

Agile Principles-

1- Customer Satisfaction

Deliver valuable software to customers as the highest priority.

2- Embrace Change

Welcome changing requirements, even late in development, to harness customer feedback.

3- Incremental Delivery

Break projects into small, manageable increments for frequent delivery and feedback.

4- Collaboration

Work closely with business stakeholders and developers throughout the project.

5- Motivated Individuals

Build projects around motivated individuals, providing the support

and environment they need.

6- Face-to-Face Communication

Use face-to-face communication for conveying information effectively within a development team.

7- Working Software

Measure progress primarily through working software.

8- Sustainable Development

Maintain a constant pace indefinitely to ensure sustainable development.

9- Technical Excellence

Continually enhance agility through attention to technical excellence and good design.

10 -Simplicity

Maximize the amount of work not done by focusing on simplicity.

11- Self-Organizing Teams
Allow teams to self-organize around tasks and responsibilities for the best architectures, requirements, and designs.

12- Regular Reflection
Regularly reflect on how to become more effective and adjust behaviors accordingly.

Scrum Framework

1- Scrum Team

-> Product Owner
Represents stakeholders and prioritizes backlog items based on business value.

Ensures that the team works on the highest-value tasks.

-> Scrum Master

Facilitates Scrum events, removes impediments, and coaches the team on Agile practices.

Protects the team from distractions and interruptions.

-> Development Team

A cross-functional group responsible for delivering potentially shippable increments at the end of each sprint.

Self-Organizing and self-managing team members.

Scrum Events

1-Sprint

A time-boxed iteration of one month, or less during which a "Done," usable, and potentially releasable product increment is created.

2-Sprint Planning

A meeting to plan the work to be performed during the sprint. The team collaborates to define the sprint goal and selects backlog items to work on.

3- Daily Scrum

A 15-minute time-boxed meeting for the Development Team to synchronize activities and create a plan for the next 24 hours.

4- Sprint Review

Held at the end of the sprint to inspect the increment and adapt the Product Backlog if needed. The team demonstrates the work done and discusses what to do next.

5- Sprint Retrospective

A meeting after the Sprint Review and before the next Sprint Planning

to reflect on the past sprint. The team discusses what went well, what didn't, and how to improve.

Scrum Artifacts

1- Product Backlog

An ordered list of everything that is known to be needed in the product. It evolves as the product and the environment in which it will be used evolve.

2- Sprint Backlog

A list of tasks the Development Team commits to complete during the sprint. It is a subset of the Product Backlog items selected for the sprint, along with a plan for delivering the product increment.

3- Increment

The sum of all the Product Backlog items completed during a

sprint and all previous sprints. An increment must be in a usable condition regardless of whether the Product Owner decides to release it.

Additional Concepts

1- Definition of Done

A shared understanding within the Scrum Team of what it means for work to be considered complete.

This includes criteria like code review, testing, and documentation.

2- Burndown Chart

A graphical representation of work left to do versus time. It helps to visualize the team's progress and remaining work in the sprint.

3- User Stories

Short, simple descriptions of a feature told from the perspective