**Module: 1 assignment**

**QUE: 1 what is software? What is software engineering?**

**--> Software is nothing but set of instruction or set o program are known as software.**

**Software is that part of a CPU computer, which cannot be touched. Software tell a computer what to do**

**and how to do it.**

**\* What is software engineering ==> software engineering is a technique through which we can developed or created**

**Software for computer systems and any other electronic devices.**

**\* In other words software engineering is a process in which user needs are analyzed and software is designed based**

**on there needs.**

**\* In software engineering the development of software using well define scientific principle, method and procedures.**

**\* Software engineers build these software and application by using designing and programming languages.**

**QUE: 2 explain types of soft?**

**--> There are 3 type of software**

**(1) System software**

**(2) Application software**

**(3) Utility software**

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**(1) System software: system software is software designed to provide a platform to other swoftware.system software**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ control and manage the operation of computer hardware.**

**EX --> operating system (" windows, android, linux etc. ")**

**(2) Application software: the software that helps you to do a specific type of works is called application software.**

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**EX --> (" MS word, excel, etc. “)**

**(3) Utility software: utility software helps to manage maintain and control computer resources.**

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**EX --> (" antivirus s/w, backup s/w, disk tools etc. ")**

**QUE: 3 what is SDLC? Explain each phase of SDLC.**

**--> SDLC stands for “software development life cycle “model.it describes the sequence of phases or steps to develop any software.**

**In simple word “entire life time of of s/w from beginning to ending define by SDLC.**

**\* All phases of sdlc:**

**(1) Planning**

**(2) Analysis**

**(3) Design**

**(4) Coding**

**(5) Testing**

**(6) Deployment**

**(7) Maintenance**

**1. Planning --> it is the first phase of sdlc in which all the necessary information is collected from the customer to developer the software as per their expectation.**

**2. Analysis --> what is the need of software. Who will be the end-user, what is the future scope of that software.**

**The main aim of this is to collect the detail of each retirement of the customer so that the developers**

**Will clearly understand what they are developing and how to fulfill the customer requirement.**

**3. Design --> it is third phase in which architects start working on logical designing of the software**

**in this phase a SRS(system requirement specification) document in document is created which contains all**

**Logical detail like how the software will look like, which language will be used, database design, modular etc.**

**4. Coding --> when the designing is completed, then a group developer starts coding of the design using a programming language.**

**The interface of the software and all its working according to design phase is implemented in coding phase.**

**5. Testing--> ones the software developer is completed,then it is sent to the tester. The testing team starts testing functionality**

**Of the entire system.**

**in this phase, the software is checked for bugs or errors.**

**Whenever, a bug is found , then the software is resent to the coders o fix it and then overall software is re-taste.**

**This is done to verify that the entire application works according to the customer retirement.**

**6. Development-> after testing of the software and after that it bug free. Then the software is lunched bad available for the users use it.**

**Even after development of the software, if any bugs or errors are still found then the software is re-evaluates by the maintence team and then it is re-deployed with a new version.**

**7. Maintence--> the maintence team looks over the software usage and users feedback**

**Maintence is necessary to eliminate errors in the system during its working life and to tune the software.**

**The bug fixing upgrade and enhancement of the software is looked over by the maintence team.**

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**(4) What is DFD? Create DFD diagram on flipkart.**

**🡪 DFD “data flow diagram” it is also known as “bubble chart” through which we can represent the low of, data graphically in an information system.**

**🡪by using DFD we can easily understand the overall functionality of system because diagram represent the incoming data flow outgoing data flow and stored data in a graphical form.**

**🡪It describes how processes are in a system in term of input and output.**

**🡪A DFD model uses a no of notations or symbol to represent flow of data.**

**\*DFD for flipkart**

Customer

Registration

Payment gateway

Payment process

Order plea cement

Product search

**(6) What is use cash diagram? Create a use-cash on bill payment on paytm.**

**🡪A use cash diagram represents the dynamic behavior of the system. Dynamic behavior measures the performance of the system at the time of the execution.**

**It is use for internal and external impact of the system retirement**

**\*use cash diagram on bill payment in paytm**

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Payment confirmation

Payment getaway

Registration

Payment method

Bill detail

Select bill type

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**(5) What is flow chart? Create a flowchart to make addition of two numbers.**

**🡪 Flow chart is diagrams showing the sequence of logical steps.**

**🡪They use geometrical shapes and arrows to show processes relationships and data/processes flow.**

**🡪Flowchart is a graphical representation of an algorithm.**

**🡪Programmers often use it as a program planning tool to solve a problem.**

**\*Two number addition flow chart**

start

stop

Variable declare num1, num2and sum

Display sum

Sum🡨num1 + num2

Read num1, num2