Software Engineering Assignment

MODULE:-1(SDLC)

- What is software? what is software engineering?

  - Software is a set of instructions, data or programs used to operate computers and execute specific tasks. Software is a generic term used to refer to applications, scripts and programs that run on a device.

  - These software program are designed to run a computer application program and hardware. It is type of software application that help in the automation of the task based on the user input. That is Five type of application software application software, system software, driver software, middleware software, programming software.

  - Application software is the most common type of software. System software coordinates the activity and function of the hardware and software. Driver software also known as device driver. Middleware describe software that mediates between application and system software or between two different kinds of application software. Programming software is used to write code.

- Explain types of software
  1. system software
  2. Application software
  3. Driver software
  4. Middleware
  5. Programming software

1. system software :- Computer cannot run without system software. Use to run system and written in low-level language. System software are mainly designed for managing system and run independently. The OS is the best example of system software. It coordinate the activity to hardware and software.

2. application software :- application can be self-contained and a program which is run the application for the uses. Application software is a computer software package that run function for user. A computer can easily run without application software.

3.driver software:- also known as device driver. Device driver control the device and enabling them to perform their specific tasks. That software is often consider type of system software. A driver communicates with the device. Drivers are hardware dependent and operating-system-specific.

4. middleware:- the term middleware describe software that mediates between application and system software it is also used to send remote work request from an application in a computer that has one one kind of OS. For example middleware enables Microsoft windows to talk to word.

5.programming software:- Programming software is a program or set of programs which helps the software developers by giving them in creating, debugging and maintaining other programs and applications. Computer programmers use programming software to write a code.

- # What is SDLC? Explain each phase of SDL

  - SDLC is a structure that imposed the software product that defined the process of planning, analysis, designing, implementation, testing and maintenance. the software development life cycle refer to a methodology with clearly defined process for creating high-quality software.

  - There are six phase of SDLC

    1. Requirement collection
    2. Analysis
    3. Designing
    4. Implementation
    5. Testing
    6. Maintenance

1. **Requirement collection:-** Requirements gathering is the process of identifying your project requirement from start to and. Requirements gathering is the process of understanding what you are trying to build and why you are building it.

2. **Analysis:-** System analysis is there very important throughout any software development process as it 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 well it is performed. this activity are the tasks of performing a feasibility study and requirements engineering.

3. **Designing:-** it design lay out of page or application. Software design is a mechanism to transform user requirements into some suitable form, which helps the programmer in software coding and implementation. It deals with representing the client's requirement

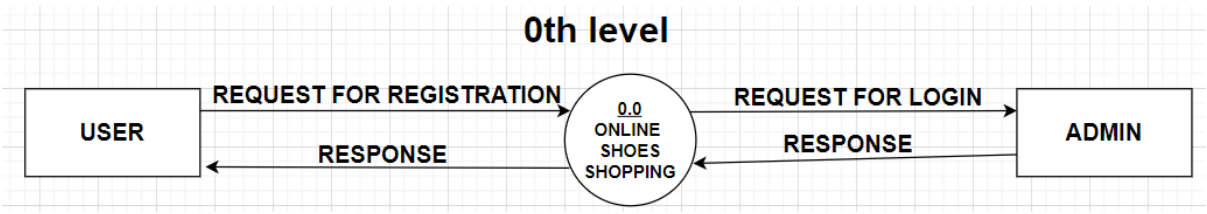
4. **Implementation:-** Translating the detailed requirements and design into system components. Developers use various tools and programming languages to build the code.

