level 1:

Software Engimeering Assignment

module -1

SE -- Over view of IT Industry

1. what is software ? what is software engineering ?

Ans1.software like a set of instructions or a recipe for a computer. Just like a recipe tells you how to make a cake, software tells the computer how to do different tasks.

For example,

So, software is like the brain of the computer that decides what to do and how to do it, while the computer itself is like the body that carries out those instructions.o, software is like the brain of the computer that decides what to do and how to do it, while the computer itself is like the body that carries out those instructions.

Software engineering is like being a builder, but instead of constructing houses or bridges, you're building software. It's about designing, creating, and maintaining software in a way that makes sure it works well, is reliable, and can be easily fixed or updated if needed.

2. explain types of software ?

Ans2. (1)Operating System (OS): This is like the boss of your computer. It helps everything run smoothly. Examples are Windows, macOS, and Linux. It's like the foundation of a house—everything else is built on top of it.

(2)Applications: These are the tools or toys you use to do specific things. For example:

-Games: These are for fun and entertainment, like Candy Crush or Minecraft.

(3)Utilities: These are special tools that help manage and fix your computer. For example:

Antivirus Software: This helps protect your computer

from viruses, like a security guard.

Backup Software: This helps keep copies of your important files, like a safety net for your data.

(4)Development Software: These are tools for people who make software. For example:

Code Editors (like Visual Studio Code or Sublime Text): These help write and edit the code that makes software work.

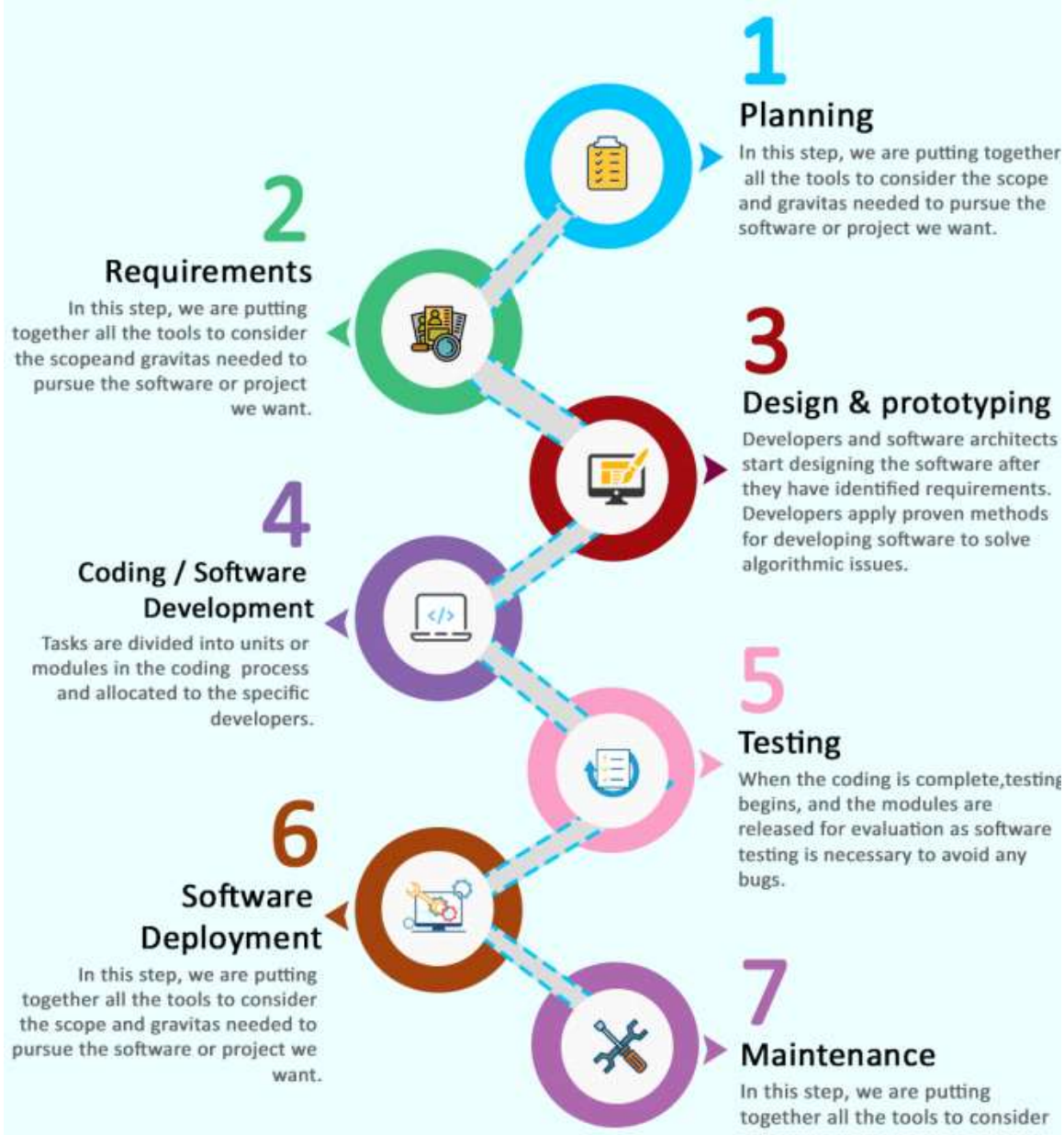
Integrated Development Environments (IDEs): These are like a super toolkit for developers, combining many tools into one place to help create software.

