

Software Engineering Assignment

MODULE : 1 (ASSIGEMENT)

• WHAT IS SOFTWARE ? WHAT IS SOFTWARE ENGINEERING ?

ANS.

- Software is a set of programs (sequence of instructions), data or programs used to operate computers and execute specific tasks. It is the opposite of hardware, which describes the physical aspects of a computer.
- Software is a generic term used to refer to application, scripts and programs that run on a device. It can be thought of as the variable part of a computer, while hardware is the invariable part.
- Software engineering is defined as a process of analyzing user requirements and then designing, building, and testing software application which will satisfy those requirements.
- Applications software is mostly installed in device. System software is built into software. Driver software is used for audios and videos. Middleware software is mediating between hardware and software. programming software is used to write a code.

• EXPLAIN TYPES OF SOFTWARE

ANS.

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

1. System software: System software is mainly designed for managing system and run independently. It is used to write a low-level programming. And OS is the best example of system software.

2. Application software: Application software is a computer software package that runs functions for user. It self-contains program.

3. Driver software: Driver software also known as a device driver. It controls the device and enabling them to perform their specific tasks. Driver software is communicated with the device. And hardware dependent and operating system specific.

4. middleware software: It is a software that mediates between application and system software. For example, middleware enables Microsoft windows to talk to word.

5. Programming software: It is a set of programs which help the software developers by giving them in creating, debugging and maintaining other programs and applications. And used to write a code.

• **WHAT IS SDLC ? EXPLAIN EACH PHASE OF SDLC**

ANS.

➤ SDLC (software development life cycle) refers to a methodology with clearly define processes for creating high-quality software in detail ,the SDLC methodology focuses on the following phases Of software development.

➤ The software development life cycle is a process used by software development organizations to plan,design,develop,test,deploy and maintain software application.

• **There are 6 phase of SDLC**

1. Requirement Gathering
2. Analysis
- 3.Designing
4. Implementation
5. Teating
6. Maintenance

1.Requirement gathering : it is processing that requirement gathering and identify your project to start to end. This process is understanding what you are trying to build and why you are building it.

2.Analysis : analysis is very important throughout any software development process. And plays a significant determining factor in the success of any software project in terms of usefulness and delivery within established constraints and based on how it is performed.

3.Designing : it designs lay out of page or application. This mechanism transforms a data to some suitable form, which helps a coding. The design is representing a client's data.

4.Implementaion : translating the data and design into system software. And after developers use tools and programming languages to build the code.

5.Testing : in this phase developers tests a software and find a errors and deficiencies. Testing is also known as a quality assurance.

6.Maintenance : if tester finding a debug from project, they return to the developers and then he resolving debug and implement correct code and send to a tester

• **WHAT IS DFD ? CREATE A DFD DIAGRAM ON FLIPKART**

ANS.

