Assignment-1 (Agile)

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**Ques 1 - What is an agile or agile methodology?**

**Ans-** Agile is a software development methodology to build software incrementally using short iterations of 1 to 4 weeks so that the development process is aligned with the changing business needs. It reduces the time constraint and there is continuous development and delivery of useful software.

**Ques 2 - Agile Methodology principle?**

**Ans-** There are twelve principles behind agile methodology :

**CUSTOMER SATISFACTION** - Manifesto provides high priority to satisfy the customer requirements. This is done through early and continuous delivery of valuable software.

**WELCOME CHANGE** - Making changes during software development is common and inevitable. Every changing requirement should be welcome, even in the late development phase. Agile process works to increase the customers; competitive advantage.

**DELIVER THE WORKING SOFTWARE** - Deliver the working software frequently, ranging from a few weeks to a few months considering the shortest time period.

**COLLABORATION** - Businesspeople (Scrum Master and Project Owner) and developers must work together during the entire life of a project development phase.

**MOTIVATION** - Projects should be built around motivated team members. Provide such an environment that supports individual team members and trusts them. It makes them feel responsible for getting the job done thoroughly.

**FACE TO FACE CONVERSATION -** Face to face conversation between scrum master and development team and between the scrum master and customers for the most efficient and effective method of conveying information to and within a development team.

**MEASURE THE PROGRESS AS PER THE WORKING SOFTWARE -** The working software is the key and primary measure of the progress.

**MAINTAIN CONSTANT PACE -** The aim of agile development is sustainable development. All the businesses and users should be able to maintain a constant pace with the project.

**MONITORING -** Pay regular attention to technical excellence and good design to maximize agility.

**SIMPLICITY -** Keep things simple and use simple terms to measure the work that is not completed.

**SELF-ORGANIZED TEAMS -** The agile team should be self-organized. They should not be

depend heavily on other teams because the best architectures, requirements, and designs emerge from self-organized teams.

**REVIEW THE WORK REGULARLY -** The work should be reviewed at regular intervals so that the team can reflect on how to become more productive and adjust its behavior accordingly.

**Ques 3 - What are the advantages and disadvantages of the Agile Process.**

**Ans:** The advantages of the agile process are:

* Customer satisfaction is rapid, continuous development and delivery of useful software.
* Customer, Developer, and Product Owner interact regularly to emphasize rather than processes and tools.
* Product is developed fast and frequently delivered (weeks rather than months.)
* A face-to-face conversation is the best form of communication.
* It continuously gave attention to technical excellence and good design.
* Regular adaptation to changing circumstances.
* Even late changes in requirements are welcomed.

The disadvantages of the agile process are:

* It is not useful for small development projects.
* There is a lack of intensity on necessary designing and documentation.
* It requires an expert project member to take crucial decisions in the meeting.
* Cost of Agile development methodology is slightly more as compared to other development methodology.
* The project can quickly go out of the track if the project manager is not clear about requirements and what outcome he/she wants.

**Ques 4 - What do you mean by a Daily Stand-Up meeting?**

**Ans:** Daily Stand-Up is a part of Sprint Cycle :

DAILY STANDUP - The daily stand-up is a daily status meeting of the agile team member.

Each member of the team has to answer three important questions

* What did he/she do yesterday?
* What did he/she will do today?
* The problem he/she is facing . . . He/she blocked due to. . .

**Ques 5 - What is the difference between Agile and Scrum?**

**Ans:** The difference between agile and scrum are:

* Agile is a philosophy, whereas Scrum is a type of Agile methodology
* Scrum is broken down into shorter sprints and smaller deliverables, while in Agile everything is delivered at the end of the project
* Agile involves members from various cross-functional teams, while a Scrum project team includes specific roles, such as the Scrum Master and Product Owner

**Ques 6 - What is a Sprint Planning Meeting, Sprint Review Meeting, and Sprint Retrospective Meeting?**

**Ans:** These all are a part of the sprint cycle.

**SPRINT PLANNING Meeting** - Tasks are built and assigned to each members, and discuss how to complete them.

**SPRINT REVIEW Meeting**- Inspects outcomes of the tasks and determines future adaptations if any.

**SPRINT Retrospective Meeting** - What went well and what can be improved?