22/04/2023

ASSIGNMENT :

1. SOFTWARE ENGINEER ASSIGNMENT :

1) What is software ? What is software engineering ?

→ software ,is a collection of computer data , instruction & information

→ Types of software

→ system software

→ Programming software

→ Application software.

i. System software :

→ system software is provide the function for
For computer use and run computer system.

→ System software is software designed
To provide operating system to another
Device like mobile , laptop and computer.

→ Android , iOS , windows , Ubuntu , Linux
Are operating system

→ operating system

2) programming software :

→ Programming is process of designing, writing,
Testing, debug and maintenance the source code of
The source code of computer program.

→ There are two types of programming language.

- **High level programming language**

1) Procedural oriented programming language

2) Object oriented programming language
3) Function Programming language
4) Logical programming language.

- **Low level programming language**

1) Machine language
2) Assembly language

3) application software

→ Application software is designed of programs for Task.

→ 3 types of application software:

1) Mobile application
2) Desktop application
3) Web application

1) mobile application :

→ Application that runs on mobile platform

Example : Instagram , Snapchat.

2) desktop application :

→ Application that runs on desktop or laptop computer

→ Software run to a computer device . Are like desktop Computer.

Example : microsoft word , web browser.

3) web application:

→ Apps that run on a web browser

For example :

(Mozilla , chrome , Firefox)

- **What is SDLC ? Explain each phase of SDLC .**

→. **Software developer life cycle .**

- **Software development life cycle (SDLC) refer to methodology with clearly defined for create software.**

- **1) planning**
- **2) requirement analysis**
- **3) designing**
- **4) implementation**
- **5) testing**
- **6) maintenance**

- **Planning:**

→ the quality assurance requirements and Identification of the associated with the Project is also done at page .

- **Analysis :**

→ requirement analysis is important in SDLC stage .

→ analyst and project organizer set up a Meeting with client to gather all the Data Like what the customer want to Build.

- **3) designing:**

→ the third phase is in architects start working On logic designing of software.

→ This phase provide a prototype of the final Product .

→ This phase in , the requirement gathered in **T**his SRS document is used input and Software architecture . That is used for Implementing system .

- **4) Implementation :**

→ implementation start once the developer Gets the design document.

→ All the components of the software are Implemented in this phase.

5) testing & integration :

→ Testing start the coding is completed The module are released and testing.

→ In this phase, the developed software Is Tested any defects found are Assigned to Developer to get them Fixed.

→ retesting is done until the point at the
Which Software is as per
Customer's expectations.

6) maintenance :

→ the deployment after of a product on the
Production environment, maintenance of
The product. if any issue comes up and
Needed to be fixed or any enhancement
Is to be taken care by the developer.

- **4) what is DFD ? Create a DFD diagram on Flipkart.**

→ **Data flow diagram .**

→ Graphical representation of flow of data inside
Application.

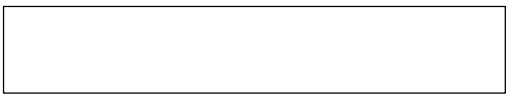
→DFD elements :

1) **External entity**
2) **Process**
3) **Data flow**
4) **Data store**

1) External entity :

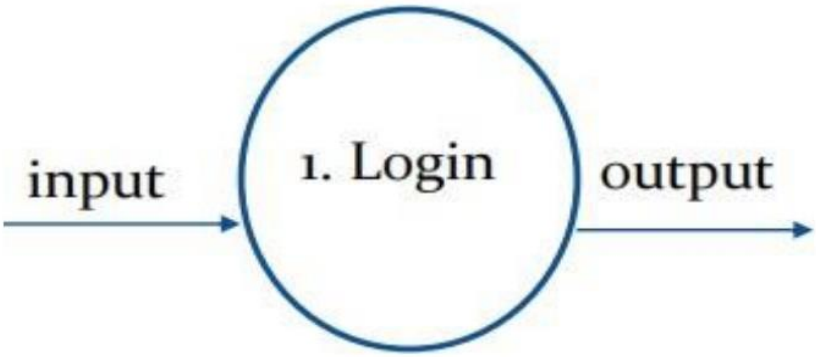
→ Can be used or external system that performs
Some process or activity in project symbolized
With rectangle.