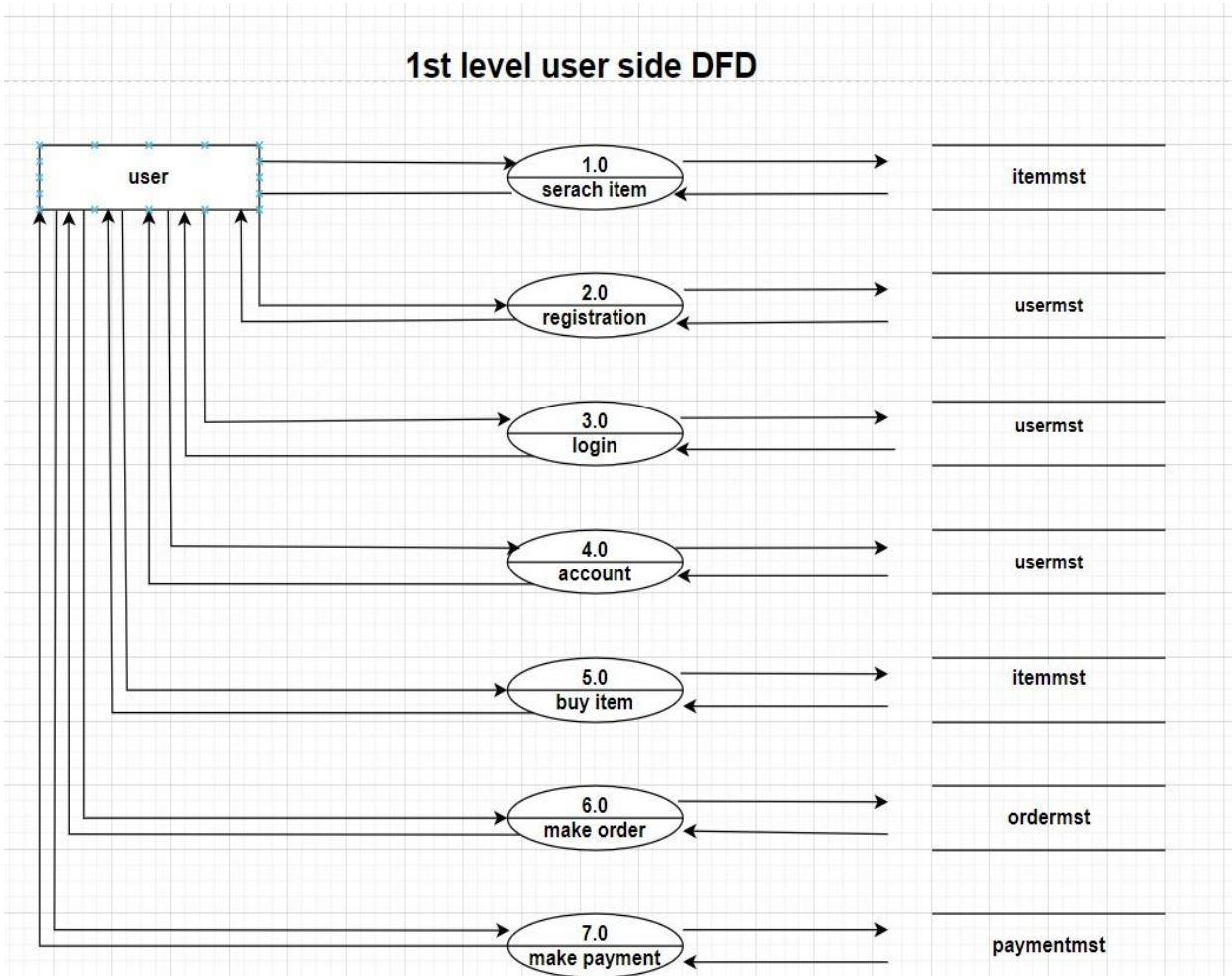
➤ DFD “stand of data flow diagram”. It is also known is a ‘ Bubble chart ’.

➤ DFD is the flow or data graphically on an information system by using DFD It describes how data is processed in a system in terms of input and output.

0th level user side DFD



1st level user side DFD



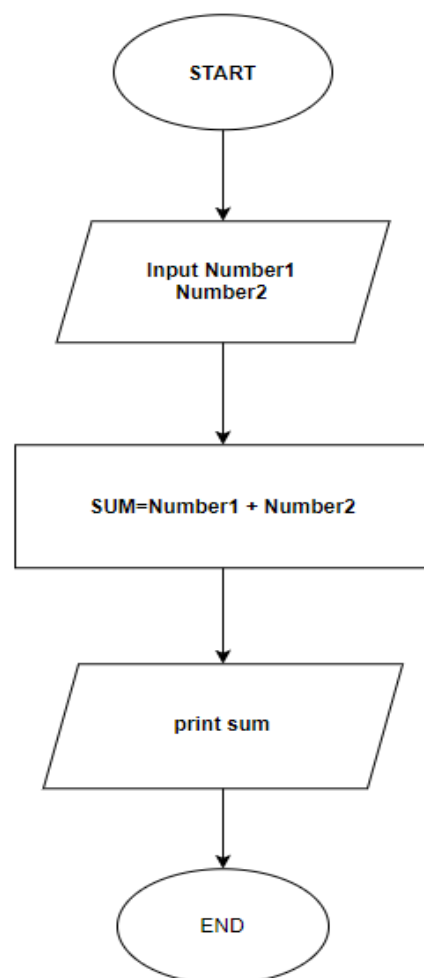
• **WHAT IS FLOW CHART ? CREATE A FLOWCHART TO MAKE ADDITION OF TWO NUMBERTS**

ANS.

➤ A flow chart is a diagram that depicts a process, system or computer algorithm. They are widely used in multiple fields to document, study, plan, improve and communicate often complex processes in clear, easy-to-understand diagrams.

➤ Flowcharts, sometimes spelled as flow charts, use rectangles, ovals, diamonds and potentially numerous other shapes to define the type of step, along with connecting arrows to define flow and sequence.

