

SE – Overview of IT Industry

Question 1: - What is software? & What is software engineering?

Ans: - 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 designing, developing, testing, and maintaining Software. It is a systematic and disciplined approach to software development that aims to create high-quality, reliable, and maintainable software.

Question 2: - Explain types of software

Ans: - Among the various categories of software, the most common types include the following:

- **Application software.** The most frequently used software is application software, which is a computer software package that performs a specific function for a user or, in some cases, for another application.
- **Driver software.** Also known as this software is often considered a type of *system software*. *Device drivers control the devices and peripherals connected to a computer, helping them perform their specific tasks.*

SE – Overview of IT Industry

Question 3. What is SDLC? Explain each phase of SDLC

Ans: - SDLC Stands for The Software Development Life Cycle

- SDLC is a process used by software development organizations to plan, design, develop, Test, deploy, and maintain software development
 - Software Development Life Cycle (SDLC) is a structured process that is used to design, develop, and test good quality software
1. Planning: Planning is very important phase in SDLC. Planning includes analysis, timing, budget, resources etc
 2. Analysis: During this phase, the software team will analysis the planning phase and reduce the workforce
 3. Design: In this phase, designers will analyse the requirements of the client and gives the best design to create a software.
 4. Implementation: This phase involves coding and development according to the design specifications.
 5. Testing: In this phase, the development team tests the software for bugs and errors.
 6. . Deployment: The application will be deployed to the production environment and will be available to users

