Agile Methodology

What do you mean by Agile or Agile Methodology or Agile Process?

Agile Methodology, as the name suggests, is a set of methods and practices where software development and project management take place to deliver customer-centric products in a short development cycle known as sprints.

What are different types of Agile Methodology?

Different types of Agile methods or frameworks widely used in the world for software development and project development are listed below:
Scrum: It is used to establish hypotheses, test them, reflect on the experience, and also make adjustments. It heavily depends on feedback, self-management, small teams, and work broken out into sprints. It relies on incremental development.

- **FDD (Feature-Driven Development):**

What are advantages and disadvantages of Agile Process.

Advantages

There are several advantages of using the Agile Process as given below:

- Adapt well with changing requirements
- Face-to-face conversation with team members and customers
- Fast and continuous development
- Ensure and promote customer satisfaction
- Faster feedback from customers or end-users
- Quick identification and elimination of errors found in the code
- Quick delivery of product

Disadvantages

There are several disadvantages of using Agile Process as given below:

- Lack of formal documentation and designing
- Difficult to estimate resource requirement and effort
- Not good for small development projects
- Costly as compared to other development methodologies
- Requires more time and energy from everyone

Principles of Agile Testing
There are eight main principles of Agile Testing as given below:
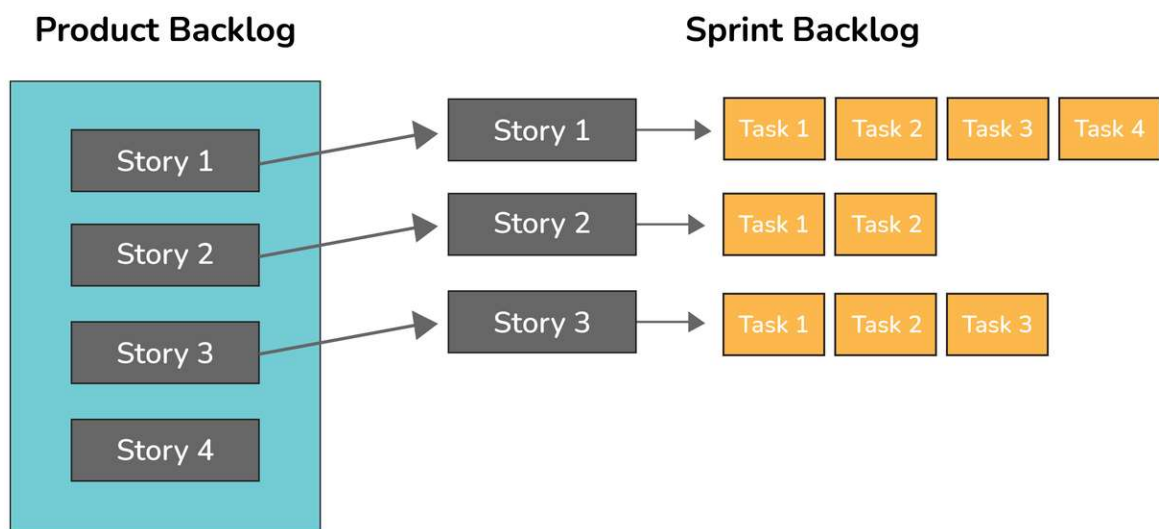
- **Continuous Testing: .**
- **Continuous Feedback:**

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- **Team Work or collective work:**
- **Clean Code:**
- **Less Documentation:**
- **Test-Driven: I**
- **Customer Satisfaction**

What's the difference between sprint backlog and product backlog?

Sprint Backlog: It is generally owned by the development team. It only contains those features and requirements that are related to the specific sprint only. It is considered a subset of the product backlog. It is compiled of everything that must be done to complete a particular sprint. It only includes items that can be completed during each agile sprint. It is specific to the sprint goal only in a particular sprint.

