Software Engineering Assignment

MODULE: 1

SE – Overview of IT Industry

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1) What is software? What is software engineering?

=> Software:

-set of instructions (input) to be executed (process)for specific task (output).

 => Software Engineering:

-Process to develop any software based on the engineering principles.

2) Explain types of software

1) System Software:

-In built software. No need to install or download. They are provided by the system itself.

e.g. notepad, notes, clock, calendar

2) Application Software:

-Need to install or download to use. It is provided by the developers.

e.g. Instagram, WhatsApp, LinkedIn

3) Driver software

-Example: Audio Driver, Video Driver etc.

4) Middleware

-Interaction between system software & app. software

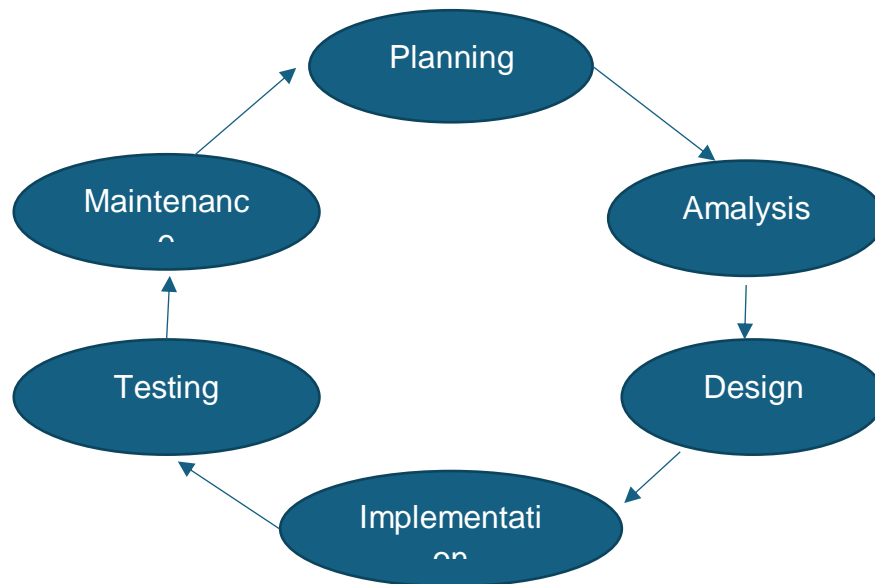5) Programming software

-Used for program execution purpose.

e.g. Compiler, interpreter

3) What is SDLC? Explain each phase of SDLC

=> SDLC: Software Development Life Cycle:

-SDLC is a step-by-step approach to develop any product/software with high quality, in shortest possible time and within the estimated budget.

-SDLC methodology focuses on the following phases of software development:

1. Planning/ Requirement Gathering

2. Analysis

3. Designing

4. Implementation

5. Testing

6. Maintenance

=> Planning/ Requirement Gathering:

-Requirement Gathering in the SDLC is the process of identifying, collecting, and documenting the specific needs and expectations of client for a software system or project.

=> Analysis:

 -Developer are analysis requirement client.

-Developer create software requirement specification (SRS) does not change requirement client.

=> Designing:

 -The design phase defines how a software application will work.

-DFD, ER Diagram, Flowchart, Use case

=> Implementation:

 -Developers build the software according to the design specifications.

-The outcome is a working version of the software.

=> Testing:

