Achal

Module 1: Over view of It industry

●What is software? What is software engineering?

Software: - The Software is the set of data which used to operate the task.

Software Engineering: - Software Engineering involves the design, development, testing & maintenance of software.

●Explain types of software

There are 3 types of software: -

1.System Software: - System software is the type of software that is designed to provide a platform to other software.

2.Application Software: - This software helps users to perform tasks & activity on their devices.

3.Utility Software: - Utility software is a program or tool to perform task to enhance, productivity, efficiency, funcality or maintenance of a device.

●What is SDLC? Explain each phase of SDLC

The full form of SDLC is Software Development life cycle. SDLC is the structured process of development planning to deployment. Its divided in 6 process they are: -

1.Planning: - This is the 1st part and in this the team analyses the cost estimation time & the software, hardware needed for the project

2. Analysis: - This is the 2nd part and in this the team gather the information how to client need the product to be & the development team then will analyze the requirement keeping the design & code od software in mind.

3.Design: - This is the 3rd part in which the development of prototype, module logic for code.

4.Coding/Implementation: - This is the 4th part in which the development of the client product start, development team turn the project into part and make the code as per the requirement of the project.

5.Testing: - This is the 5th part in which the testing of the program made by the developer team is tested to check any errors, any major issue, any security issue. There are 2 type of testing: -

1. Manual Testing: - In this testing process the test is perform manually without any tool.

2. Automation Testing: - In this testing process the test is perform with the help of automation software using frame work

●What is DFD? Create a DFD diagram on Flipkart

The Data flow diagram is a graphical representation using a set of symbol & notation to describe how the business is operated.

DFD Diagram on Flipkart
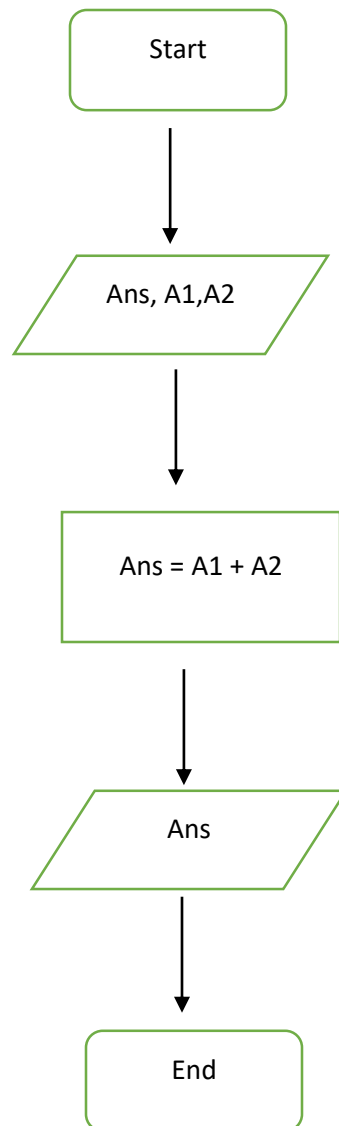
Start → Customer

Product Search → Redeem points

 Payment Process → Payment Gateway

Order Placed → Order accepted

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

Flow Chart is the diagram that represent the workflow of the program:

Flow chart of addition of 2 number: -

```
          ┌──────────────┐
          │    Start     │
          └──────────────┘
                 │
                 ▼
          ╱──────────────╱
         ╱  Ans, A1,A2  ╱
        ╱──────────────╱
                 │
                 ▼
          ┌──────────────┐
          │ Ans = A1 + A2│
          └──────────────┘
                 │
                 ▼
          ╱──────────────╱
         ╱     Ans      ╱
        ╱──────────────╱
                 │
                 ▼
          ┌──────────────┐
          │     End      │
          └──────────────┘
```

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

A use case diagram is a visual representation of the process how user interact with a system.