Software Project Management KOE-068

Assignment-1

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Submitted to

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Ques-1) Explain why Risk Planning is required.

Ans-1) Early Identification - Identifies potential issues before they become major problems.

Impact Assessment - Evaluates the severity of each risk and its potential consequences.

Response Strategies - Develops proactive plans to mitigate, avoid, transfer or accept risks.

Contigency Planning - Prepares for unforseen events with backup plans.

Stakeholder Communication - Maintains transparency and manages expectations.

Cost and schedule Management - Minimizes delay and budget overruns.

Continious Monitoring - Ongoing process to adapt and address new risks as they risks.

**Ques-2)** Discuss the role of leadership in project management.

Ans-2) The key roles of leadership in software project management:

1. Vision Setting: Establishing project goals and aligning the team.

2. Team Building: Creating a skilled, collaborative, and motivated team.

3. Motivation and Inspiration: Encouraging & supporting team members.

4. Decision Making: Guiding the project with informed decisions.

5. Conflict Resolution: Managing conflicts constructively.

6. Risk Management: Identifying and mitigating project risks.

7. Communication: Facilitating clear & transparent communication.

8. Adaptability: Adjusting strategies in response to change.

9. Accountability: Ensuring responsibilities are met and standards upheld.

10. Continuous Improvement: Fostering a culture of learning & innovation.

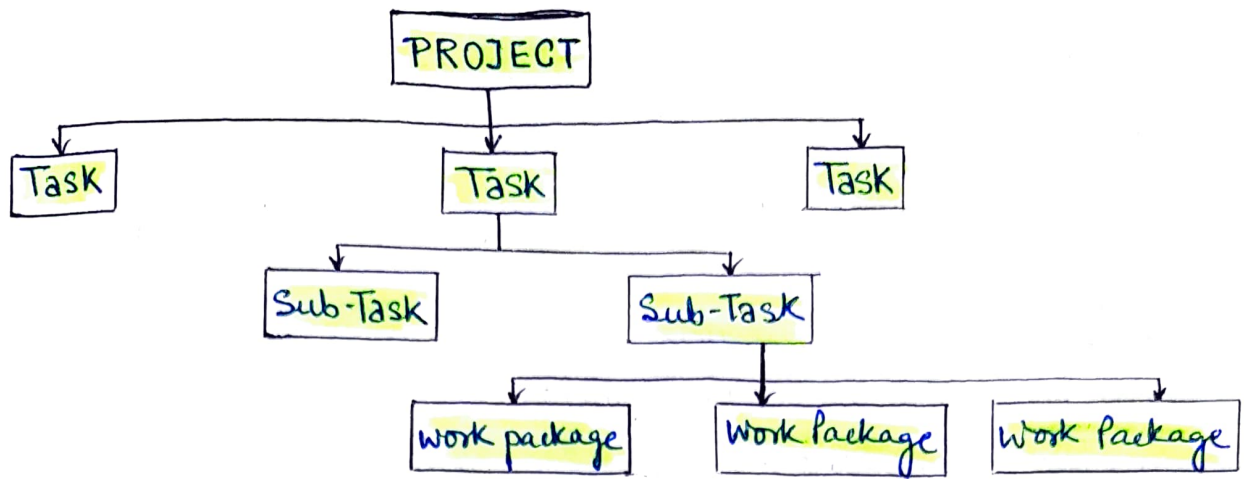**Ques-3)** Discuss project portfolio management with examples.

