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8th batch CSE
Course code: CSI 321
course: Software Engineering.

Ans: to: the: s: NO: 01
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(a) Ans: Software Engineering is the design Development testing & maintenance of software Application. software engineer Apply engineering principles & knowledge of programming language to build software solution for end user.

(b) Ans: SDLC Activities:

→ Communication. This is the first step where the user initiates the request for a desired software Product.
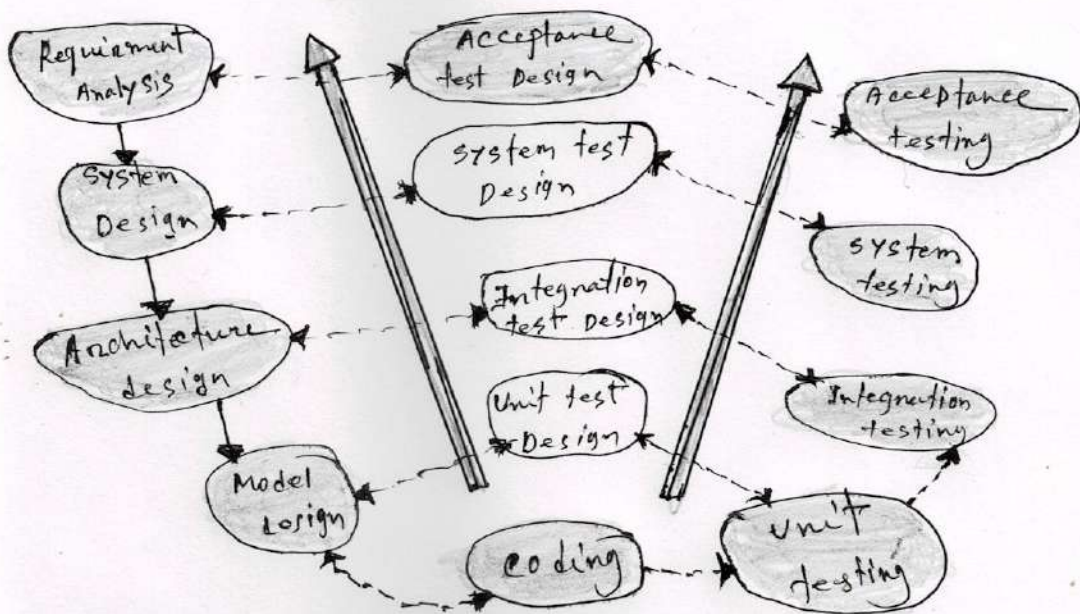
→ Requirement Gathering. The step on words the software development team works to carry on the project.

→ Feasibility study. → System Analysis.

→ Coding. → testing → Integration.

⊞ Spiral Model: The spiral model is on of the most important software development life cycle model which provides support Risk Handing in it's diagram matic representation. It looks like a spiral with many loops. The exact number of loops of the spiral is unknown & can very from project. Each loop of the spiral is called a phase of the software development processes.

The exact number of phases needs to develop the product can be varied by the project manager depending upon the project risks. As the project manager has an important rule to develop a product using the spiral model. The spiral model is a software development life cycle (SDLC). Model that provides a systematic & interative approach to sofware.

(c) Ans: V-model: The v-model is an SDLC model where execution of process happens in a sequential manner in a v-shape. It is also known as Verification & validation model. The v-model is an extension of water fall model & is based on the association of a testing phase for each corresponding development stage. This means that for every single phase in the development cycle. There is a directly associated testing phase. this is highly-Disciplined model & the next phase starts ony after completion of the previous phase.
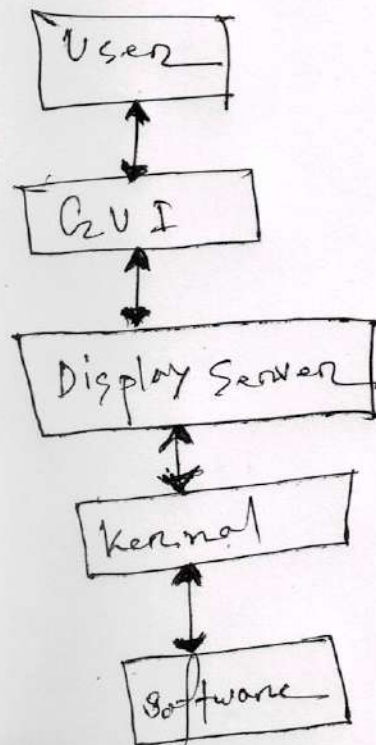

V-model

(d) Graphical user Interface: (GUI)

GUI is an interface that Allows user to interact with Different Elements electronic device Using icons & other visual indicator. The graphical user interface were created Because command line interface were quit complicated & it was difficult to learn all the commands in it in today's time, graphical user interface are used in many device such as mobile, MP3 players, gaming device, smart phone etc.

→ The bellow Diagram provides the possition of the GUI with respect to the computer system.

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┌──────────────┐
│    User      │
└──────────────┘
       ↕
┌──────────────┐
│    GUI       │
└──────────────┘
       ↕
┌──────────────────┐
│  Display Server  │
└──────────────────┘
       ↕
┌──────────────┐
│   Kernal     │
└──────────────┘
       ↕
┌──────────────┐
│  Software    │
└──────────────┘
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(a) Ans: Project manager: Project manager in software Organization project & can assign tasks of software engineering teams According to the specification of a task. software project manager use their leadership skills, technical knowledge & experience to direct their teams & ensure software needs clint requirement.

(b) Ans: Project manager rule & responsibilities:

A software project manager is the most important person inside a team who takes the overall responsibilities to manager to manager the software project & plays & important rule in the successfull completion of the project. A project manager has to face many difficult situation to accoplish these works. In fact the job responsibilities of a project manager range from invisible actives like building up team morule to highly visible customer presentation most of the manager take responsibility for writing the project proposal project cost estimation, sheduling, project slafting software process.

Tailoring project monitoring & control, software configaration management, risk, risk management managerial report writing & presentation & interesting which elements. The task of a project manager are classified into two major type:

(1) Project planning.

(2) Project monitoring & control.

<u>Project planning</u>: Project planning is undertaken immediately After the feasibility study phase & before the starting of the requirament analysis & specification.

(1) Project estimition.
   (i) cost estimition.
   (ii) time estimition.
   (iii) Effort " .

(2) Sheduling (3) Staffing (4) risk management.

(5) Miscelloneous plan.

 # Responsibilities:

→ Knowledge of project estimation techniques.

→ Good decision - making abilities of the right time.

→ Previous experience manging a similar type of project.

→ A project manager must encourage all the team members to successfully develop the product.

→ He must know the various type of risks that may occur & the solution to these problem.

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(c) Answer: Object of software design: The object of software Design process are correctness, completeness, efficiency, flexibility consistency & maintainability. The object of system design is to create plan for a software or Hardware system that meets the need & requirement of a customer or user. This plan typically detaild specification for the system including its architecture components or int interfacing.

O.P.T

System Design is a important steep in the development process of any system, as it Service as the foundation for the implementation & development of system.

A well - desined system cann't help ensure that the system is reliable, efficient, & user - friendly.