Product Backlog: It is generally owned and maintained by the project owner. It usually contains each and every feature of the product as well as the requirements of the product. It is compiled to everything that must be done to complete the whole process. It just breaks down every item into a series of steps. It is more specific to the end goal of the product.
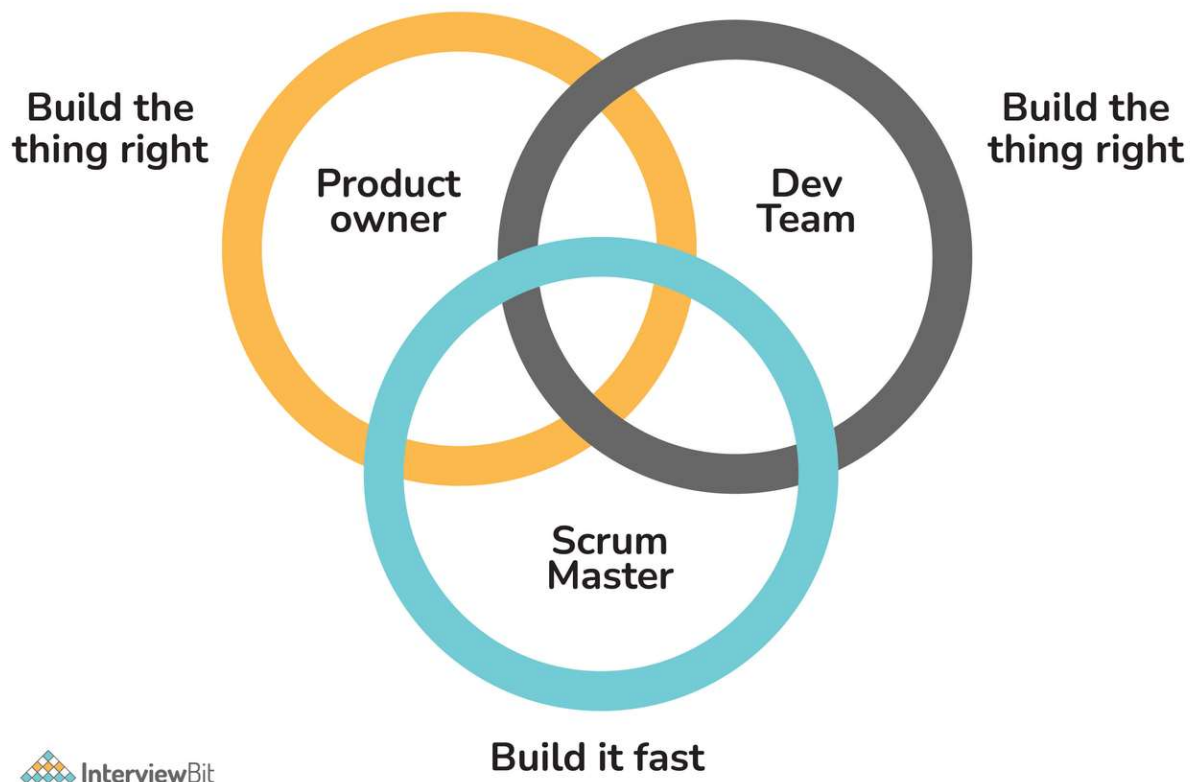

	Agile Software Development	Traditional Software Development
1	This approach is more focused on teamwork, flexibility, customer collaboration, and features.	This approach is more focused on upfront planning and gives importance to factors like cost, scope, and time.
2	In this, testing is usually done parallel to the development activity.	In this, testing is usually done at the end of the development activity.
3	In this, testing is done on small features.	In this, testing is done on the whole application.
4	It involves various stakeholders including customers in the development process.	It does not involve all stakeholders in the development process.
5	In this methodology, testers and developers work together as a team to achieve a goal.	In this methodology, testers and developers work separately.
6	They collaborate with customers in each and every step throughout the process.	They collaborate with customers only at the requirement phase.
7	Agile processes are more focused and flexible as compared to traditional processes.	The traditional process is less flexible as compared to the agile process.
8	This method is more suitable for large or more complex projects.	This method is more suitable for small or less complex projects.

What do you mean by Daily Stand-Up meeting?

A daily stand-up meeting is a day-to-day meeting among all the members of the agile team. Its main purpose is to know the current progress and performance of every team member that works on task

24. What is Scrum? Write its advantages.

Scrum is process that helps scrum teams to work together and manage product development to deliver products in the shortest time

Scrum Master: Scrum Master is a team leader who is responsible for ensuring that the scrum team executes tasks properly.

Product Owner: The product owner is basically a stakeholder of the project who is responsible for managing the product backlog. He is also responsible for defining a vision of what to build for the team.

Development Team: It involves an individual person and each person is responsible for working collectively to complete a particular project. It is the team that is responsible for developing actual product increments and meeting sprint goals

- **Product Backlog:** It is a list of all requirements from clients or stakeholders that are needed in the product and should be accomplished before the end of the project.

- **Sprint Backlog:** It is a list of all finalized user stories, bug fixes, work items, etc., that are completed and selected by

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scrum to be completed during the current sprint.

- **Epic:** It is basically a large story that cannot be completed in a single sprint. Therefore, epics are sub-divided into multiple, smaller user stories before they can be worked on.

- **User story:** These are the smallest units that can be fitted and completed in one sprint. User stories are further broken down into different tasks.

- **Tasks:** These are detailed pieces of work that are necessary to turn user stories into workable components.