→ If we have entity 'admin' them symbol will be



2) Data flows :

→ It can be used to show input and output of data
To each process must have input and output.



3) Process :

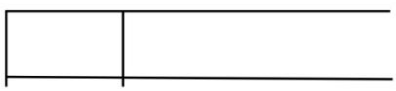
- Work or action an be used to show input and Output of data should be named uniquely And don't include word 'data' names can be 'Payment' , 'order', ' complaints' .
- **Symbol as :**

4) Data store :

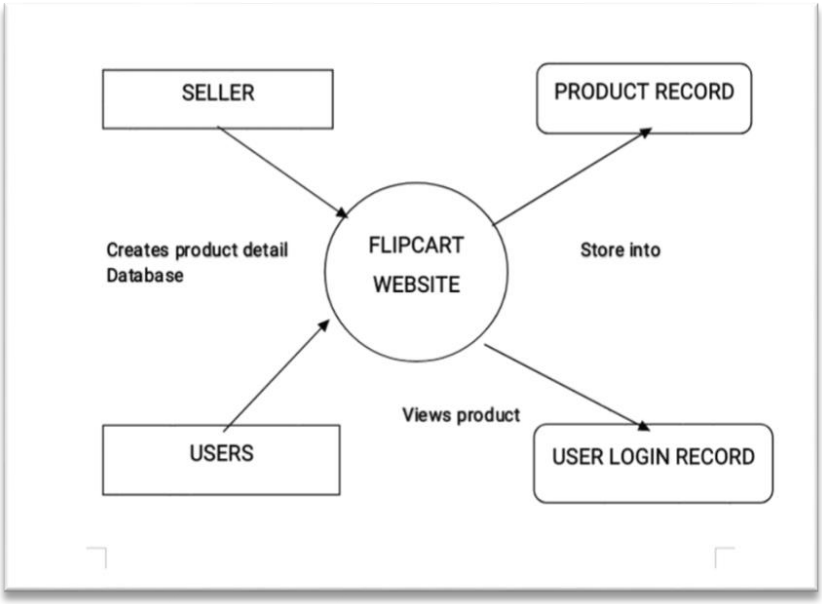
- can be used to show database tables only

