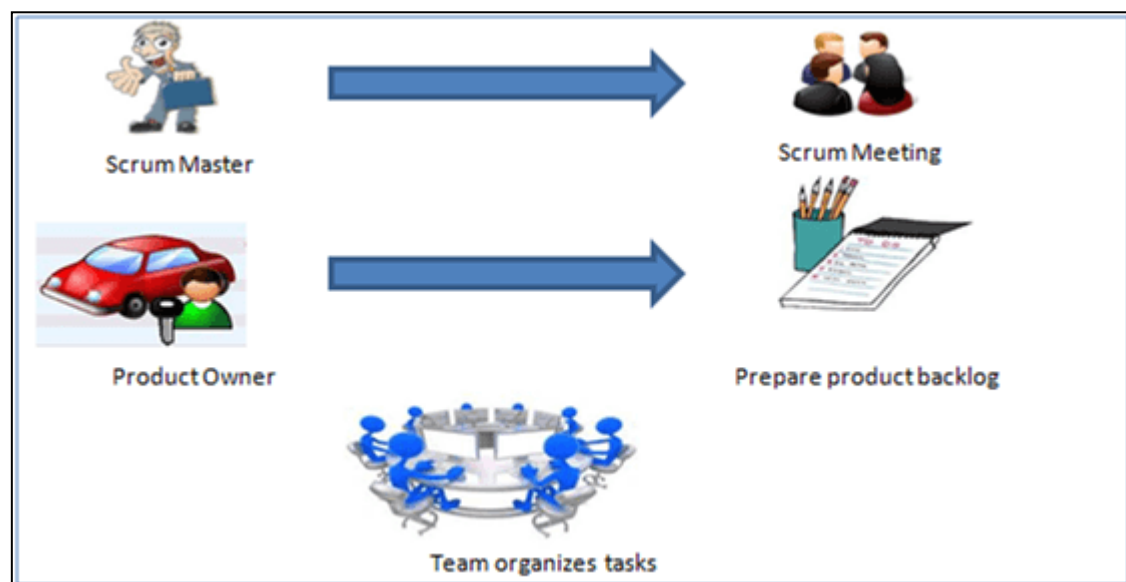# Agile Methodology

Agile Methodology meaning a practice that promotes continuous iteration of development and testing throughout the software development lifecycle of the project. In the Agile model in software testing, both development and testing activities are concurrent, unlike the Waterfall model.

The agile software development emphasizes on four core values.

- Individual and team interactions over processes and tools

- Working software over comprehensive documentation

- Customer collaboration over contract negotiation

- Responding to change over following a plan

There are various Agile methods present in agile testing, and those are listed below:

Scrum

- SCRUM is an agile development method which concentrates specifically on how to manage tasks within a team- based development environment. Basically, Scrum is derived from activity that occurs during a rugby match. Scrum believes in empowering the development team and advocates working in small teams (say- 7 to 9 members). Agile and Scrum consist of three roles, and their responsibilities are explained as follows:

Scrum Master

- Scrum Master is responsible for setting up the team, sprint meeting and removes obstacles to progress

Product owner

- The Product Owner creates product backlog, prioritizes the backlog and is responsible for the delivery of the functionality at each iteration

Scrum Team

- Team manages its own work and organizes the work to complete the sprint or cycle

Process flow of Scrum Methodologies:

Process flow of scrum testing is as follows:

- Each iteration of a scrum is known as Sprint

- Product backlog is a list where all details are entered to get the end- product

- During each Sprint, top user stories of Product backlog are selected and turned into Sprint backlog

- Team works on the defined sprint backlog

- Team checks for the daily work

- At the end of the sprint, team delivers product functionality

Advantages of Agile Methodology :

- In Agile methodology the delivery of software is unremitting.

- The customers are satisfied because after every Sprint working feature of the software is delivered to them.

- Customers can have a look of the working feature which fulfilled their expectations.

- If the customers has any feedback or any change in the feature then it can be accommodated in the current release of the product.

- In Agile methodology the daily interactions are required between the business people and the developers.

- In this methodology attention is paid to the good design of the product.

- Changes in the requirements are accepted even in the later stages of the development.

Disadvantages of the Agile Methodology :

- In Agile methodology the documentation is less.

- Sometimes in Agile methodology the requirement is not very clear hence its difficult to predict the expected result.

- In few of the projects at the starting of the software development life cycle its difficult to estimate the actual effort required.

- Because of the ever- evolving features, there is always a risk of the ever- lasting project.

- For complex projects, the resource requirement and effort are difficult to estimate.