

MODULE : 1 (SDLC)

1. What is Software ? What is Software engineering ?

→ **Software** : Software is a collection of computer programs.

Software Engineering :-

→ **Software** : Software is a Program or set of Programs containing instructions which provide desired functionality.

→ **Engineering** : Engineering is a Process of designing and building something that ensure particular purpose.

→ **Software Engineering** is a systematic approach to the design, development, operation, and maintenance of a software system.

2. Explain types of software ?

→ (1) System software / operating system,

→ (2) Application s/w ,

→ (3) Programming language.

→ (1) **System s/w or OS** :- System software / operating system provides the basic functions for computer usage and helps to run the computer hardware and system. - System software / operating system is the s/w used by the computer to translate inputs from various sources into a language which a machine can understand. Basically OS coordinates the different hardware components of a computer.

→ (2) **Application s/w** :- Application s/w is the general designation of computer programs for performing user tasks.

• Types of application s/w.

→ 1. **Mobile app** :- Application that run on mobile

- Ex. Instagram, facebook, etc

→ 2. **Desktop app** :- That run stand-alone in a desktop or laptop computer. - Ex. Microsoft office suite which includes Word, Excel and PowerPoint.

- Ex. Outlook for email, and firefox, Google Chrome, Mozilla are the web browser.

→ 3. **Web app** :- That run on a web browser

→ ex. google.com, facebook.com, etc.

→ (3) **Programming s/w** :- Programming s/w is the process of designing, writing, testing, debugging, and maintaining the source code of computer programs.

→ This s/w is pawritten in a programming language.

→ The purpose of programming is to create a program that exhibits a certaindesired behavior.

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

Ans:-Software Development Life Cycle :-

- 1.Requirement Gathering
2. Requirement Analysis
- 3.Design
- 4.Implementation
- 5.Testing
- 6.Maintenance

1.Requirement Gathering:-Although requirement may be document in written form they may be incomplete unabiguous or even incorrect.

2 .Requirement Analysis:-The analysis phase defines the requirment of the system,independent of how these Requirement will be accomplished.The architecher defines the components their interfaces and behaviors.

3.Design:-Design Architecture Document,Performance Analysis,Test Plan etc.

4.Implementation:-In the implementation phase,the team builds the componets either from scratch or by composition. Given the architecher document from the design phase and the requirment document from the analysis.

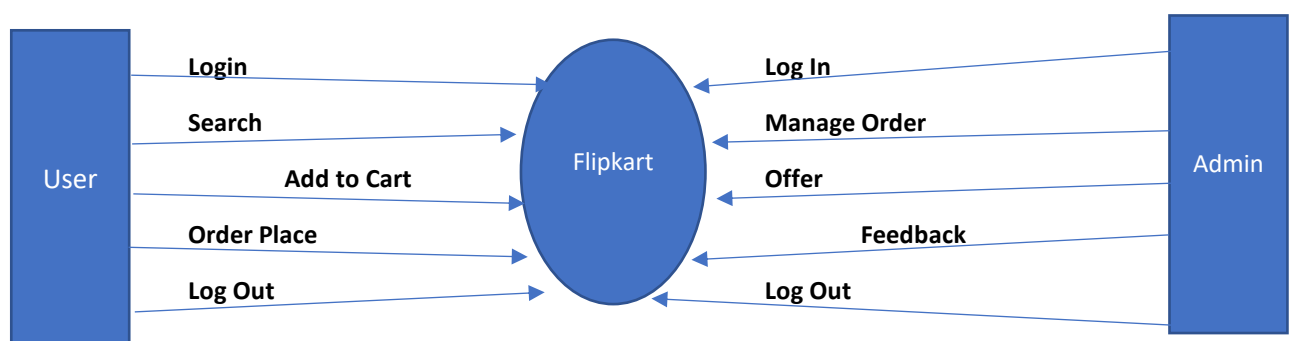
5.Testing:-There is merit in this approach.it is hard to see own mistake,and a fresh eye can discover obvious errors much faster than the person who has and re-read the material many time.

6. Maintenance:-Software Maintenance is one of the activities in software engineering,and is the process of enchancing and optimizing devloped software,as well as fixing defects.