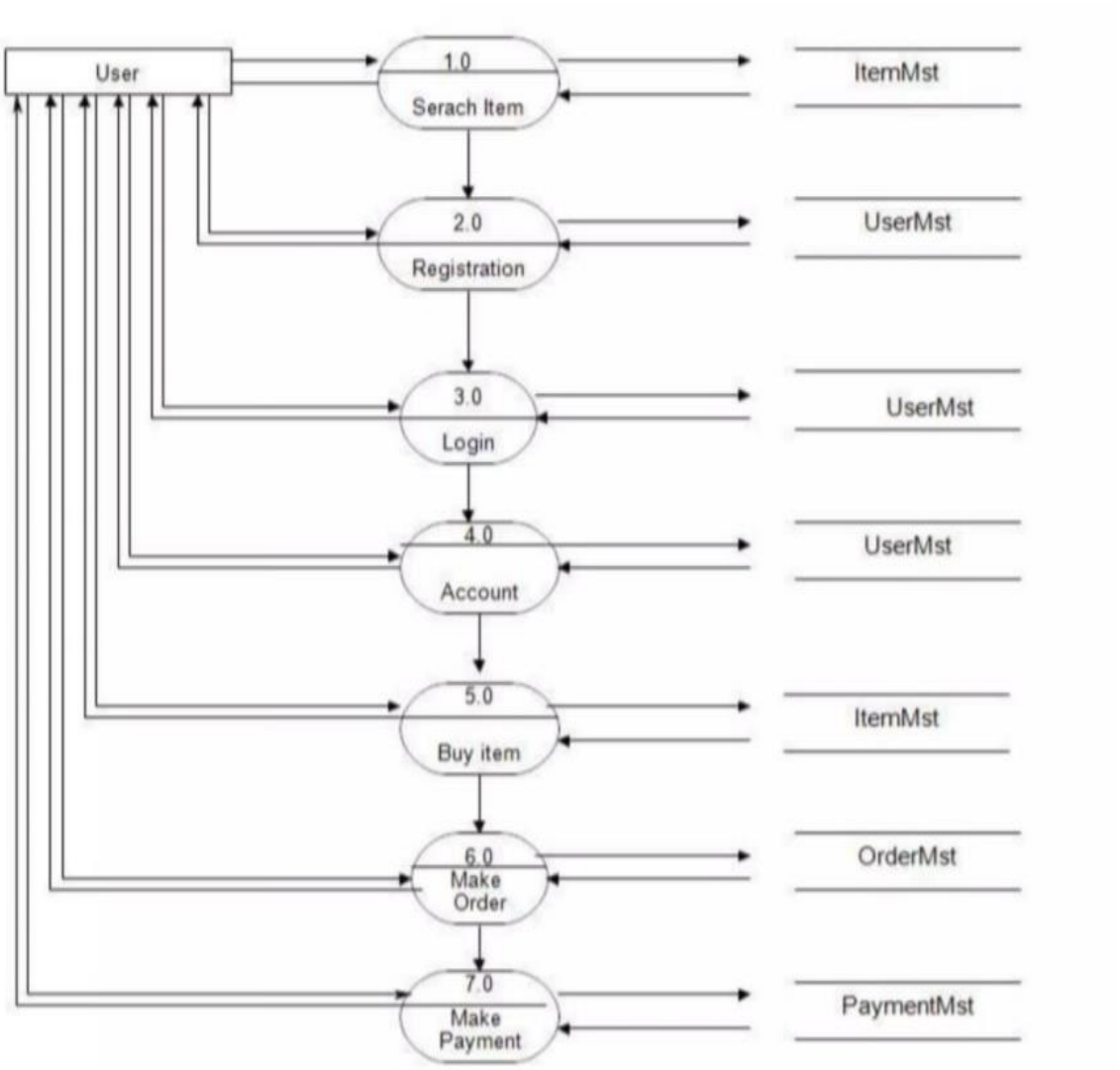
  Process may connect data stores
- There can be two or more process sharing

  Same data store.
- symbol as



Flipkart DFD diagram :