Ans-3) It is a tool that is designed to centralize the management and maintenance of a project portfolio management.
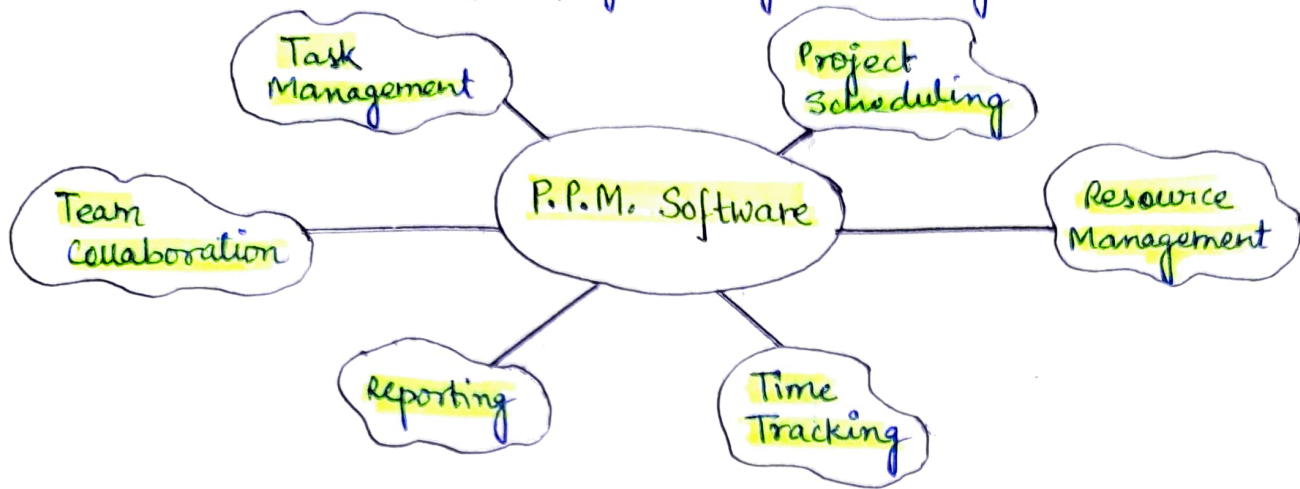
1. It provides an overview of all the project that an organisation is considering.

2. It prioritize the allocation of resource to project and decide which new project should be accepted and existing one should be dropped.

3. It includes accessing the amount of risk of failure.

4. Decide how to share limited resource, staff and time.

5. Ensures project do not duplicate work

6. Identifying which project proposal are worth implementation.

7. The three key aspects of P.P.M. are —

   → Portfolio definition

   → Portfolio management

   → Portfolio optimisation.

Ques-4) Illustrate Work Breakdown Structure (WBS) in context to software projects and products.

A work breakdown Structure (WBS) includes diving a large and complex project into simpler, manageable and independent tasks. The root of this tree (structure) is labeled by the project name itself. For constructing a work breakdown structure, each node is recursively decomposed into smaller sub activities, until at the leaf level, the activities become undividable and independent. It follows a top-down approach.

