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Week 7 assignment.

1) Differentiate between a project and program.

A Project is an individual or collaborative enterprise that is carefully planned to achieve a particular aim.

While

A Program a set of related measures or activities with a particular long-term aim.

2) Describe the different stages of a project lifecycle.

There are 5 stages in a project lifecycle which include.

- Initiating phase. This phase is to determine the vision for the project, document what to accomplish through a business study, and secure approvals from a stakeholder.
- Planning phase. Here an outline of what to do and the reason for the project is drawn up usually as a team and a full infrastructure is put in place with tasks delegated to team members.
- Executing phase. This phase includes team development, stakeholder engagement, quality assurance, communications, client management it also includes the budget allocation and the project deliverables. The project plan is then put into action.
- Monitoring phase. This phase takes into account the overall progress of the project. It also includes tracking of individual progress of team members and solving potential problems before they get out of hand.
- Closing phase. Here it's about checking off the project as done and closing the project down. This phase is essential for the project and secure a sign-off with from approval stakeholders.

3) Why is project planning considered the most significant step in the project life cycle?

The Planning phase of a project is key because it answers many questions concerning the project or takes into account what exactly the team is going to do, how are they going to do it, when are they going to do it, how will they know when we're done.

4) What is meant by the following as used in software development:

- a) Project Scope. In project management, scope is the defined features and functions of a product, or the scope of work needed to finish a project.
- b) Project lifecycle. The Project Lifecycle is the sequence of phases through which a project progresses. It includes the initiating phase, planning phase, executing phase, monitoring phase and Closing phase.
- c) Quality control. the process through which you achieve, or improve, product quality it is done usually in the testing phase of a life cycle with input from the customer.

5) Explain the major skills of a project manager.

- A project manager should have numerous skills but the most important and what I will take about are the following.
- Effective Communication. From the start of a project communication is key for completion of a project between the team members and the stakeholders.
- Leadership. Its key to have strong leadership skills through effectively coaching, guiding, and motivating of team members can help move a project forward and deliver a positive outcome.
- Critical Thinking and Problem Solving. This is a critical skill to have by keeping a cool head through tricky or ambiguous projects and generate solutions to problems.
- Scheduling and Time Management. This is a core skill in a project to have in handling multiple schedules it prevents chances of having roadblocks in the future and in the end potentially saving time.

6) How to choose a project management tool for you and your team?

- Identify your challenges and constraints. This phase is important because some teams are focused on keeping the workflow organized and on track while others are looking for a contained and logical way to communicate about.
- Create a list of top options. Once the constraints have been identified, we now can create a list of the options that may fit our budget.
- Test each tool with the team. Here we test the various tools identified from above and see which one suits the kind of project we are working on.
- Get feedback from your team. We get feedback from the team and to see which tool best suits what we are trying to achieve.
- Calculate and justify the cost. We have to recalculate cost depending on the budget because some tools cost more than others.

7) Briefly explain some of the tools used in project management.

- I. Gantt Charts. A Gantt chart is a visualization of your project timeline and the dependencies between your various work items. It uses a bar chart that illustrates a project schedule.
- II. Microsoft projects. It is a project management software product, developed and sold by Microsoft. It is designed to assist a project manager in developing a schedule, assigning resources to tasks, tracking progress, managing the budget, and analyzing workloads.

8) Stakeholders are a key to success of any project management. Justify this statement.

Stakeholders provide constraints or requirements based on information from their industry. This will help you understand the project risks (positive and negative) and constraints. The more you involve and engage stakeholders, the more you will uncover and reduce risks on your project.

9)

a) Define Agile project management.?

It is an iterative approach to delivering a project throughout its life cycle. It ensures feedback can be acted on quickly and that responsive changes can be made at each stage of a product cycle.

b) Briefly explain the significance of Agile project management?

It ensures feedback can be acted on quickly and that responsive changes can be made at each stage of a sprint or product cycle.

10)

a) **What is version Control?**

It is a business management technique employed in many places where information is communicated by using visual signals instead of texts or other written instructions?

b) **Explain the uses of version control.**

- Show people on the team and elsewhere to see the state of the work being done
- To identify abnormalities in the process such as blockages, capacity issues, or dates at risk.
- Provides a way for a team to better discuss what their process should be.

c) **Differentiate between git and GitHub?**

Git is a version control system that lets you manage and keep track of your source code history.

While

GitHub is a cloud-based hosting service that lets you manage Git repositories.

d) **Other than GitHub, mention other code hosting platforms.**

- GitLab.
- BitBucket.

e) **What's meant by the term pull request as referred to in GitHub?**

Pull requests let you tell others about changes you've pushed to a branch in a repository on GitHub. Once a pull request is opened, you can discuss and review the potential changes with collaborators and add follow-up commits before your changes are merged into the base branch.

f) **Describe the process involved in making a pull Request.**

First, I create a branch on a given repository.

Change the branch and destination of a pull request. This is done only when the default repo is incorrect using the drop-down lists.

Creating a pull request. This is done by navigating to the main page of the repository, in the Branch menu, choose the branch that contains your commits, add the list of files and then merge.

g) **Why are Pull Requests needed?**

Enables you as the leader to track your team's review process as a whole.

h) **When do we use pull Requests?**

They are used when working on a branch of a repository.

References

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