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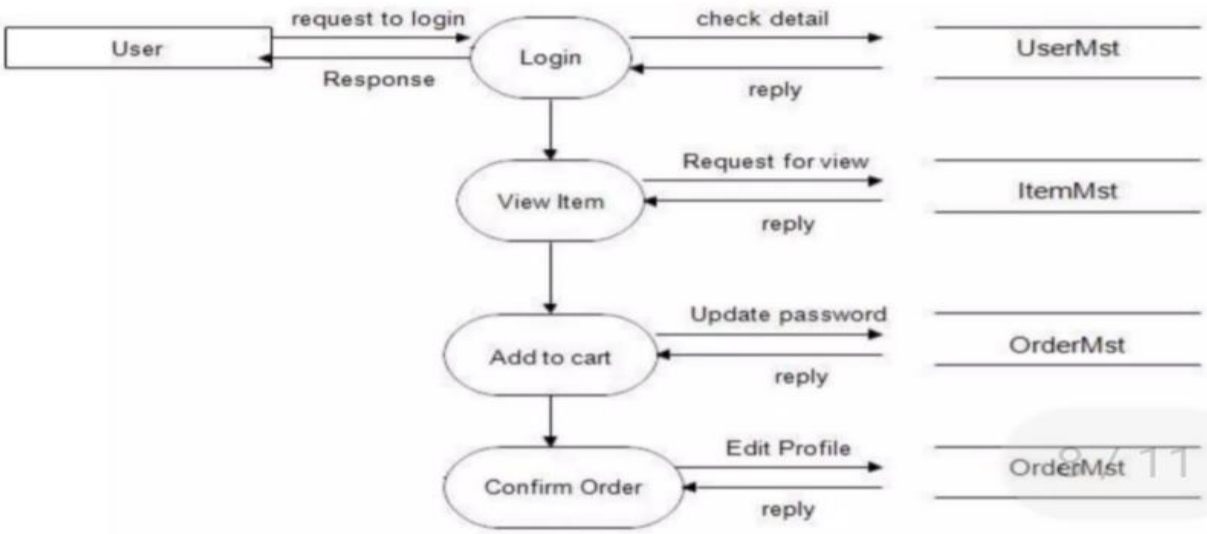
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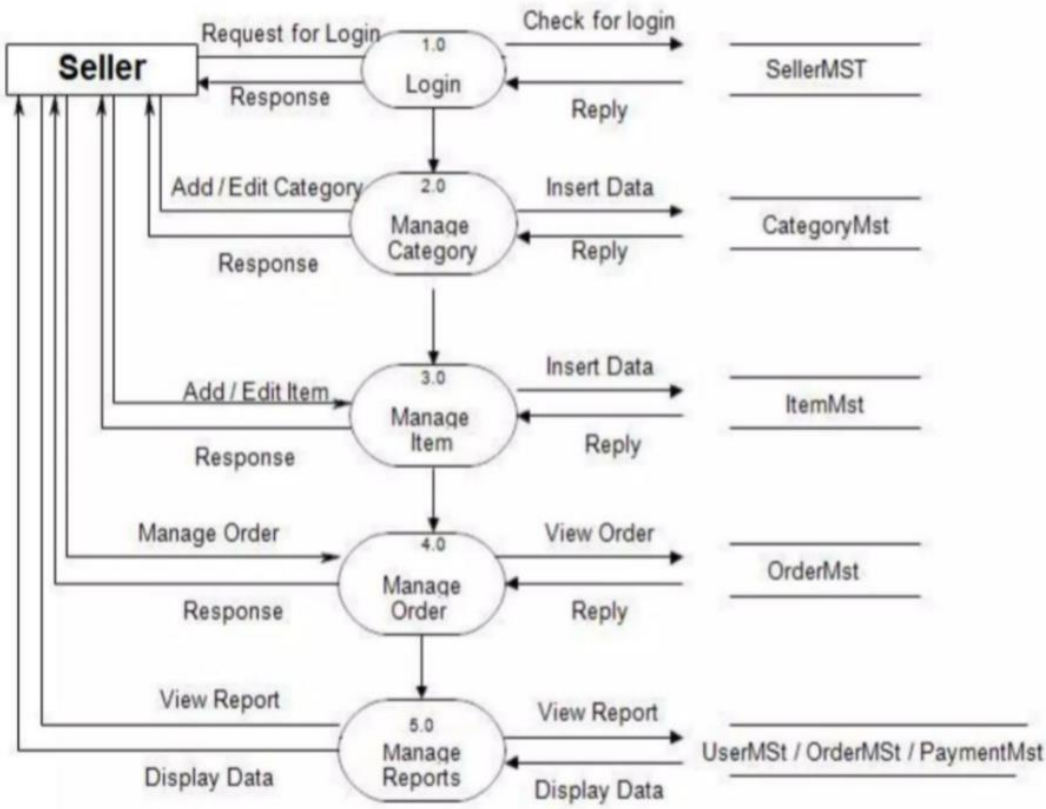
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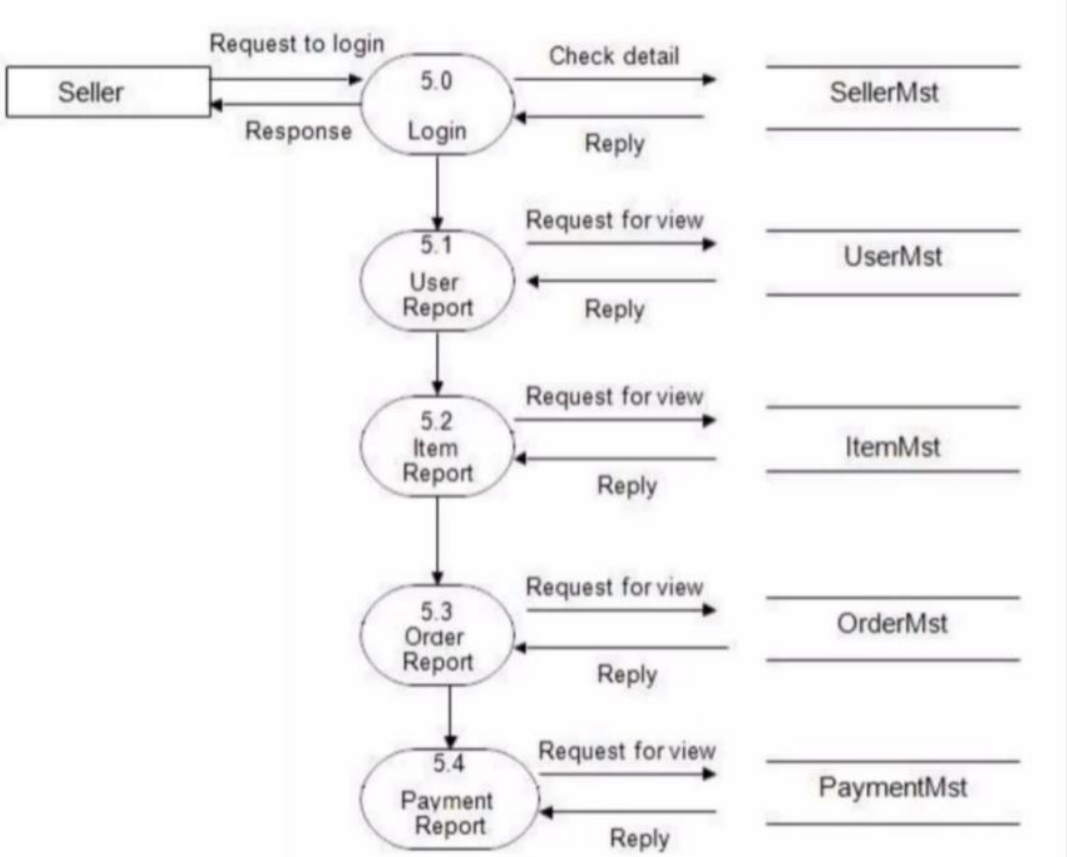
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- **5) what is flow chart ? Create a flow chart to**