(5)System Software: This includes the OS and other programs that help the hardware of your computer work properly. It's like the instructions that help all the different parts of your computer talk to each other.

3. what is SDLC ? Explain each phase od SDLC ?

Ans3. SDLC stands for Software Development Life Cycle. It's a process used to design, develop, and maintain software systems. The phases of SDLC are:

7 Stage of Software Development Life Cycle



1 Planning

In this step, we are putting together all the tools to consider the scope and gravitas needed to pursue the software or project we want.

2 Requirements

In this step, we are putting together all the tools to consider the scopeand gravitas needed to pursue the software or project we want.

3 Design & prototyping

Developers and software architects start designing the software after they have identified requirements. Developers apply proven methods for developing software to solve algorithmic issues.

4 Coding / Software Development

Tasks are divided into units or modules in the coding process and allocated to the specific developers.

5 Testing

When the coding is complete,testing begins, and the modules are released for evaluation as software testing is necessary to avoid any bugs.

6 Software Deployment

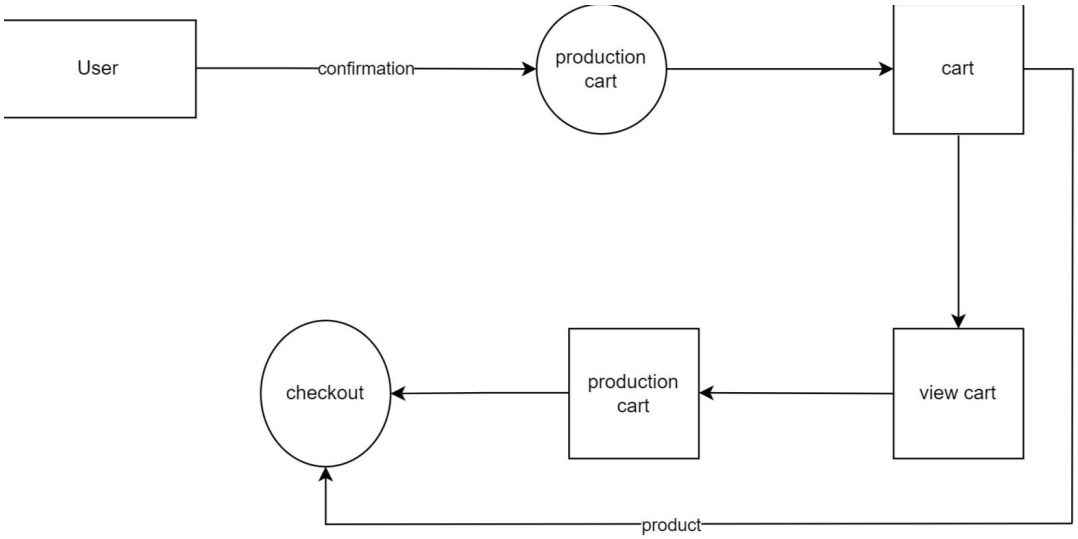
In this step, we are putting together all the tools to consider the scope and gravitas needed to pursue the software or project we want.

7 Maintenance

In this step, we are putting together all the tools to consider the scope and gravitas needed to pursue the software or project we want.