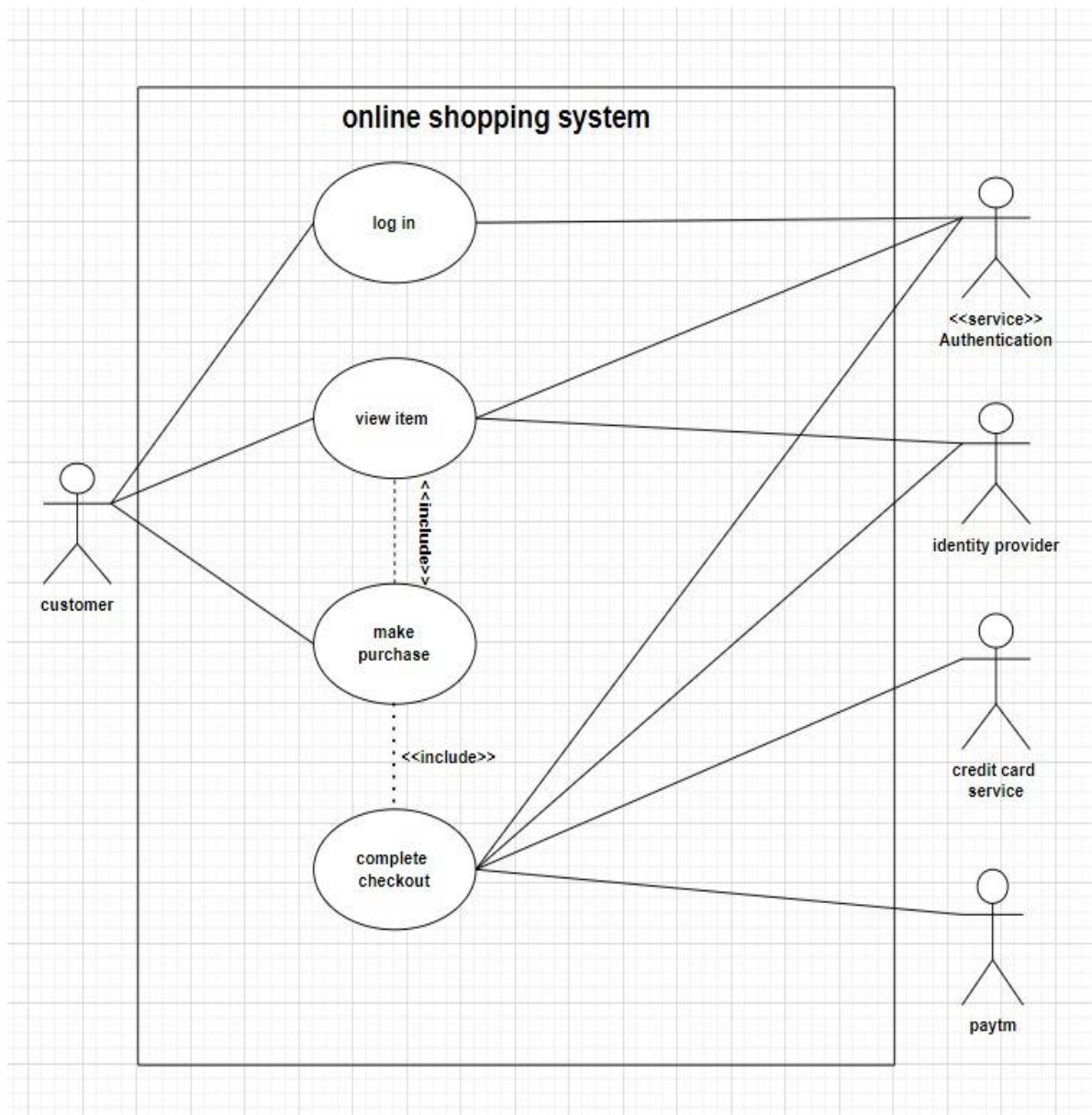
Flow chart of addition of two numbers



• **WHAT IS USE CASE DIAGRAM ? CREATE A USE CASE ON BILL PAYMENT ON PAYTM .**

ANS.

- A use case diagram is graphical depiction of a user's possible interactions with a system. it shows various use cases and different types of users the system has and will often be accompanied by other types of diagrams as well.
- The use cases are represented by either circles or ellipses. The actor is often shown as stick figures.



Use case diagram