  Make addition of two numbers.

  ➡ Used to show algorithm or process.

  ➡ The first flow chart was made by

  John von Newman in 1945.

  ➡ Pictorial view of process.

  ➡ flowcharts are generally drawn in the early

  Stage of formulating computer

  ➡ flow chart facilitate communication between

  Programmers and business people .

  ➡ these flow chart play a vital role in the

  Programming of problem and are

  Quite helpful in understanding the logic of

  Complicated and lengthy problem.

  ➡ The flow chart is drawn , it become easy to write

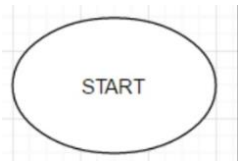
  The program in high level language.

- **Flow chart symbols :**

1) Start or end :

➡ show starting and ending of flow chart .

➡ symbol as



2) Process :

➡ define a process like defining variables or

Initializing variable or performing any

Computation.

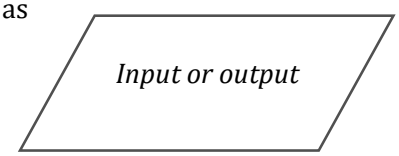
→ symbol as

3) Input or output :

→ Used when user have to get or initialize any

Variable like get num1 and 2 .

→ Symbols as

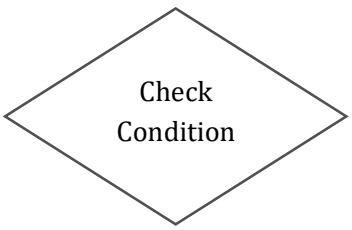


4) decision making :

→ checking condition this symbols can be

Used like num1 is greater than num2

→ symbol as



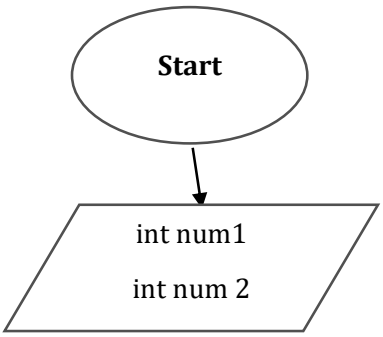
5) Flowlines:

→ lines are showing flow of data and process

Showing flow of instructions.

→ symbol as

- **Two number addition flow chart :**



6) what is use case of diagram ? Create a

Use case on bill payment on Paytm.

