Design document. The Software design is translated into source code. All the components of the software are implemented in this phase.

4) Testing

- Testing starts once the coding is complete and the modules are released for testing. In this phase, the developed software is tested thoroughly and any defects found are assigned to developers to get them fixed.

5) Maintenance

- if any issue comes up and needs to be fixed or any enhancement is to be done is taken care by the developers.

13. Explain the phase of waterfall model?

Ans:- Waterfall Model is a sequential model that divides software development into pre-defined phases. Each phase must be completed before the next phase can begin with no overlap between the phases. Each phase is designed for performing specific activity during the SDLC phase.

- Advantages

- Before the next phase of development, each phase must be completed
- Suited for smaller projects where requirements are well defined

- Disadvantages

- Error can be fixed only during the phase
- It is not desirable for complex project where requirement changes frequently

14. Write the phase phase of spiral model?

Ans:- Spiral Model is a risk-driven software development process model. It is also known as a meta model because a combination of waterfall model and iterative model. A Spiral model in software engineering is used when project is large this model When risk and costs evaluation is important

- Advantages
  - Risk handling
  - Large projects
  - Customer satisfaction
- Disadvantages
  - Complex
  - Expensive

15. Write Agile manifesto principles

- Frequent delivery
- Face to face communication
- Time saving
- Requirement Change
- Less documentation
- Maintenance problem

16. Explain working methodology of Agile Model and also write pros and cons?

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- Pros
  - Frequent delivery
  - Face to face communication
  - Requirement Change
  - Time
- Cons
  - Less documentation
  - Maintenance problem