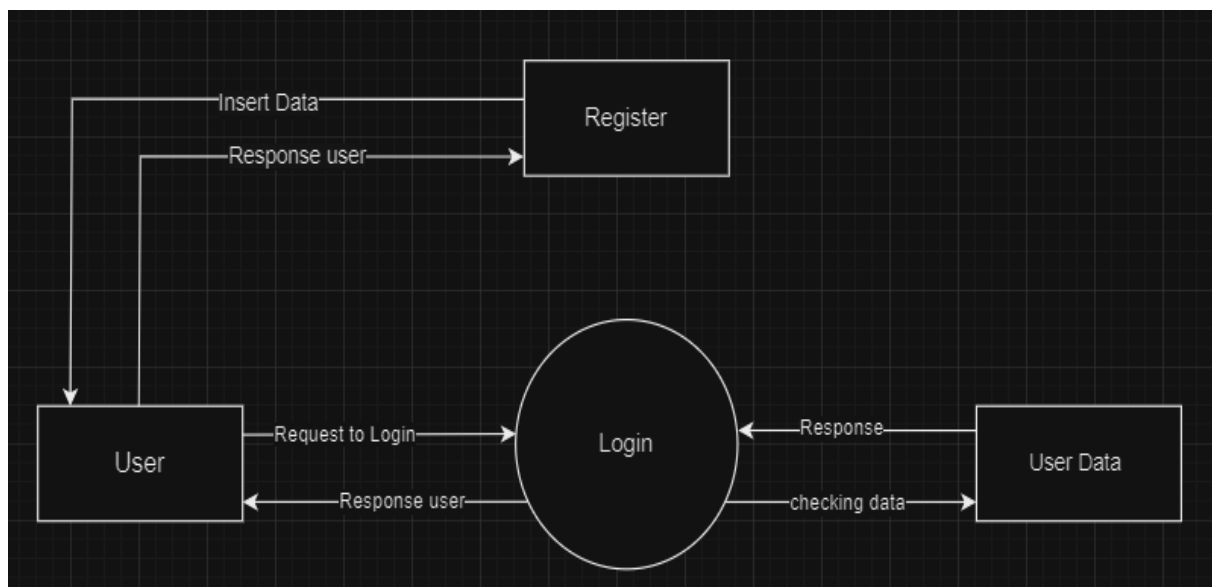
SE – Overview of IT Industry

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

Ans: - DFD Stands for Data flow diagram

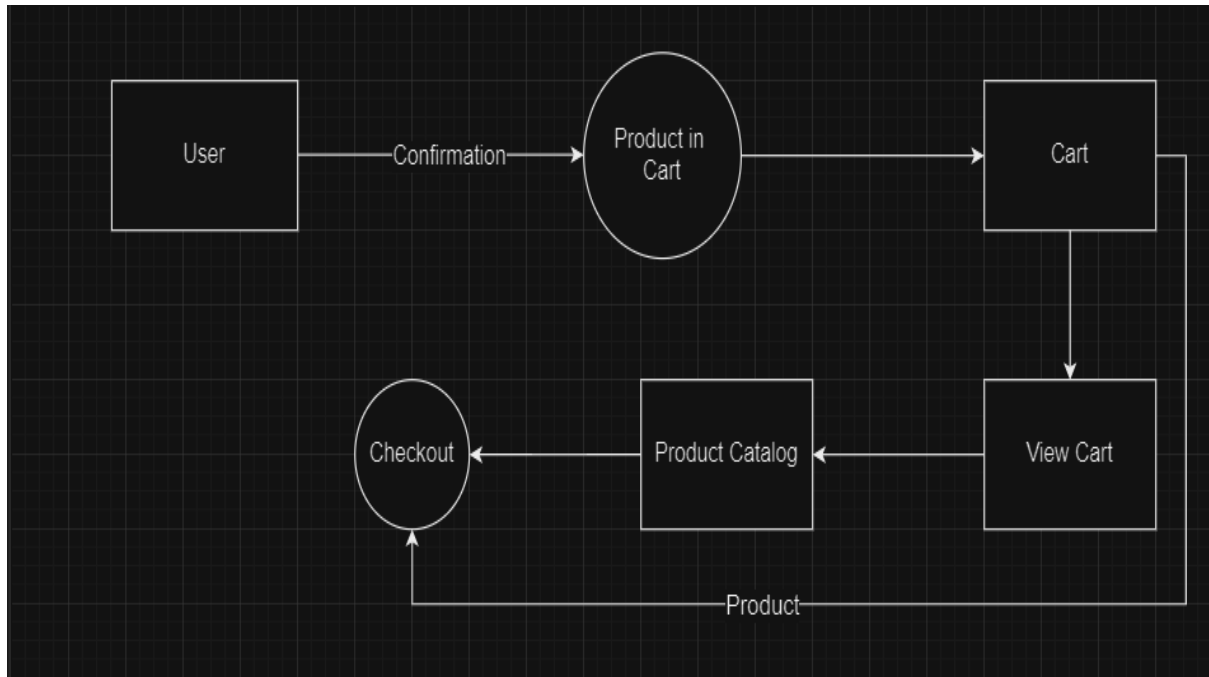
- DFD) is a diagram being used frequently in software design. It visually represents the flow of data throughout processes in each system. DFD shows the kind of information that will be input to and output from processes as well as where the data will be stored.

(Diagram: - Level 0 DFD of Login in Flipkart)

