

#Software Testing Assignment#

Module -1 (Fundamental)

1)What is SDLC?

-software development life cycle is a process used by software industry to design,develop and test software.

There are the different phases in SDLC

- 1.requirement analysis
- 2.project planning
- 3.design
- 4.development
- 5.testing
- 6.maintenance

2)What is software testing?

-software testing is an activity to detect and identify the defects of the software program.

3)What is agile methodology?

-Agile methodology is a project management framework that breaks projects down into several dynamic phases, commonly known as sprint.

4)What is SRS?

-A software requirements specification is a document that describes what the software will do and how it will be expected to perform.

-it also describes the functionality the product needs to fulfill the needs of all stakeholders.

5)What is oops ?

-object oriented programming is a computer programming model that organizes software design around data or objects.

6) Write basic concepts of oops.

- 1- object
- 2- class
- 3- Encapsulation
- 4- Inheritance
- 5- polymorphism
- 6- Abstraction

7)What is object?

-They are the units of code,that are eventually derived from the process.

8)What is class?

-class is the group of object .it is a template definition of methods and variables in a particular kind of object.

9)What is Encapsulation?

-it describes the bundling of data and methods operating on this data into one unit .

10)What is Inheritance?

-In object oriented programming when a class derives from another class is Inheritance.

-the child class will inherit all the public and protected properties and methods from parent class.

11)What is polymorphism?

-it is the core concept of oops and describes situations in which something occurs in several different forms.

-it has two methods:-

1.overloading :- In method overloading, multiple methods having same name can appear in a class but with different signature

2.overriding:-In method overriding,there is one method and one parameter in different class.

12)Write SDLC phases with basic introduction.

- There are the different phases in SDLC

1.requirement analysis :- we have to collect the requirements from the customer

2.project planning:- All the planning about the project will be on meet before starting project like design,develop,test,cost,time etc

3.design:- the designers will design the software

4.development:- software developers will develop the software by writing different type of programs by using different type of language

5.testing:- Before delivering the software to the customer we have to test it so we have to conduct a different type of testing like function, non-functional, performance, security as part of testing phase

6.maintenance:- after that finally we deliver the software and maintenance will be start so maintenance in the sense we deploy the software in customer environment and they start using the software

13) Explain phases of the waterfall model.

-the first and initial model they have started with waterfall model so very old and very traditional model so waterfall model is also called as a linear model.

This is one of the model which is comes under SDLC and whatever phases we have seen in SDLC the same phases will be there but the approach will be different.

It's phases are:-

1-requirement analysis:-we have to collect the requirements from the customer.

2-system design:-the designers will design the software

3-development :-software developers will develop the software by writing different type of programs by using different type of language

4-testing:-Before delivering the software to the customer we have to test it so we have to conduct a different type of testing like function, non-functional, performance, security as part of testing phase

5-deployment :-once the functional and non functional testing is done , the product is deployed in the customer environment or release into the market.

6-maintenance :-after that finally we deliver the software and maintenance will be start so maintenance in the sense we deploy the software in customer environment and they start using the software

14) Write phases of spiral model.

-there are four phases in spiral model

1.planning:- where the scope of project is determined and a plan is created for the next iteration of the spiral.

2.Risk Analysis:- where the risk associated with the project are identified and evaluated.

3.Engineering:- the software is developed based on the requirements gathered in the previous iteration.

4.Evaluation:- the software is evaluated to determine if it meets customer's requirements and if it is of high quality.

15) Write Agile manifesto principles.

-customer no need to wait for long time

-we develop, test and release piece of software to the customer with few number of features

-we can accept/accomodate requirement changes

-cooperation with staff

-better communication

-stable work environment

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

-individuals and interaction over process and tools

-working software over comprehensive documentation

-customer collaboration over contract negotiation

-responding to change over following plan

Pros :-

-requirement changes are allowed in any stage of development

-we can accommodate requirement changes in the middle of development

-release will be very fast

-customer no need to wait for long time

-good communication between team

-it is very easy model to adopt

Cons:-

-less focus on design and documentation since we deliver software very fast

