# Software Engineering Assignment Module - 1

(Overview Of IT Industry)

# Q1.What is software? What is software engineering?

**Ans:-** Software is a set of instructions that tell a computer how to perform specific tasks. Software Engineering is a branch of computer science the process of developing, testing and deploying computer application to solve the real world problems.

# Q2. Explain types of software.

**Ans:-** The various categories of software below are the most common software.

#### 1. System Software :-

These software programs are designed to run a computers application programs and hardware. System software coordinates the activities and functions of the hardware and software.

#### 2. Application Software: -

Application Software is a computer software package that perform a specific function for a user.

#### 3. Device Software:-

Driver software is also known as device driver, this software is often considered a type of system software. Device drivers control the devices and peripherals connected to a computer, helping them to perform their specific tasks.

# Q3. What is SDLC? Explain each phase of SDLC.

**Ans:-** The Software Development Life Cycle is a structured process used for developing software applications.

- 1. Analysis
- 2. Planning
- 3. Designing
- 4. Development / Implementation
- 5. Deploy / Testing
- 6. Maintain

# 1.Analysis:-

Analysis seeks to identify and record the precise requirement of the final user.

# 2.Planning:-

Planning involve defining the software purpose and scope.

# 3.Designing:-

The Design is all about building the framework. The development team is responsible for software engineering and outlines the software functionality and aesthetic.

#### 4.Development / Implementation :-

Development aims to develop software that is functional, efficient, and user-friendly.

#### 5.Deploy / Testing :-

Testing involves a thorough examination of the software for any bugs or glitches. After crafting a product with precision, it's time to Deploy it to the users by pushing to the production environment.

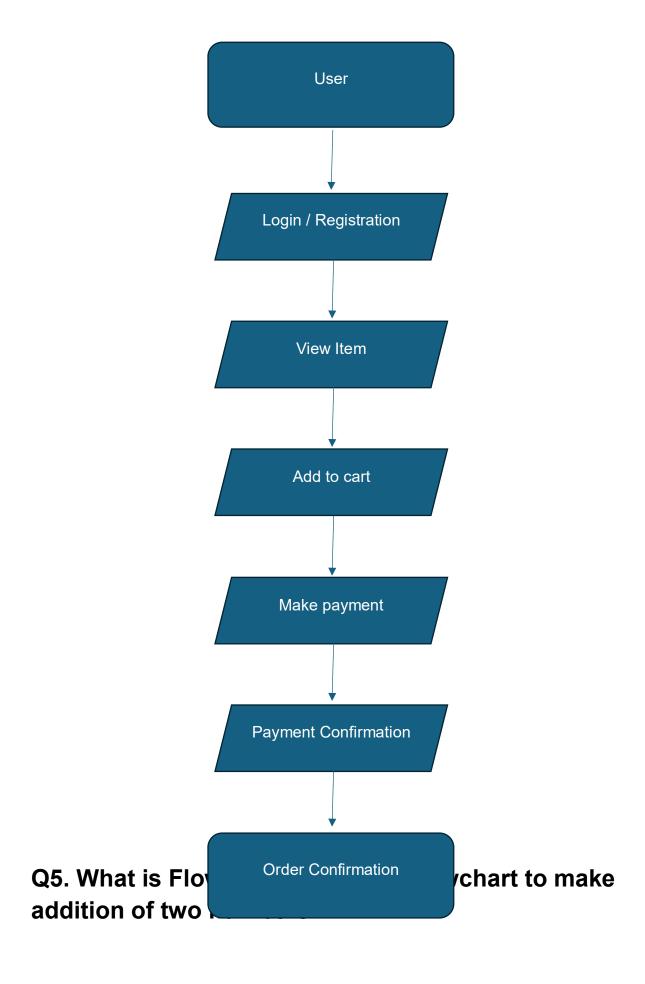
#### 6. Maintain:-

This adaptation involves responding to user feedback, resolving unexpected issues, and upgrading the software based on users' evolving requirements.

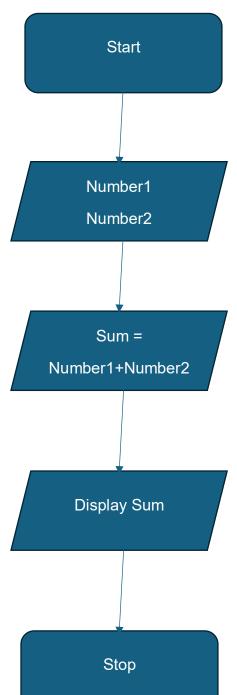
# 4. What is DFD? Create a DFD diagram on Flipkart.

**Ans**:- Data Flow Diagram is a graphical representation of the flow of data within a system.

# **DFD diagram :-**



**Ans:-** A Flow chart is a diagram that shows the steps and sequences of a process or workflow.



6. What is Use case Diagram: Oreate a use-case on bill payment on Paytm.

**Ans:-** A Use Case Diagram is a vital tool in system design, it provides a visual representation of how users interact with a system.

| Case Diagram:- |   |                      |
|----------------|---|----------------------|
| User           | > | Login / Registration |
| Туре           |   | Payment              |
|                |   | Bill Detail          |
| <br>Method     |   | Payment              |
| Gateway        |   | Payment              |
| <br>Process    |   | Payment              |

|              | Payment |
|--------------|---------|
| Confirmation |         |
|              |         |