

Assignment

Q.1 What is software? What is software engineering?

=> In a Computer system, the Software is basically a set of instructions, data or computer programs that are used to operate computers and execute specific tasks or activities.

=> Engineering is the process of designing and building something that serves a particular purpose and finds a cost-effective solution to problems.

=> Software Engineering is the process of designing, developing, testing and maintaining software.

=> Software engineering is the branch of computer science that deals with the design, development, testing and maintenance of software applications.

Q.2 Explain types of software.

=> types of Software :

1. Application Software
2. System Software
3. Driver Software
4. Middleware
5. Programming Software.

(1.) Application Software =

=> It's used 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.

=> An application can be self-contained or it can be a group of programs that run the application for the user.

(2.) System Software :

=> These software programs are designed to run a computer's application programs and hardware.

System software coordinates the activities and functions of the hardware and software.

(3.) Driver software :-

- => Also known as device drivers.
- => 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.

(4.) Middleware :-

- => The term middleware describes software that mediates between application and system software or between two different kind of application software.

(5.) Programming software :-

- => Computer programmers use programming software to write code. Programming software and programming languages.

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

- => SDLC means software development life cycle (SDLC).
- => SDLC is a structured process that is used to design, develop and test good-quality software.
- => It's a methodology that defines the entire procedure of software development step-by-step.

* SDLC Phases :-

- 1.) Planning
- 2.) Analysis
- 3.) Design
- 4.) Testing & Integration
- 5.) Implementation
- 6.) Maintenance of software

(1.) Planning :-

- => Planning is a role in the Software delivery lifecycle since this is the part where the team estimates the cost and defines the requirements of the new software.

C2.) Analysis =

=> Discuss each details and specification of the product with the customer. The development team will then analyze the requirements keeping the design and code of the software in mind.

C3.) Design =

=> It phases is all about building the framework. It's link between the software's purpose and its execution. It's an essential step in creating software that works efficiently and provides an excellent user experience.

C4.) Testing & Integration :

=> After designing of the software testing of the software is necessary to ensure its smooth execution. Although minimal testing is conducted at every stage of SDLC.

(4) Implementation :-

=> The design is then implemented in code usually in several iterations and this phase is also called as Development.

(5) Maintenance :-

=> After successful testing the software is deployed to a production environment and made available to end users. Maintenance phase includes on going support, bug fixes and updates to the software.