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                    PROJECT
         ┌─────────────┼─────────────┐
       Task          Task          Task
                 ┌──────┴──────┐
             Sub-Task      Sub-Task
                      ┌────────┼────────┐
                 work package  Work Package  work Package
```

uses of Work Breakdown structure:

1. Cost Estimation
2. Time Estimation
3. Easy Project Management
4. Helps in Project organization

Ques-5) Discuss charecteristics of an objective of a project.

Ans-5) The mnemonic SMART is used to describe well-defined objectives:

- Specific - Effective objectives are concrete and well-defined. Vague aspirations such as 'to improve customer satisfaction' are unsatisfactory. Objectives should be defined such that it is obvious to all whether the project has been successful.

- Measurable - Ideally there should be measures of effectiveness which tell us how successful the project has been. For example 'to reduce customer complaints' would ID be more satisfactory as an object than to improve 'customer relations'. The measure cart in some cases, be simple yes/no questions e.g. Did we install the new software by 1st June?"

- Achievable - It must be within the power of the individual or group to achieve the objective.

- Relevant - The objective must be relevant to the true purpose of the project.

- Time Constrained - There should be a defined point in time by which the objective should have been achieved.

Ques-6> Define SDLC Lifecycle.

Ans-6> Software Developement life Cycle (SDLC) is a structured process that is used to design, develop and test good quality software. (SDLC) is a methodology that defines the entire procedure of software developement step-by-step.

The goal of SDLC lifecycle model is to deliver high quality, maintainable that meet's the user's requirements. SDLC in software engineering models outlines the plans for each stage so that each stage of the software developement model can perform its task efficiently to deliver the software at a low cost within a given time frame that meds users' requirements.
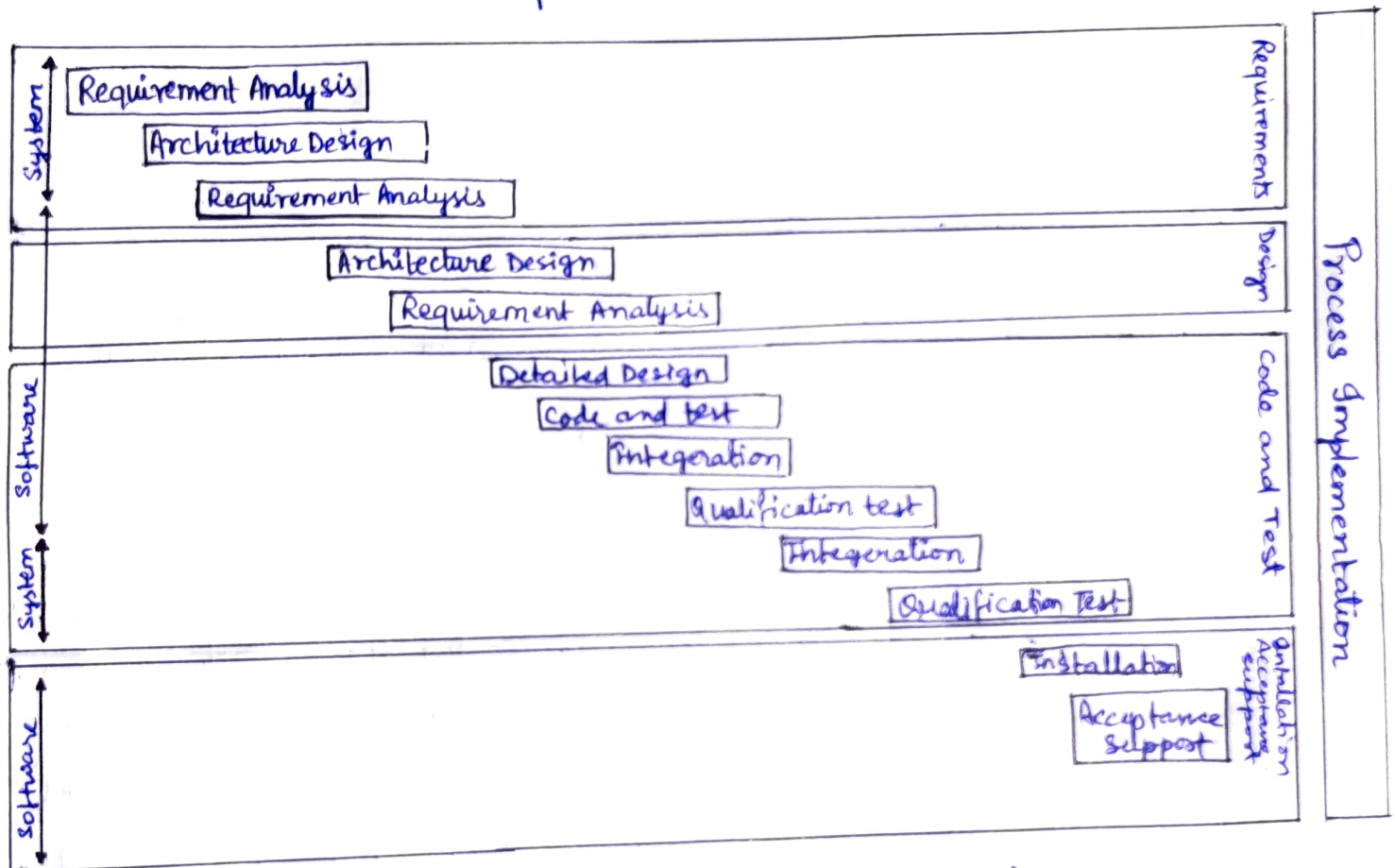
The ISO12207 Software Developement life Cycle