

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

→ there are 3 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

→ 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 .

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) maintain**



- **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:**

- ☐ This phase provide a prototype of the final Product .

- ☐ This phase in , the requirement gathered in This SRS document is used input and Software architecture .

- **4) Implementation :**

- ☐ implementation start once the developer Gets the design document.

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 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 :

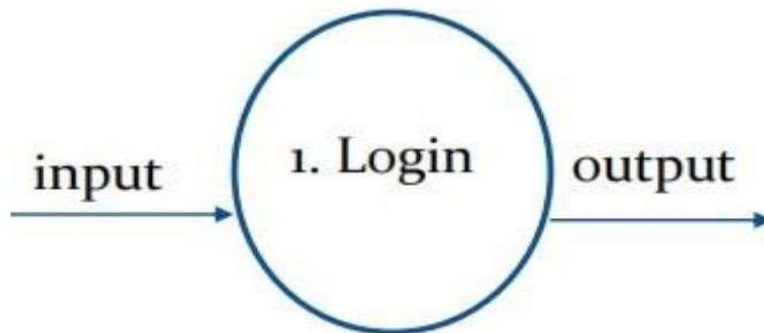
→ Can be used or external system that performs
Some process or activity in project symbolized
With rectangle.

→ 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 :



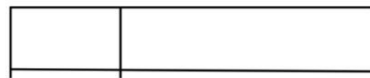
4) Data store :

→ can be used to show database tables only

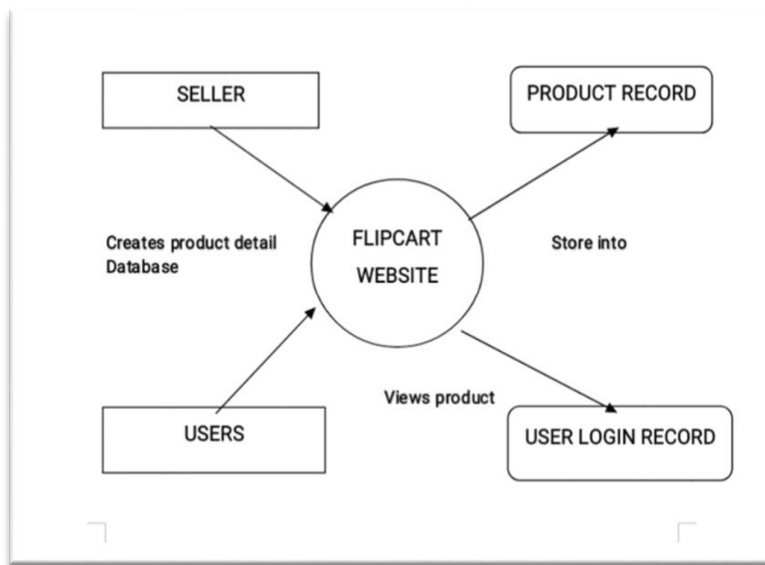
Process may connect data stores → There can be two or more process sharing

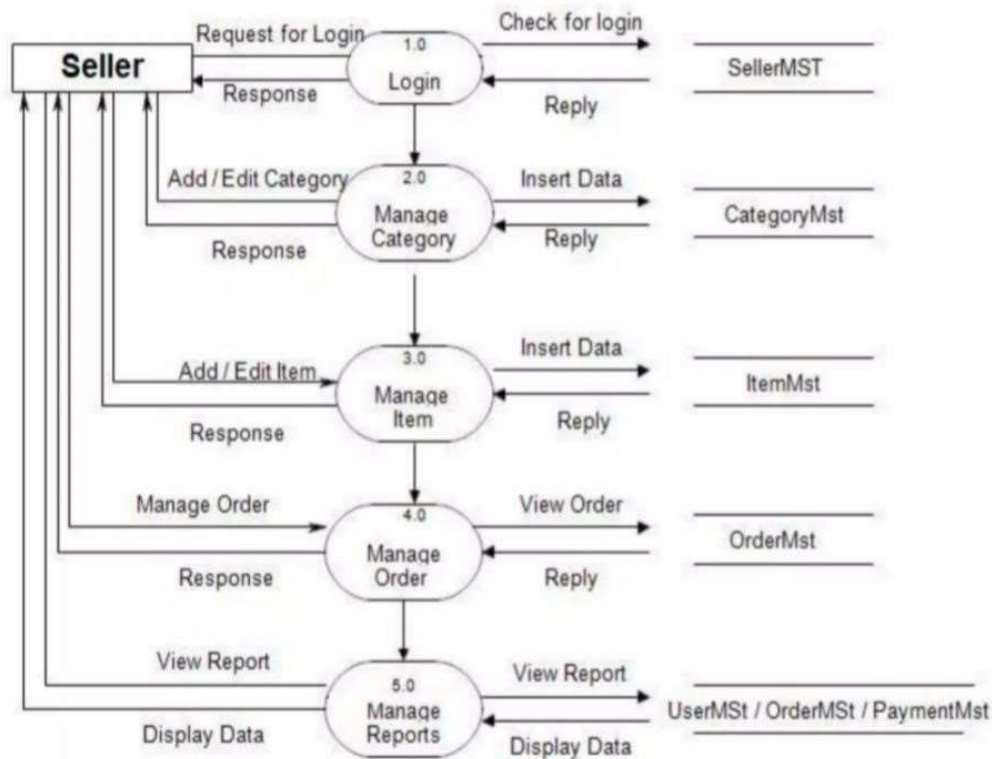
Same data store.

→ symbol as



Flipkart DFD diagram :





- 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.

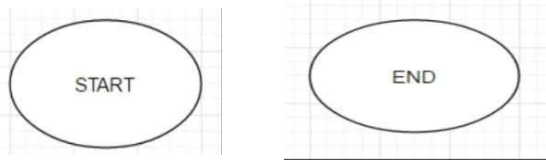
⇒ Pictorial view of process.

- 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 :**

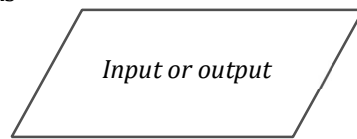
- define a process like defining variables or
Initializing variable or performing any
Computation.
- symbol as



- 3) Input or output :**

→ Used when user have to get or initialize any Variable like get num1 and 2 .

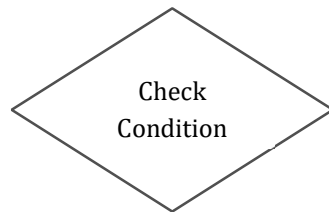
→ Symbols as



4) decision making :

→ checking condition this symbols can be
Used like num1 is greater than num2

→ symbol as



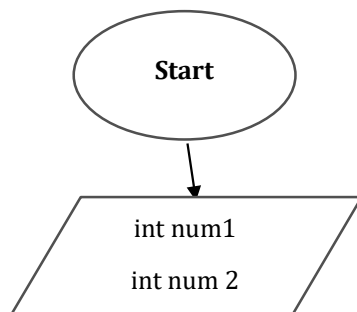
5) Flowlines:

→ 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.