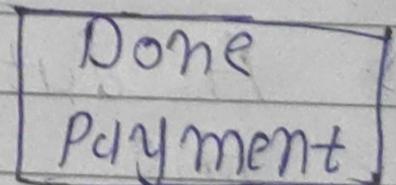
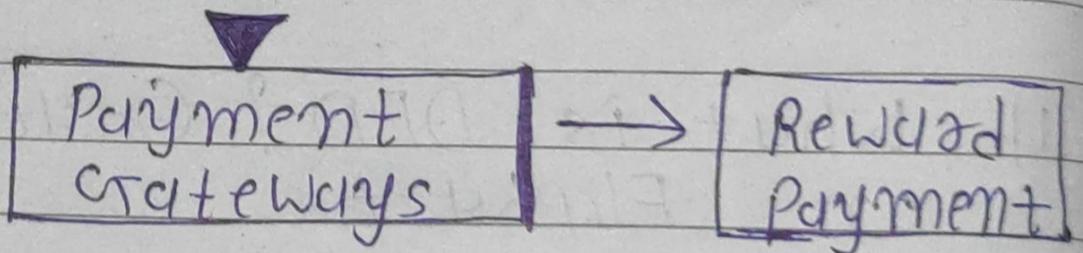
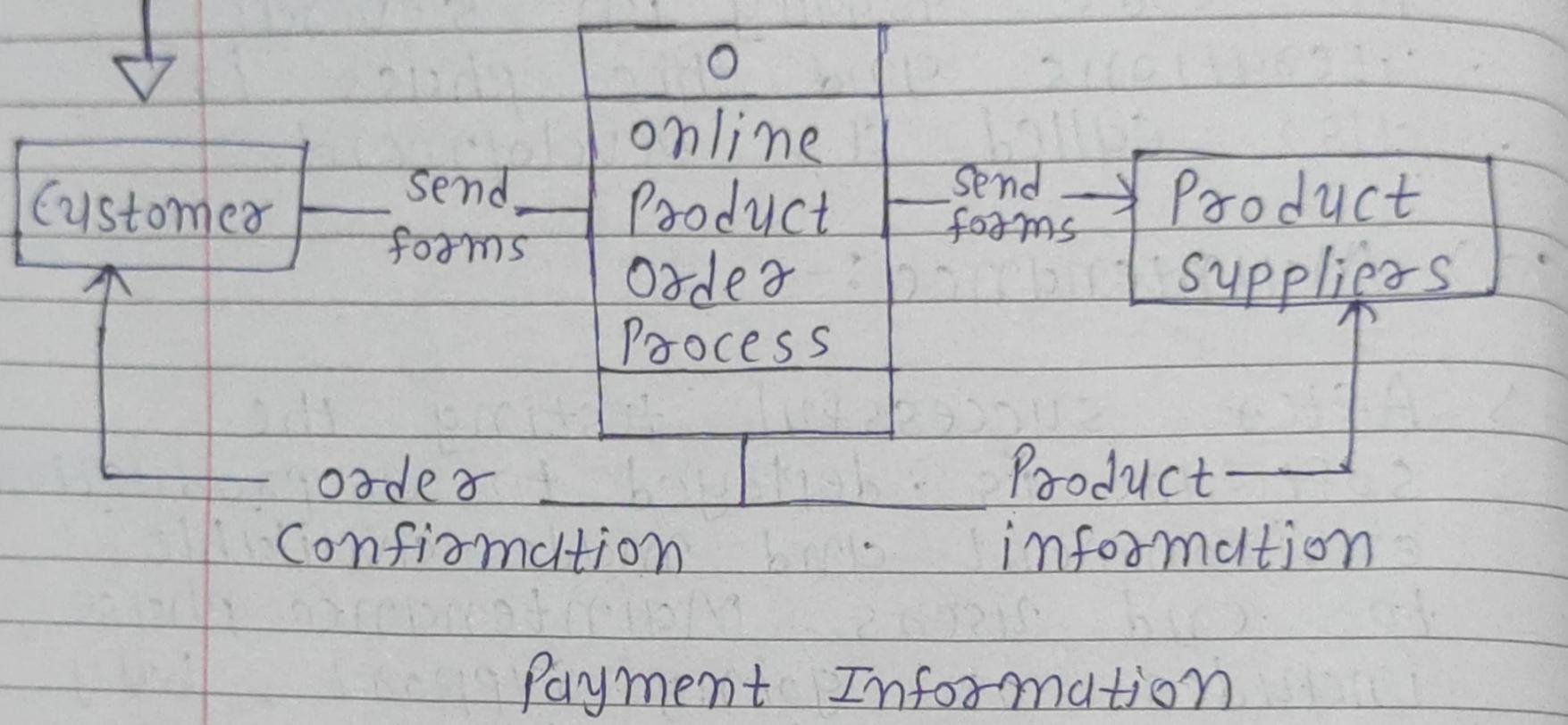
Q.4 What is DFD? Create a DFD diagram on Flipkart.

=> DFD means Data Flow Diagram.

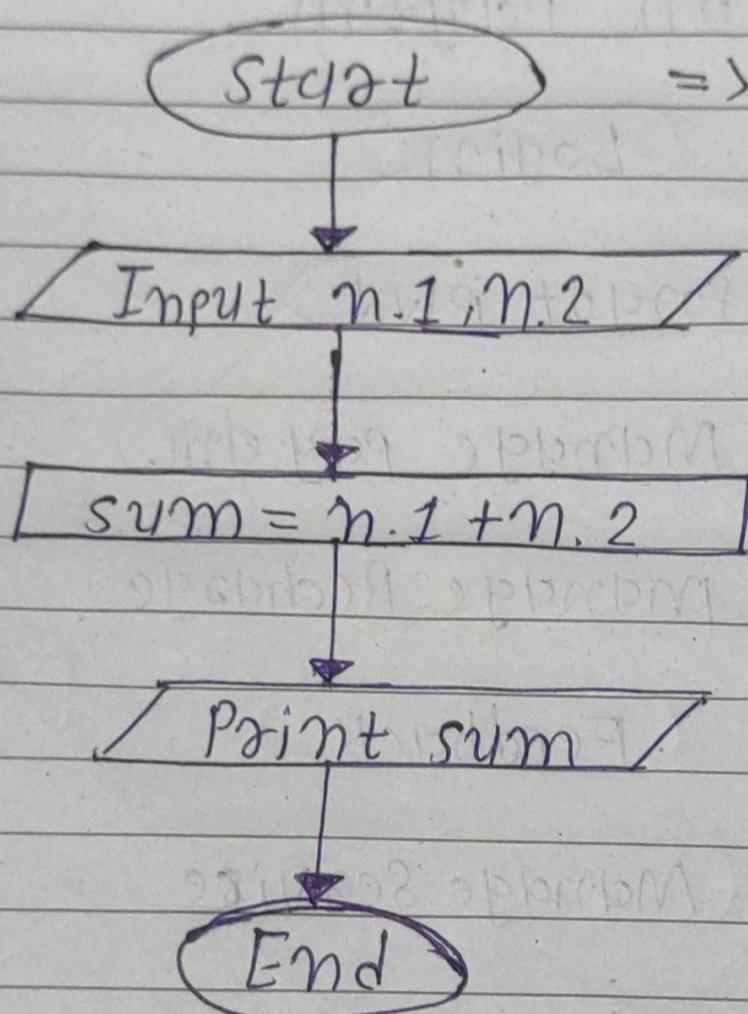
=> A data flow diagram maps out the flow of information for any process or system.