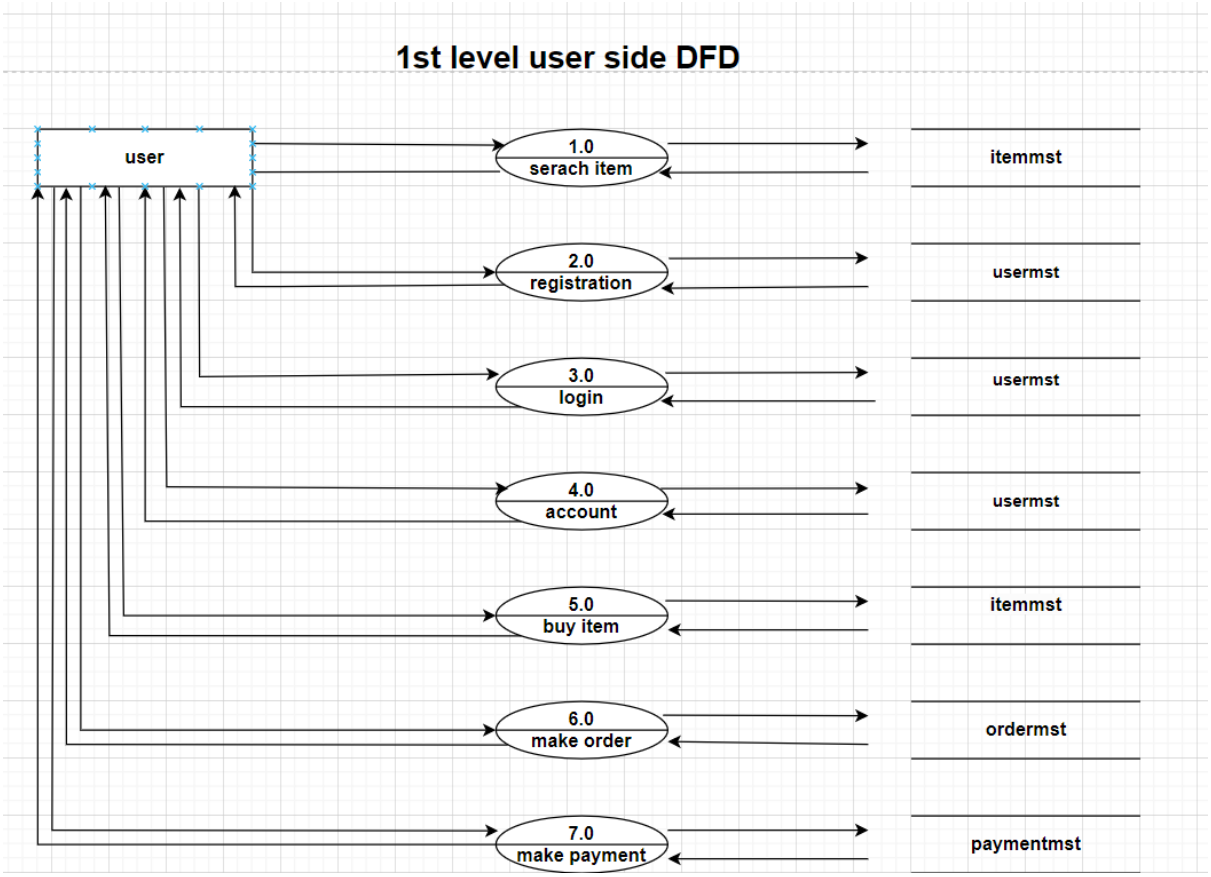
5. **Testing:-** is where the development team tests the software for errors and deficiencies. the testing process should ensure each unit of the software works well. Testing is also known as quality assurance.

6. **Maintenance:-** if tester finding a debug from implementation they return to the developer and then he resolving debug and implement code and then again send to the tester. If tester approv then it was given to user or customer.

• What is DFD? Create a DFD diagram on Flipkart

- **DFD** stand of " data flow diagram" it is also known as "bobble chart".Data Flow Diagram can be represented in several ways**.** Which we can represent the flow of data graphically on information system. It describe hoe data in processed in a system in term f input of output.

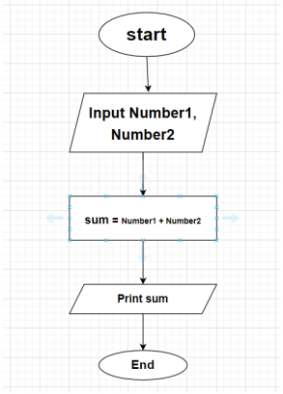




- What is Flow chart? Create a flowchart to make addition of two numbers

  - A flow chart is a picture of the separate steps of a process in sequential order. It is a generic tool that can be adapted for a wide variety of purposes, and can be used to describe various processes, such as a manufacturing process, an administrative or service process, or a project plan. Flow chart is used to develop understanding of how a process is done and communicate to others how a process is done.

Flow chart of addition of two numbers



- # What is Use case Diagram? Create a use-case on bill payment on paytm.

➢ A use case is a written description of how user will perform tasks on your website. It outlines, from a user's point of view, a system's behavior as it responds to a request. Each use case is represented as a sequence of simple steps, beginning with a user's goal and ending when that goal is fulfilled. the use cases and actors in use-case diagrams describe what the system does and how the actors use it, but not how the system operates internally. Use-case diagrams describe the high-level function and scope of a system.