

1. What is SDLC ?

- > software development life cycle is process of software organisation who design, develop, test and deliver software in high quality.
- > SDLC is some phases like planning, design, test, implement and maintenance. SDLC who work in this phases.

2. What is software testing?

- > Software testing is process to check the software that work properly. Software testing is to find defects and bugs and deliver software in high quality.

3. What is agile methodology ?

- > Agile model is develop software in small parts and deliver than getting feedback .  
If software is develop any change by customer so agile model allow changes.

4. What is SRS ?

- > Software requirements specification is process of functional and non functional requirements also improve software development and software testing .

5. What is OOP ?

- > Object oriented programming is object assign responsibilities and object communication with other object . Object programming is program by object also code date that work in phase like encapsulation, abstraction, polymorphism and class etc.

6. Write a basic concepts of oop

- > Object oriented programming basic concepts is object, class, abstraction,

encapsulation, inheritance and polymorphism

7. What is object?

> If all entity which has own behaviour that is object .

Ex: pen, paper, colour, brand

8. What is class ?

> Class is collection of objects. All object collection called class.

Ex: human body

9. What is encapsulation?

> Wrapping up the data and binding the data and hiding internal details from others. This is very safe and secure.

10. What is inheritance?

> Inheritance is process that child who get all properties for parents side automatically that called inheritance.

Ex: father and son

11. What is polymorphism?

> Polymorphism is like one man name is same but his behaviour is change by any situations .

12. write SDLC phases with basic introduction.

> SDLC work in phases like

> Requirements gathering

Requirements gathering is starting before developing project. Requirements gathering first step is collect customer requirement and instructions that start

project work.

There are three types of requirements like customer requirement, functional requirements, non functional requirements.

#### > Analysis

Analysis is phase for identifying all of risk and solution. This phase is also work to how much time to complete project and analysis for budget .

#### > Design

Design team create the system architecture and design the software. The architecture team also convert the scenario in test plan .

#### > Implementation

The developer start code for software and also who design software. The developer build software code and manuals .

#### > Testing

The software tester who describe the defect and bugs for their software. Software tester who find all defect than software is in better quality.

#### > Maintenance

Maintenance is a phase of SDLC . The software in maintenance so fix some issues and any change are implement and try to change something in software. Maintenance phase also three phase this called corrective, adaptive and perfective.

This is phases of SDLC.

13. Explain phases of waterfall model

> Water fall model is phase.

> Requirements analysis

Requirements gathering is starting before developing project. Requirements gathering first step is collect customer requirement and instructions that start project work.

Also analysis the project risk that how much project time if project long so how much cost and risk . This phases analysis risk also.

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14. Write a phase of spiral model .

- > Spiral model has four phase is like planning, customer evaluation, risk analysis and engineering.
- > Planning:- planning phase start with indentifying objective and requirements. This phase collect all requirements and plan to build software.
- > Risk analysis:- the risk analysis phase specially build for risk analysis. The project was long and how much time it take and analysis risk. Risk is high or low everything analysis.
- > Engineering:- risk analysis phase complete and developers role are start. Developer design and make code for build software.
- > Customer evaluation:- software deliver for customer and customer check software than getting feedback. If his requirements are change so spiral start again for all phases. If customer was satisfied so spiral stop.

15. Write agile manifesto principles.

- > If requirement change in midway don't fear because agile is build for changes.
- > If you deliver high quality of software than customers are always satisfy.
- >Face to face communication with customer.
- > Customer feedback is very important so always deliver high quality of software.
- >Agile is high discipline model.agile model first focus is to deliver high quality

software.

- > Developer and tester who talk to each other is very important. Is it very important for software quality.

- > If all team are working well and follow all requirements so trust your team .

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

- > Agile model convert large project to small project and deliver them. If requirement are change than getting feedback by customer. a requirements are change so enhancing requirement and all change complete than re deliver software.

Agile model some good or bad things .

Pros:

- > Agile model frequently deliver is possible.

- > Agile model also good for face to face communication with client and check their requirements.

- > If requirement are change so agile is allow to change. If agile in developer phase.

- > Agile is very discipline model who always focus on software quality.

- > Agile model deliver or software again and again. If their customers satisfy than stop.

> Agile resources are very lower .

> Agile model easy to manage and understand.

Cons -

> Agile less focus in document and maintenance.

> Agile work we don't know how much time and budget .

> Agile model project never fix deadline.

> Agile model start work as long term so it so much costly for company.

> Agile model works better for project if there requirements are fix.

