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1.What is software? What is software engineering?

Software: s/w is the language of computer.

- is a collection of computer programs and related data that provide the instructions for

telling a computer what to do and how to do it.

- Just like human language.

- 3 main groups depending on their use and application.

1) System software / operating system.

2) Application s/w

3) Programming language

Software: a Program or set of Programs containing instructions which provide desired

functionality.

Engineering: Process of designing and building something that ensure particular purpose.

Software Engineering:

―Software engineering is the art of developing quality software on time and within

budget.‖

Software Engineering is a systematic approach to the design, development, operation,

and maintenance of a software system.

2.Explain types of software

- 3 main groups depending on their use and application.

1) System software / operating system.

2) Application s/w

3) Programming language

1) System s/w or OS:

- provides the basic functions for computer usage and helps to run the computer hardware

and system.

- is the s/w used by the computer to translate inputs from various sources into a language

which a machine can understand.

- Basically OS coordinates the different hardware components of a computer.

- Ex. Linux, window, macOS, Android, iOS

2) Application s/w:

- is the general designation of computer programs for performing user tasks.

- Types of application s/w

1) Mobile app:

- Application that run on mobile

- Ex. Instagram, facebook, etc

2) Desktop app:

- That run stand-alone in a desktop or laptop computer.

- Ex. Microsoft office suite which includes Word, Excel and PowerPoint.

- Ex. Outlook for email, and firefox, Google Chrome, Mozilla are the web browser.

- Anti-virus is an application and so is the media player.

3) Web app:

- That run on a web browser

- ex. google.com, facebook.com, etc

Programming s/w:

- is the process of designing, writing, testing, debugging, and maintaining the source code

of computer programs.

- This s/w is pawritten in a programming language.

- The purpose of programming is to create a program that exhibits a certaindesired

behavior.

3.What is SDLC? Explain each phase of SDLC

Software Development Life Cycle

SDLC is a structure imposed on the development of a software product that defines the

process for planning, implementation, testing, documentation, deployment, and ongoing

maintenance and support. There are a number of different development models.

A Software Development Life Cycle is essentially a series of steps, or phases, that

provide a model for the development and lifecycle management of an application or piece

of software.

The methodology within the SDLC process can vary across industries and organizations,

but standards such as ISO/IEC 12207 represent processes that establish a lifecycle for

software, and provide a mode for the development, acquisition, and configuration of

software systems.

‎SDLC Phases

Requirements Collection/Gathering = Establish Customer Needs

Analysis = Model And Specify the requirements- ―What‖

Design = Model And Specify a Solution – ―Why‖

Implementation = Construct a Solution In Software

Testing = Validate the solution against the requirements

Maintenance = Repair defects and adapt the solution to the new

requirements

4.What is DFD? Create a DFD diagram on Flipkart

A Data Flow Diagram (DFD) is a traditional way to visualize the information flows within a system. A neat and clear DFD can depict a good amount of the system requirements graphically. It can be manual, automated, or a combination of both. It shows how information enters and leaves the system, what changes the information and where information is stored. The purpose of a DFD is to show the scope and boundaries of a system as a whole. It may be used as a communications tool between a systems analyst and any person who plays a part in the system that acts as the starting point for redesigning a system.



5. what is flow chart ? create a flowchart to make addition of two number

A flow chart is a picture of the separate steps of a process in sequential order.



6.What is Use case Diagram? Create a use-case on bill payment on paytm