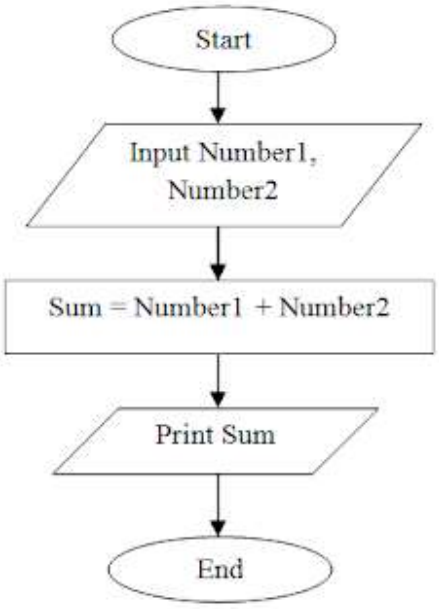
Q.4 What is DFD? Create a DFD diagram on flipkart.

Data Flow Diagram (DFD) represents the flow of data within information systems. Data Flow Diagrams (DFD) provide a graphical representation of the data flow of a system that can be understood by both technical and non-technical users. The models enable software engineers, customers, and users to work together effectively during the analysis and specification of requirements.



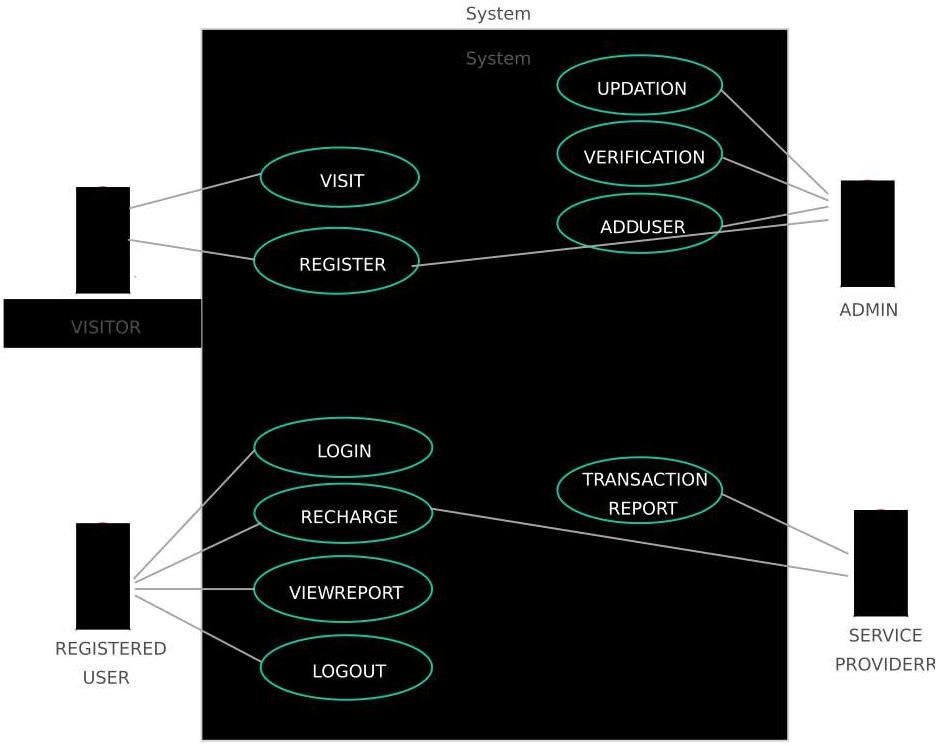
Q.5 What is a flowchart? Create a flowchart to make addition of two numbers.

Flowchart is a graphical representation of an algorithm. Programmers often use it as a program-planning tool to solve a problem. It makes use of symbols which are connected among them to indicate the flow of information and processing.



Q.6 What is Use Case Diagram? Create a use-case on bill payment on Paytm.

A Use Case Diagram is a vital tool in system design, it provides a visual representation of how users interact with a system. It serves as a blueprint for understanding the functional requirements of a system from a user's perspective, aiding in the communication between stakeholders and guiding the development process.


System
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REGISTER
VISITOR
ADMIN
LOGIN
RECHARGE
VIEWREPORT
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TRANSACTION
REPORT
REGISTERED
USER
SERVICE
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