DFD provides a graphical representation of the data flow of a system that can be understood by both technical and non-technical users.

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Q.5 flowchart to make addition of two numbers.

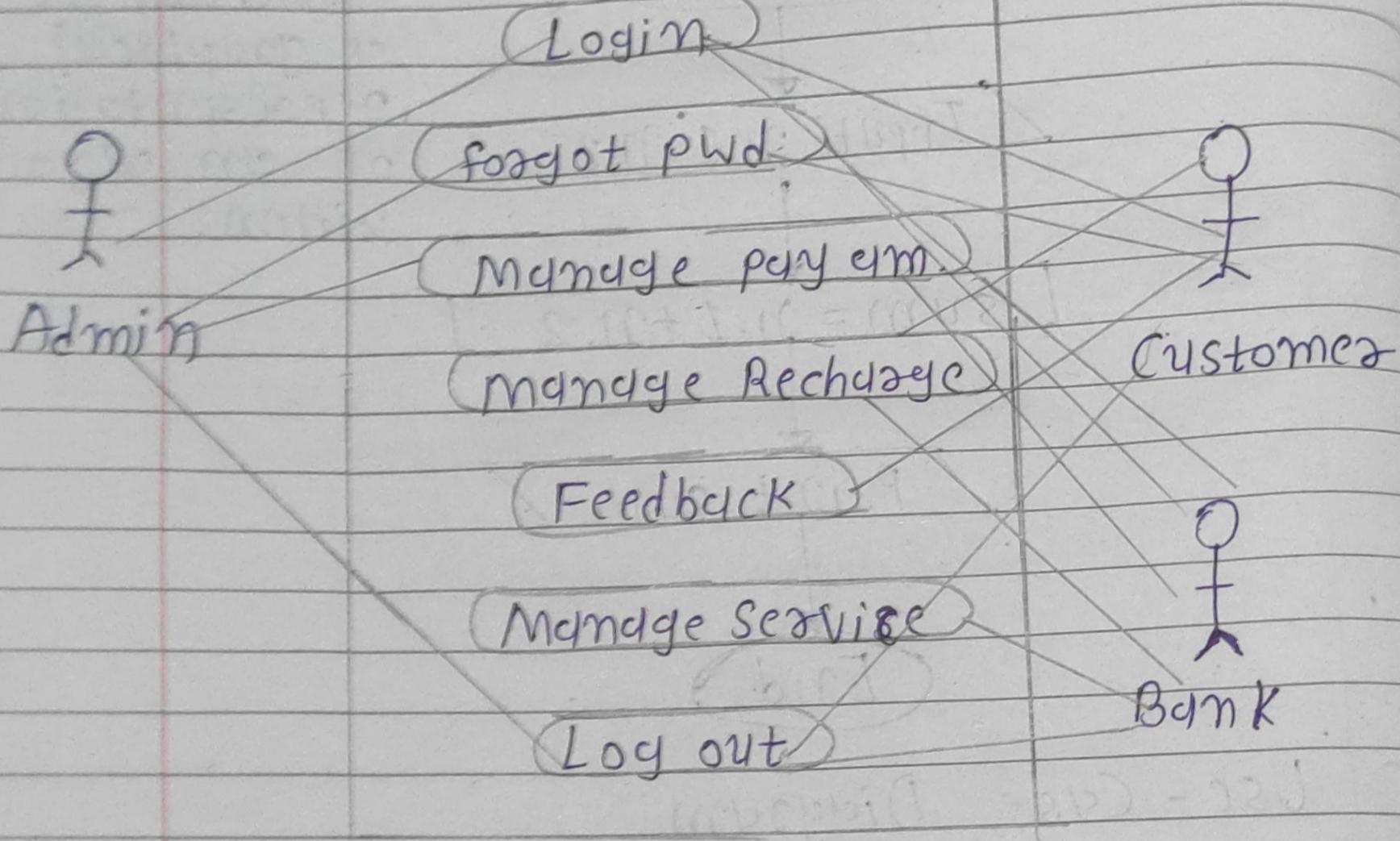


=> Flowchart is a graphical representation of an algorithm.

Q.6 Use-Case Diagram:

- => Use-case diagrams describe the high level functions and scope of a system.
- => It provides a visual representation of how users interact with a system.

Bill Payment on Paytm



Actors = Admin, customer, Bank

use case = Login, forgot pwd, manage pay amount, manage recharge; feedback, manage service , Log out .