-Client meets the requirement and work from backend side a project implementation or development.
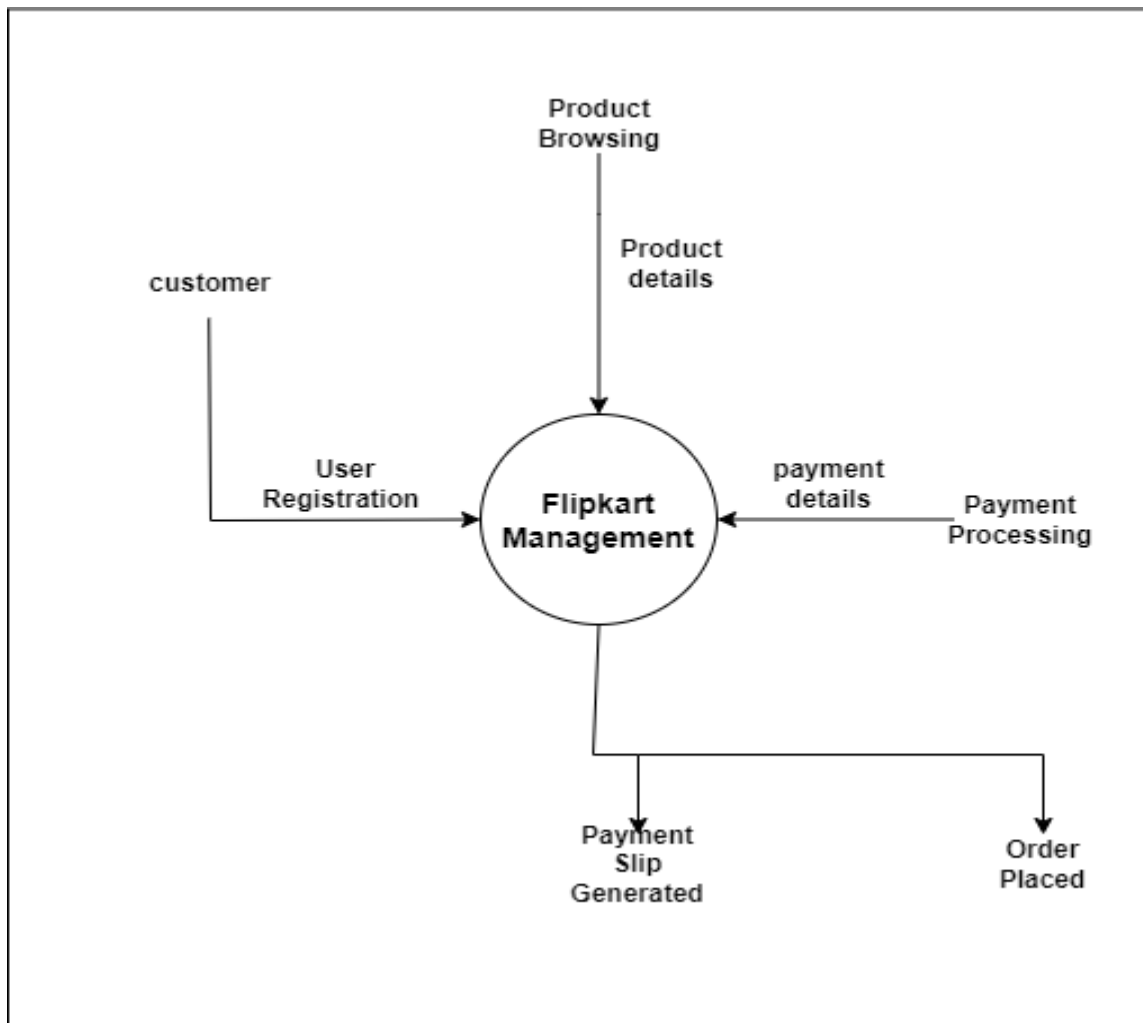
=> Maintenance:

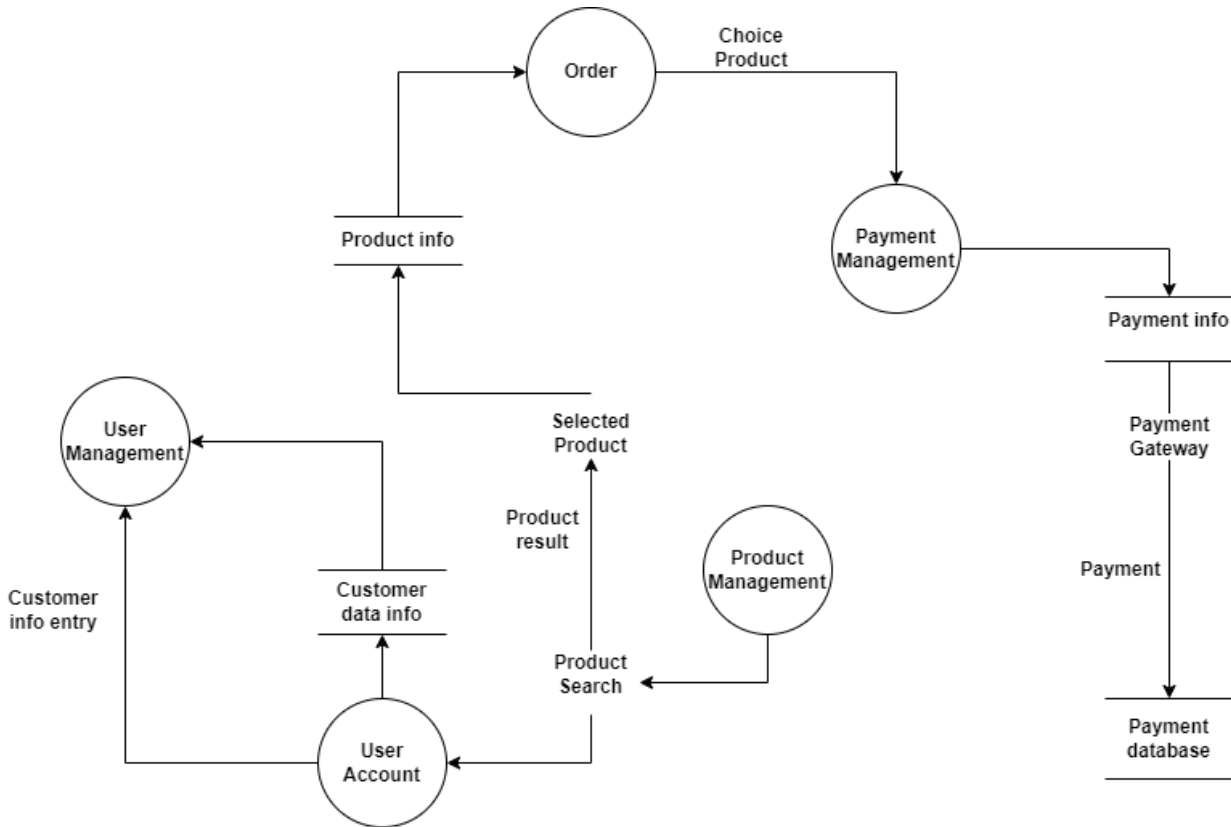 -Maintenance also covers software updates and optimization for better performance.

