

# AGILE METHODOLOGY:

- Agile is a combination of the Iterative and Incremental model approach.
- It is a process model.
- The software will be delivered to the client with few functionalities which defines the whole software.
- The requirements can be changed even in the later stages of the software development.
- Newer versions of the software will be released.
- Good communication between every team.

## 3 Principles:

- Customers no need to wait till the whole software is developed.
- Delivering the piece of software which contains some functionality which is already developed and tested.
- We can accommodate/accept the change of requirements continuously.

## Advantages:

- Requirement changes are possible at any stage of the development.
- Releases will be very fast.
- No need to wait for a long time.
- It is very easy to adapt.
- Good communication between the team.

## Disadvantage:

- Less focus on Design and Documentation.

# SCRUM:

- It is a framework through which we develop the software using the agile principles.
- Scrum include a group of people, normally contains 5-9 people.
- They are: Product Owner, Scrum Master, Dev Team, QA team.
- Product Owner:
  - He is responsible for gathering the inputs from the customer.
  - Defines the features of the software.
  - Prioritize the requirements as needed.
  - Accept/ Reject the results.
- Scrum Master:
  - He makes sure that the team is running smoothly.
- Dev team and QA team:
  - Develop and test the software.

## SCRUM Terminology:

- User Story: A feature/ module of a software( functionality).
- Epic: Collection of a user story(huge amount of functionalities).
- Product backlog: Contains list of user stories, prepared by product owner.
- Sprint: time period to complete the user stories, decided by the team and the product owner(2-4 weeks).
- Sprint Planning: Meeting conducted with the team, what can be delivered in the particular period of the time.
- Sprint backlog: Contains the list of committed by the QA/Dev team for specific sprint.
- Scrum meeting: Meeting conducted by the Scrum Master for 15 min, to know about the status and blockages if any.
- Sprint retrospective: Conducted after the completion of the sprint along with the product owner and plans for the next sprint.
- Story point: Rough estimation of the user stories, will be given by the Dev and the QA in the form of fibonacci series( 1 story= 6-8 hrs).

- Burndown chart: Maintained by the Scrum Master. Shows how much work remains in the sprint.