AGILE

Agile: is a software development methodology, it is an iterative approach to the project based on the feedback from the client/stakeholder instead of delivering it all at once near the end.

Agile Values:

- Individuals and interactions over processes and tools;

- working software over comprehensive documentation;

- customer collaboration over contract negotiation; and

- responding to change over following a plan.

Agile Principles:

1. Satisfying customers through early and continuous delivery of valuable work.

2. Breaking big work down into smaller tasks that can be completed quickly.

3. Recognizing that the best work emerges from self-organized teams.

4. Providing motivated individuals with the environment and support they need and trusting them to get the job done.

5. Creating processes that promote sustainable efforts.

6. Maintaining a constant pace for completed work.

7. Welcoming changing requirements, even late in a project.

8. Assembling the project team and business owners on a daily basis throughout the project.

9. Having the team reflect at regular intervals on how to become more effective, then tuning and adjusting behavior accordingly.

10. Measuring progress by the amount of completed work.

11. Continually seeking excellence.

12. Harnessing change for a competitive advantage.

SCRUM:

Scrum: is a popular and most accepted framework of the agile methodology used for managing complex projects.

Scrum Values:

- COURAGE: The Scrum Team members have the courage to do the right thing and work on tough problems.

- FOUCS: Everyone focuses on the work of the Sprint and the goals of the Scrum Team.

- COMMITMENT: Scrum team members must be committed to success and be willing to create realistic goals and stick to them.

- RESPECT: Each team member must respect everyone else. It's the golden rule within scrum.

- OPENNESS: The scrum team and it is stakeholders agree to be open about all the work and the challenges with performing the work.

Scrum Roles:

- Product owner: The Product Owner is responsible for delivering the Stakeholder's vision of the project to the Scrum team. It must be a person who fully understands all the requirements and needs of the Stakeholder. He is also responsible for the successful business strategy of the project. Generally, he can be defined as the representative of the customer interests in the Scrum team.

- Scrum Master: The ScrumMaster is just a coach who helps to make the work of the Scrum team more effective,

- The Scrum development team members: The development team members are responsible for the project's performance. There is no personal responsibility in Scrum. The work of the team is estimated as a whole, so there is no ability to find someone to blame for the failure of the project.

Scrum Events:

All events are time-boxed. Once a Sprint begins, its duration is fixed and cannot be shortened or lengthened. The remaining events may end whenever the purpose of the event is achieved, ensuring an appropriate amount of time is spent without allowing waste in the process.

The Scrum Events are:

- Sprint
- Sprint Planning
- Daily Scrum
- Sprint Review
- Sprint Retrospective

Scrum Artifacts

Scrum Artifacts represent work or value to provide transparency and opportunities for inspection and adaptation. Artifacts defined by Scrum are specifically designed to maximize transparency of key information so that everybody has the same understanding of the artifact.

The Scrum Artifacts are:

- Product Backlog
- Sprint Backlog
- Increment