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

=>DFD: Data flow diagram

- The flow of data of a system or a process is represented by DFD
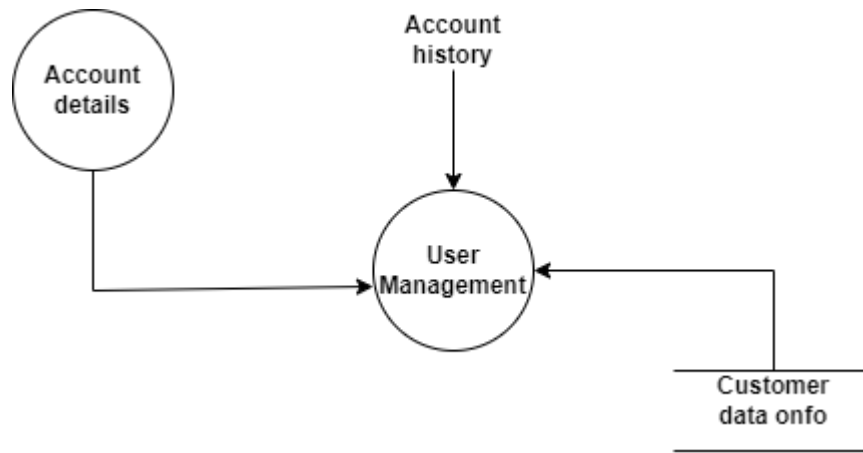
- Level 0 DFD of Flipkart:

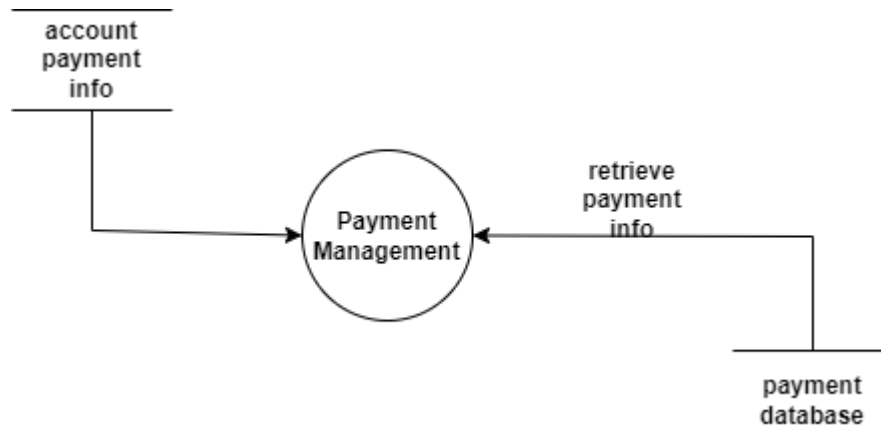-Level 1 DFD of Flipkart:
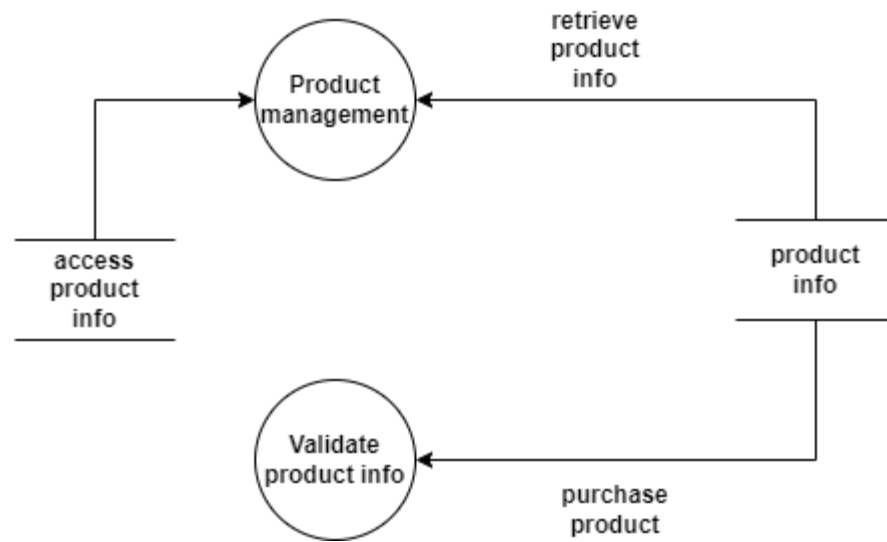

