MODULE: 1 (SDLC)

1. • What is software? What is software engineering?

Ans. Software is considered to be collection of executable programming code, associated libraries and documentations. Software, when made for a specific requirement is called software product. Engineering on the other hand, is all about developing products, using well-defined, scientific principles and methods.

1. Explain types of software?

Ans. **Examples and types of software**

* Application software. The most common type of software, application software is a computer software package that performs a specific function for a user, or in some cases, for another application. ...
* System software. ... These software programs are designed to run a computer's application programs and hardware. - - System software coordinates the activities and functions of the hardware and software. - It controls the operations of the computer hardware and provides an environment or platform for all the other types of software to work in.
* Driver software. ... Also known as device drivers, this software is often considered a type of system software. - Device drivers control the devices and peripherals connected to a computer, enabling them to perform their specific tasks. - Every device that is connected to a computer needs at least one device driver to function. - Examples include software that comes with any nonstandard hardware, including special game controllers, as well as the software that enables standard hardware, such as USB storage devices, keyboards, headphones and printers .

Example: Audio Driver,Video Driver etc..

* Middleware. ... The term middleware describes software that mediates between application and system software or between two different kinds of application software. For example, middleware enables Microsoft Windows to talk to Excel and Word. - It is also used to send a remote work request from an application in a computer that has one kind of OS, to an application in a computer with a different OS. It also enables newer applications to work with legacy ones.

Example: database middleware,application server middleware

* Programming software. Computer programmers use programming software to write code. Programming software and programming tools enable developers to develop, write, test and debug other software programs. - Examples of programming software include assemblers, compilers, debuggers and interpreters.

Examples : Turbo c,Eclipse,Sublime etc..

1. • What is SDLC? Explain each phase of SDLC ?

Ans. SDLC consists of various phases, such as planning, design, coding, testing, and deployment, while STLC has different phases, such as test planning, test case development, test execution, and test closure.

1) Planning: The first phase of the SDLC is the project planning stage where you are gathering business requirements from your client or stakeholders. This phase is when you evaluate the feasibility of creating the product, revenue potential, the cost of production, the needs of the end-users, etc.

2) Analysis: This phase formally defines the detailed functional user requirements using high-level requirements identified in the Initiation and Feasibility Phases. The requirements are defined in this phase to a level of detail sufficient for systems design to proceed.

3) Design: In SDLC, the design phase is a stage where software developers define the technical details of the product. Depending on the project, these details can include screen designs, databases, sketches, system interfaces, and prototypes. Clients use these details to make final product design choices.

4) Implementation: This phase is initiated after the system has been tested and accepted by the user. In this phase, the system is installed to support the intended business functions. System performance is compared to performance objectives established during the planning phase.

5) Testing and integration: Integration testing verifies the compatibility, reliability, and performance of the integrated system, and identifies any integration issues or defects. System testing evaluates the compliance, functionality, usability, and security of the system to ensure that it meets specifications and requirements.

6) Maintenance: The maintenance phase in the software development process is where the software is monitored to ensure it continues to function as it was designed to, and repairs or upgrades are performed as needed. After the software is released into production, updates or upgrades will need to be made.

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

Ans. DFD is the abbreviation for Data Flow Diagram. The flow of data of a system or a process is represented by DFD. It also gives insight into the inputs and outputs of each entity and the process itself. DFD does not have control flow and no lo ops or decision rules are present

flipkart dfd……

user

Request to login check detail

order mst

response reply

request to view

order mst

reply

update password

order mst

reply

1. What is Flow chart? Create a flowchart to make addition of two numbers?

Ans. A flowchart is a diagram depicting a process, a system or a computer algorithm. It is a diagrammatic representation of the solution to a given problem but, more importantly, it provides a breakdown of the essential steps to solving the problem.

start

Inpu from user number 1

Inpu from user number 1

Process sum=a+b

Print sum

end

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

Ans. Class diagrams are the blueprints of your system or subsystem. You can use class diagrams to model the objects that make up the system, to display the relationships between the objects, and to describe what those objects do and the services that they provide. Class diagrams are useful in many stages of system design.

