***Software Engineering Assignment***

1. **What is software ? What is software engineering ?**

**Software :**

* Software is a set 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 applications, scripts and programs that run on a device.

**Software Engineering :**

* Software engineering is defined as a process of analyzing user requirements and then designing, building, and testing software application.

1. **Explain types of software.**

There are 2 types of software.

1. System software
2. Application software
3. Driver software
4. Middleware
5. Programming software
6. **System Software :**

* System software is software that directly operates the computer hardware and provides the basic functionality to the users as well as to the other software to operate smoothly.
* System software basically controls a computer’s internal functioning and also controls hardware devices such as monitors, printers, and storage devices, etc.
* Example :- Calculater

1. **Application software :**

* Application software is a computer software packages that performs a specific function for a user or in some cases for another application.
* Example :- MS Office, Paint etc.

1. **Driver Software :**

* Driver software that controls a device and helps that device to perform its functions. Every device like a printer, mouse, modem, etc. needs a driver to connect with the computer system eternally.
* Example :- Audio drivers, Video drivers, etc.

1. **Middleware :**

* Middleware is an elementary software that connects two secrates applications.
* Example :- Database middleware, Application server middleware.

1. **Programming Software :**

* Computer programmers use programming software to write code.
* Example :- Turbo C , Eclipse etc.

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

**SDLC :**

The Software Development Life Cycle (SDLC) refers to a methodology with defined processers for creating high-quality software.

SDLC methodology focuses on the following phases of software development:-

1. Requirement
2. Analysis
3. Designing
4. Implement
5. Testing
6. Maintainance

Requirement

Maintainance

Testing

Implement

Designing

Analysis

1. **What is DFD ? Create a DFD diagram on Flipkart.**

**DFD :** DFD stands for Data Flow Diagram.

A data flow diagram is a way of representing a flow of data through a process of a system.

**DFD diagram on flipcart :**

Order Confirmed

Cash on delivery

Payment

Add Address

Login

Sign up

Add to cart

Select

Sub - Categaries

Categaries

Online

HOME

1. **What is Flow chart? Create a flowchart to make addition of two numbers.**

**Flowchart :**

A diagram that shows the connections between different stages of a process or parts of a system.

**Flowchart to make addition of two numbers :**

Start

Input number :- num1,num2

Ans= num1 + num2

Print Ans

End

1. **What is use case Diagram? Create a use-case on bill payment on paytm?**

A use case diagram is a graphical depiction of a users possible interactions with a system.

**A use-case on bill payment on Paytm** :-

Start

Electricity bill

Slect electricity board

Personal information

Select an option to pay

Stop

Pay bill

Add bank detail

Bill Amount

Select state

Add new bill