➡ Use case diagram is used to represent the Dynamic behavior of system.

➡ It encapsulates the system's functionality By incorporating use cases, actors and Relationship.

➡ Models the tasks, services and functions Required a system of an application.

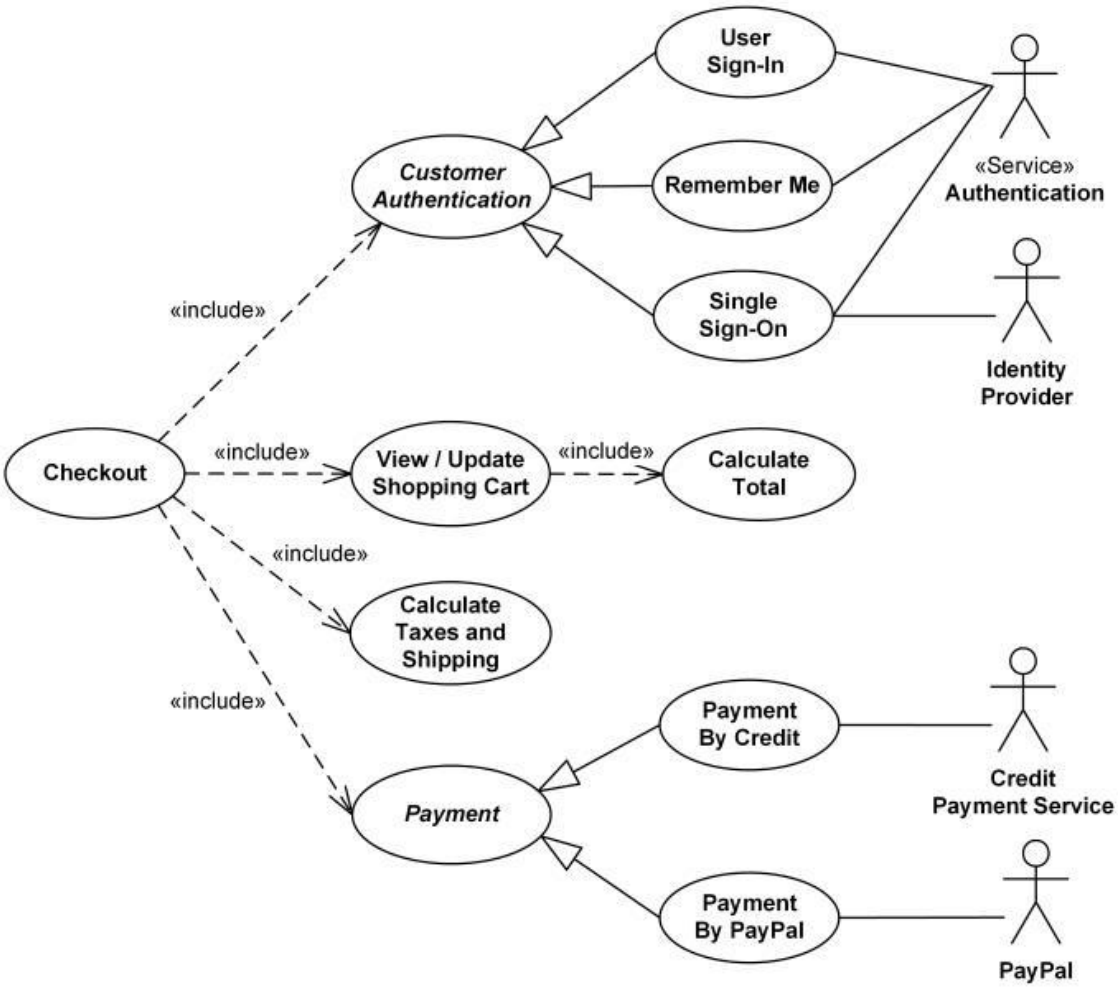
➡ The high level functionality of a system and Also tells how the user handles system.

➡ Main purpose use case diagram is to portray The dynamic aspect of system.

➡ It depicts the external view of the system.

➡ It recognizes the internal as well as external Factors that influence the system.

➡ It represents the interaction between the actors.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