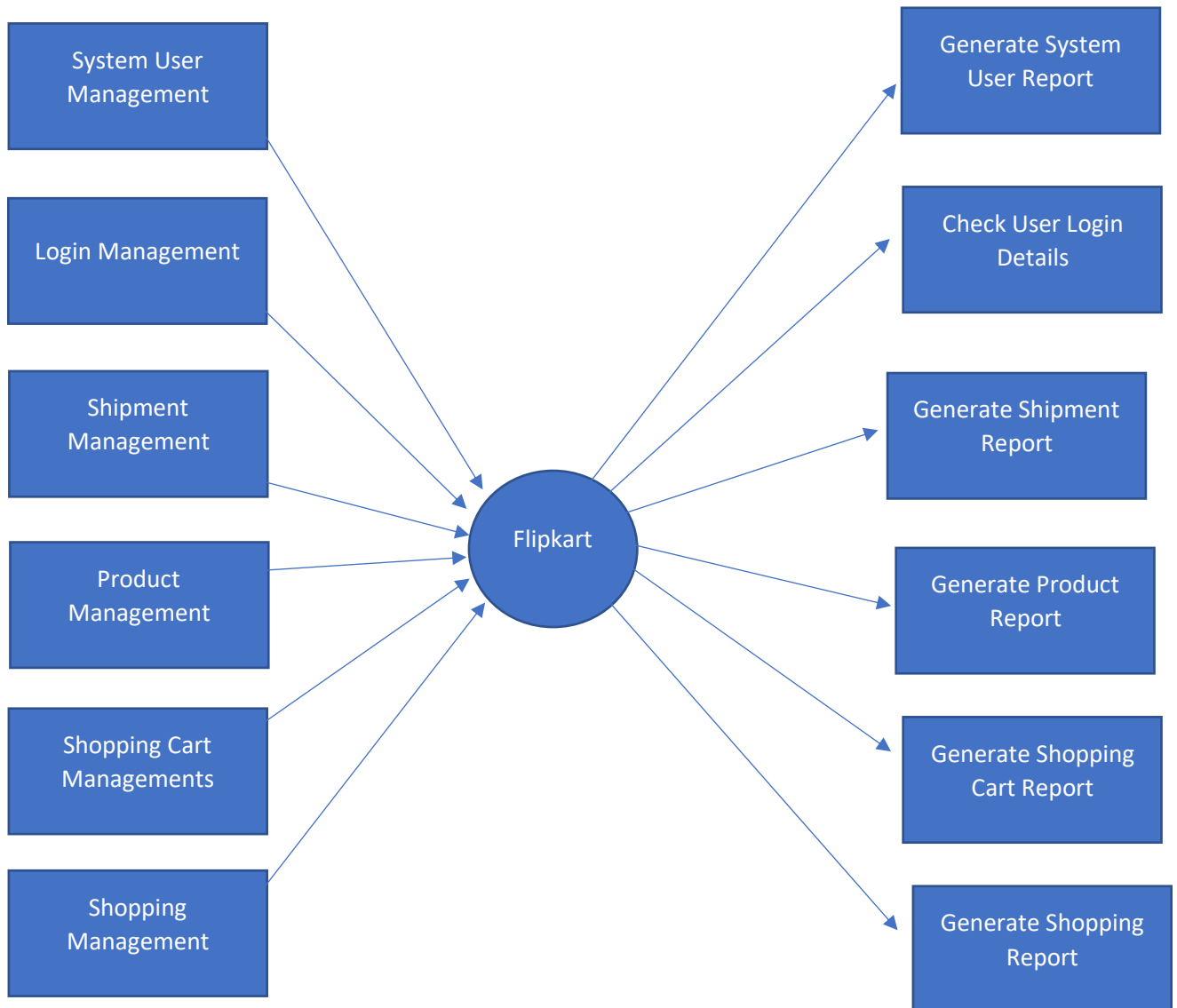
(4) What is DFD? Create a DFD diagram on Flipkart ?

→ A Data Flow Diagram (DFD) is a traditional way to visualize the information flows within a system.