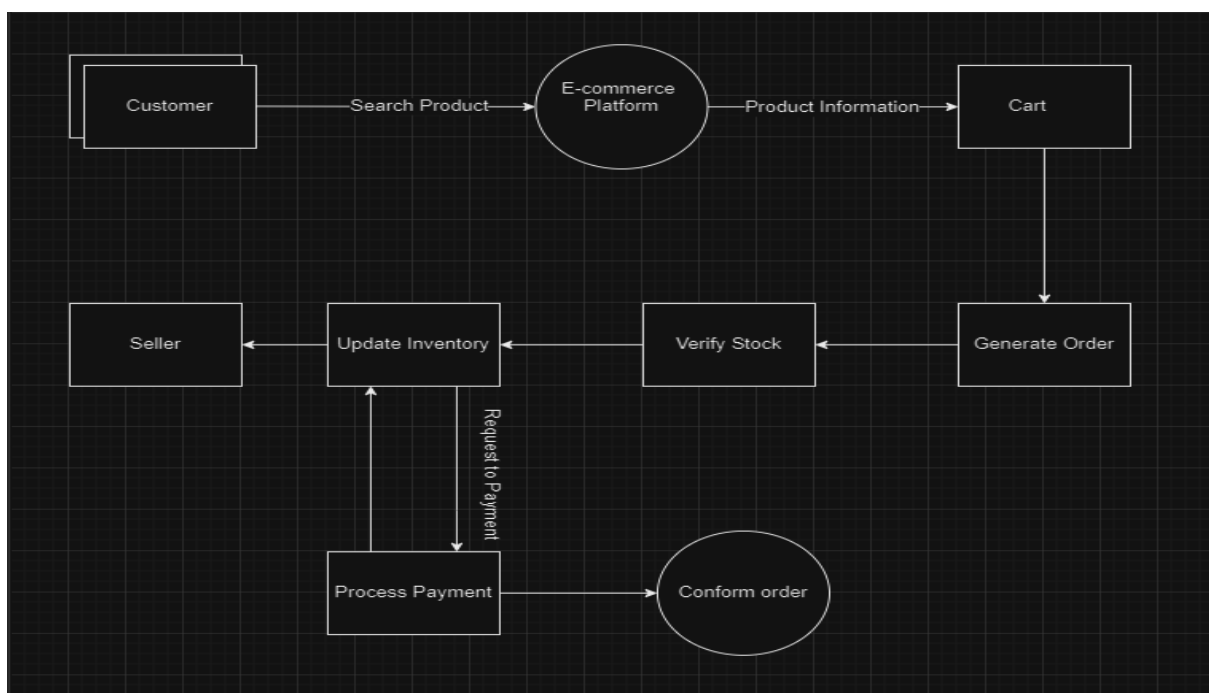


SE – Overview of IT Industry

(Diagram: - Level 1 of carting Product in Flipkart)



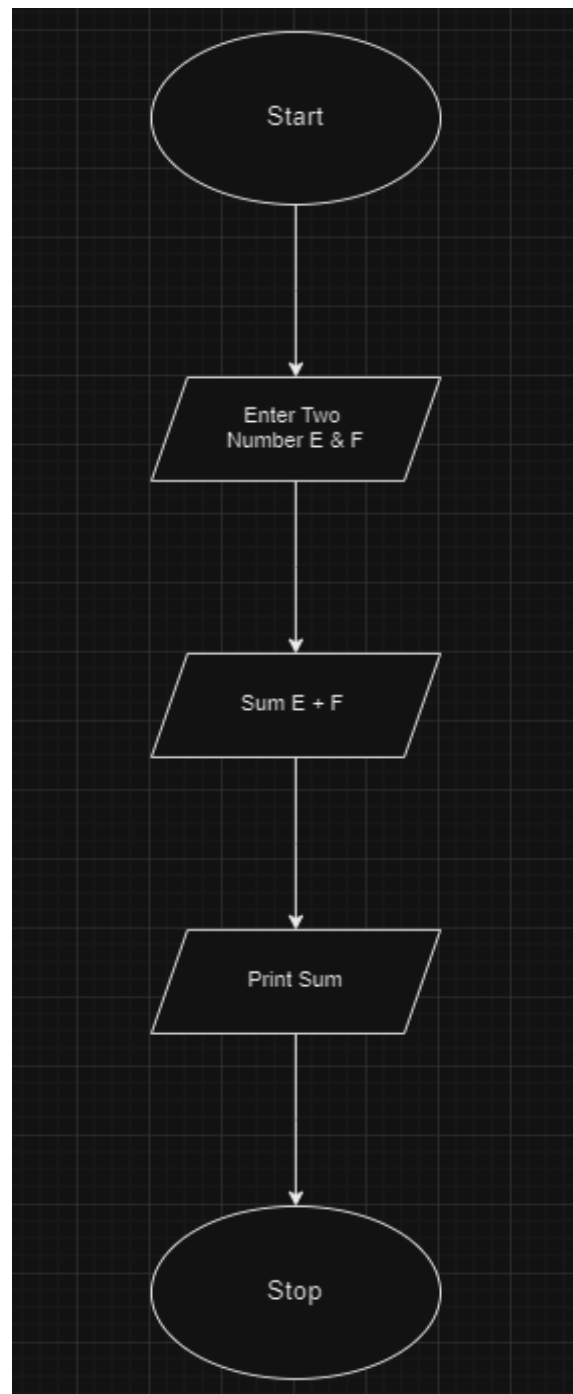
(Diagram: - Level 2 DFD Buying a Product from Cart)



SE – Overview of IT Industry

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

Ans: - A flowchart is a type of diagram that represents a workflow or process. A flowchart can also be defined as a diagrammatic representation of an algorithm, a step-by-step approach to solving a task.



SE – Overview of IT Industry

Question 6. What is Use case Diagram? Create 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.

