

1. What is SDLC ?

Answer : SDLC is a series of step or phase that provide the model of development is the life cycle management for the piece of software or application.

2.What is Software Testing ?

Answer : Software testing is process used to identify completeness, correctness and quality of developed computer software.

3.What is Object ?

Answer : An Object is anything to which a concept applies. That is both data and function that operate on data are bundled as a unit called as object.

4.What is Class ?

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

5.What is encapsulation ?

Answer : Encapsulation is the practice of including in an object everything it needs hidden from other objects. The internal state is usually not accessible by other objects.

6.What is inheritance ?

Answer : Inheritance means that one class inherits the characteristics of another class. This is also called a “is a” relationship.

7. What is polymorphism ?

Answer : Polymorphism means “having many forms”. It allows different objects to respond to the same message in different ways, the response specific to the type of the object.

8. Write Basic Concepts of oops ?

Answer : Object, Class , encapsulation , inheritance, polymorphism (Overloading, Overriding), Abstraction.

9. What is OOPS ?

Answer : Identifying objects and assigning responsibilities to these objects. Objects communicate to other objects by sending messages. Messages are received by the methods of an object.

10. What is agile methodology ?

Answer : 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.

11. What is SRS ?

Answer : A software requirements specification (SRS) is a document that captures complete description about how the system is expected to perform. It is usually signed off at the end of requirements engineering phase.

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

Answer :

Pros :

- Is a very realistic approach to software development.
- Promotes teamwork and cross training.
- Functionality can be developed rapidly and demonstrated.
- Resource requirements are minimum.
- Suitable for fixed or changing requirements.
- Delivers early partial working solutions.
- Good model for environments that change steadily.

- Minimal rules, documentation easily employed.
- Enables concurrent development and delivery within an overall planned context.
- Little or no planning required.
- Easy to manage.
- Gives flexibility to developers.

Cons :

- Not suitable for handling complex dependencies.
- More risk of sustainability, maintainability and extensibility.
- An overall plan, an agile leader and agile PM practice is a must without which it will not work.
- Strict delivery management dictates the scope, functionality to be delivered, and adjustments to meet the deadlines.
- Depends heavily on customer interaction, so if customer is not clear, team can be driven in the wrong direction.
- There is very high individual dependency, since there is minimum documentation generated.
- Transfer of technology to new team members may be quite challenging due to lack of documentation.

13. Write phases of spiral model ?

Answer :

1. Risk Analysis.
2. Engineering.
3. Customer Evaluation.
4. Planning.

14. Write agile manifesto principles ?

Answer :

1. Individuals and interactions over processes and tools.

2. Working software over comprehensive documentation.
3. Customer collaboration over contract negotiation.
4. Responding to change over following a plan.

15.Explain Phases of the waterfall model ?

Answer :

1. Verification Phase:

- Business Requirement Analysis: This is the first phase in the development cycle where the product requirements are understood from the customer perspective. This phase involves detailed communication with the customer to understand his expectations and exact requirement. This is a very important activity and need to be managed well, as most of the customers are not sure about what exactly they need.
- System Design (System Requirement): Once you have the clear and detailed product requirements, it's time to design the complete system. System design would comprise of understanding and detailing the complete hardware and communication setup for the product under development. System test plan is developed based on the system design. Doing this at an earlier stage leaves more time for actual test execution later.
- Module Design (Program Specification): In this phase the detailed internal design for all the system modules is specified, referred to as Low Level Design LLD . It is important that the design is compatible with the other modules in the system architecture and the other external systems. Unit tests are an essential part of any development process and helps eliminate the maximum faults and errors at a very early stage. Unit tests can be designed at this stage based on the internal module designs.
- Architectural Design (Technical Specification): Architectural specifications are understood and designed in this phase. Usually more than one technical approach is proposed and based on the technical and financial feasibility the final decision is taken. System design is broken down further into modules taking up different functionality. This is also referred to as High Level Design (HLD).The data transfer and communication between the internal modules and with the outside world (other systems) is clearly understood and defined in this stage.