What is software?

Software is a set of instructions, data or programs used to operate computers and execute specific tasks.

What is software engineering?

Software engineering is the process of developing,

Testing and deploying computer applications to solve real-world problems by adhering to a set of engineering principles and best practices.

Types of software?

There are 5 type of software

* Application software.
* System software.
* Driver software.
* Middleware.
* Programming software.
* Firmware
* Shareware

Application software: application software is a computer software package that performs a specific function directly for an end user or, in some cases, for another application.

System software: System software is a type of computer program that is designed to run a computer's hardware and application programs.

Driver software: A driver software is a set of files that tells a piece of hardware how to function by communicating with a computer's operating system.

Middleware software: Middleware is software that lies between an operating system and the applications running on it.

Programming software: Programming software is a tool for creating computer code that allows computer software to operate.

What is SDLC?

SDLC is the cost-effective and time-efficient process that development teams use to design and build high-quality software.

1. Requirement Gathering

During this phase, all the relevant information is collected from the customer to develop a product as per their expectation. Any ambiguities must be resolved in this phase only.

2. Analysis

Business analyst and Project Manager set up a meeting with the customer to gather all the information like what the customer wants to build, who will be the end-user, what is the purpose of the product. Before building a product a core understanding or knowledge of the product is very important.

3. Design

In this phase, the requirement gathered in the SRS document is used as an input and software architecture that is used for implementing system development is derived.

3. Implementation

Implementation/Coding starts once the developer gets the Design document. The Software design is translated into source code. All the components of the software are implemented in this phase.

4. Testing

Testing starts once the coding is complete and the modules are released for testing. In this phase, the developed software is tested thoroughly and any defects found are assigned to developers to get them fixed.

Retesting, regression testing is done until the point at which the software is as per the customer’s expectation. Testers refer SRS document to make sure that the software is as per the customer’s standard.

6. Maintenance

After the deployment of a product on the production environment, maintenance of the product i.e. if any issue comes up and needs to be fixed or any enhancement is to be done is taken care by the developers.

What is DFD?

DFD is a graphical or visual representation using a standardized set of symbols and notations to describe a business's operations through data movement.

What is flowchart?

A flowchart is a diagram depicting a process, a system or a computer algorithm.

What is use case diagram?

Use-case diagrams describe the high-level functions and scope of a system. These diagrams also identify the interactions between the system and its actors.