->Level 2 DFD of Flipkart:
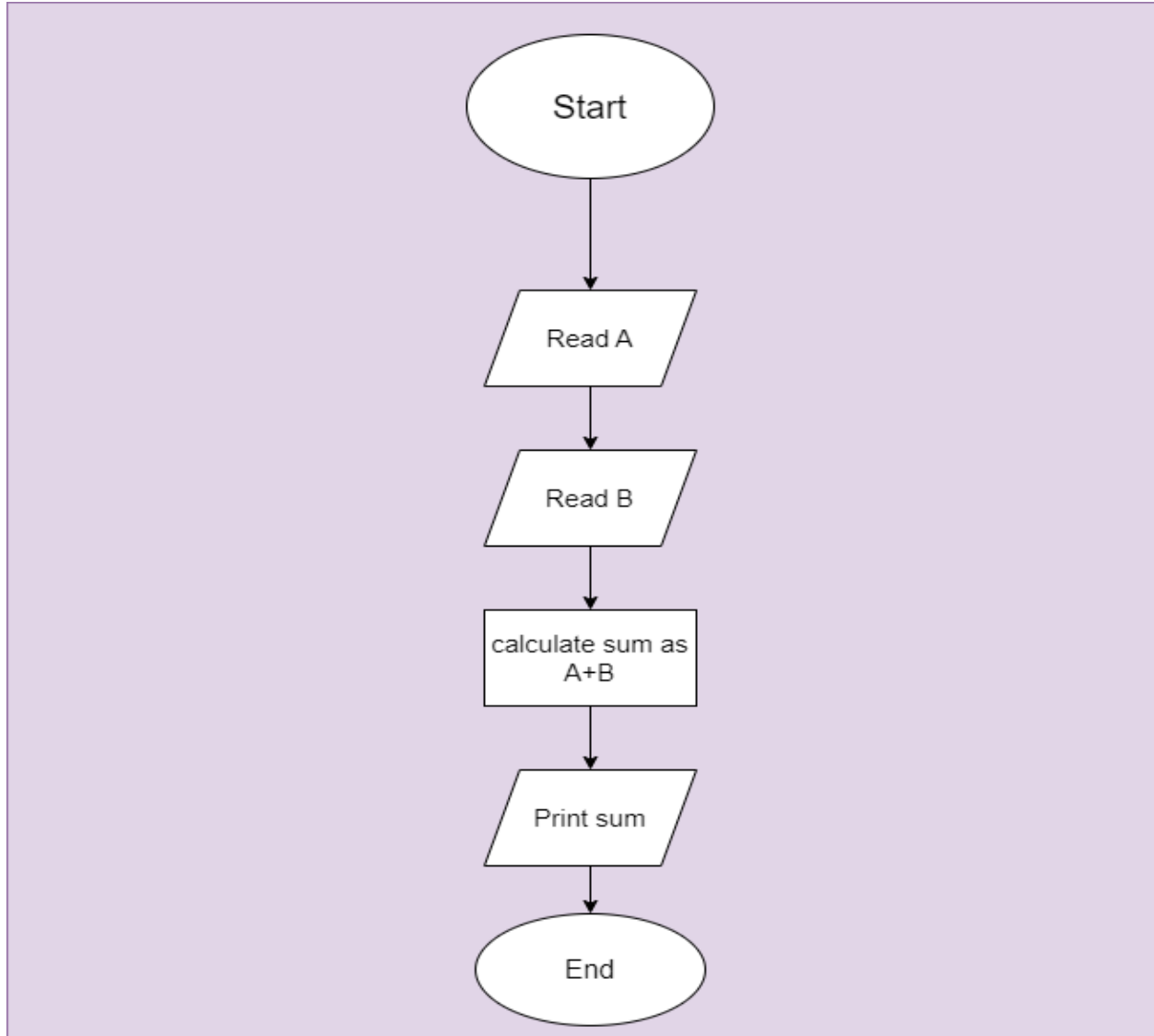
-User Management:

-Payment Management:

-Product Management:

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

=> Graphical representation about the algorithm.

- Flowchart is a step-by-step approach to solving a task.
-Two numbers addition of flowchart.

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

=> sequence of actions performed by the actors.

- A use case is a written description of how users will perform tasks on your website.