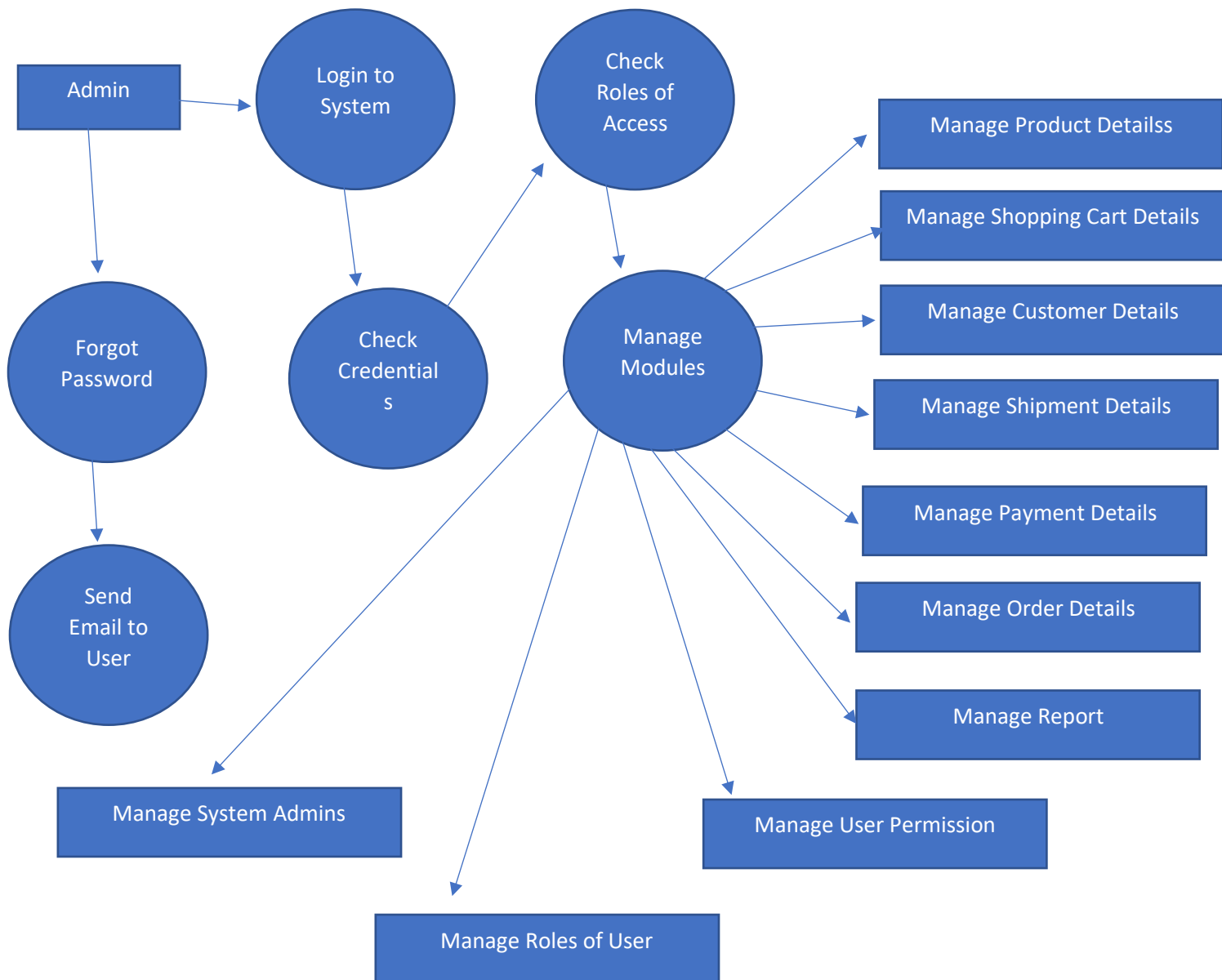
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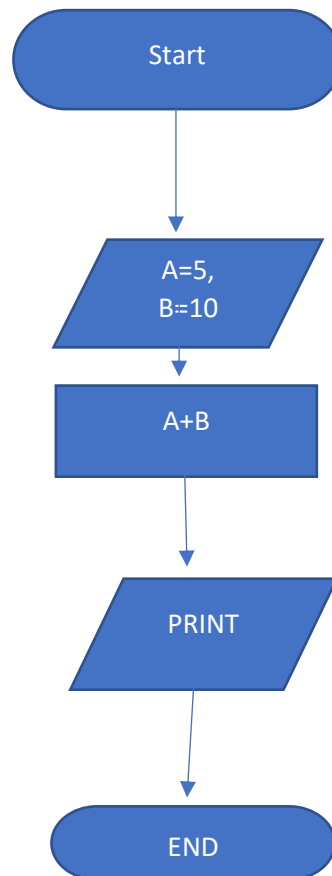


DFD LEVEL : 2



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

→ A flow chart is a graphical or symbolic representation of a process.



(6) What is Use case Diagram? Create a use-case on bill payment on paytm ?

→ A Use Case diagram is a graphical depiction of a user possible interaction with a system

