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Agile Assignment - 02

Q.1)

A· **Agile methodology** → It is a set of principles rather than one single principle. Its principles are applied in other more specific methodologies such as extreme programming, Scrum, etc. Its a practice based on continuous iterations of development & testing where these activities run side-by-side. Projects made in agile are characterised by a series of tasks which are performed dynamically.

· **Waterfall model** → This model is linear which focuses on up front planning with pre-defined requirements. In this model each phase needs to be completed before moving on to next step. In this, work cascades like a waterfall, through various project phases.

Q2)

A· Roles in Scrum are quite different from the traditional software methods. Clearly defined roles and expectations help individuals perform their tasks efficiently. In Scrum, there are 3 roles :

a) Product Owner
b) Development team
c) Scrum master

→ All these together are known as Scrum team.

- Scrum Master ⇒ Helps the product group team & apply Scrum to achieve business value. The scrum master does whatever is in their power to help the team, Product Owner & Organisation be successful.

- Product Owner ⇒ Is responsible for maximising return on investment (RoI) by identifying product features, translating these into a priotarised list, deciding which should be at the top of the list for the next sprint and continually re-prioritizing and refining the list.

- Development team ⇒ It is a collection of individuals working together to develop & deliever the requested & committed product increments, It comprises of cross-functional numbers who are capable of achieving the sprint goals.

(Q-3)

Q.3)

A.

Product Backlog	Sprint Backlog
• It is the list of all the items that need to be completed so that the end product can be developed.	• It is the list of all the items that have been taken from the product Backlog & has to be completed so that the sprint can be completed.
• The Product Owner is responsible for the product Backlog	• The Development Team is responsible for the Sprint Backlog.
• Specific to the entire goal of the Product	• Is specific to only the Sprint goal in a particular sprint
• It is independent of the Sprint Backlog	• It is purely dependent on the Product Backlog.

Q.4)

A. Scrum meeting plays an integral role in a work environment adapting scrum methodology. They are considered to be an invaluable source of collecting information & feedback from the dev. teams & thus help them synchroise with sprint goals

Types of Scrum meetings are :-

a) <u>Sprint Planning meeting</u> → They are held in beginning of every sprint. Entire team is present in this meeting including product owner & scrum master. The product owner explains backlog items & discussion is done. Then dev team comes with sprint goal & backlog.

b) <u>Daily Scrum meeting</u> → These occur daily, held at same time & place every day are held for 15 min. only. Task statuses & hindrances are discussed. Daily achivements of a day before are analysed too.

c) <u>Sprint Review meeting</u> → It is held at end of every sprint. In this meet demonstration of functionality of product & what has been achieved in a sprint is discussed.

d) <u>Sprint Retrospective meeting</u> → fundamental purpose of reviewing what went right & wrong is discussed. Brings a great scope for improvements.

e) <u>Backlog Refinement Meeting</u> → In this backlog items are categorised & prioritised after a technical discussion to make sure that the team understand what exactly is needed.

Q.5

A. • **Team Velocity** => It is a measure of the amount of work a team can tackle during a single sprint & is the key metric in Scum.

• **User Story** => It is an informal, general explainations of a software feature written from the perspective of end user.

• **Story points** => It is a metric used in Agile Project managment & Development to, estimate the difficulty of implementing of a given user story.

• **Burn Down chart** => It shows the amount of work that has been completed in an epic or a sprint, and the total work remaining.

• **Burn Up chart** => It shows the amount of work that has been completed & the total scope of the project