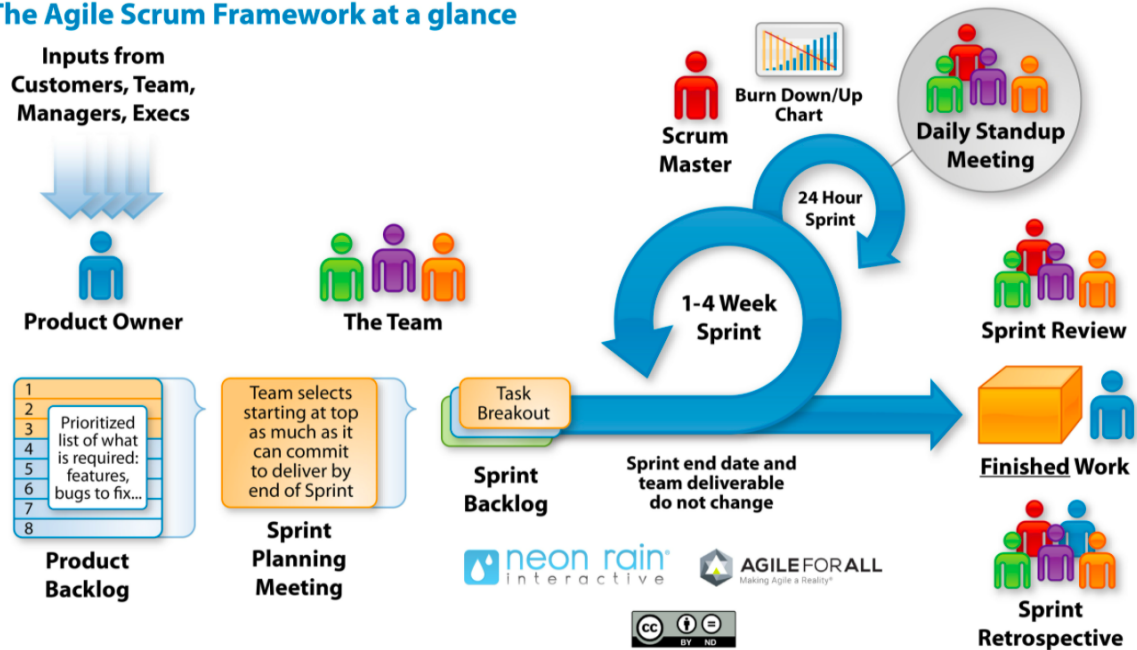# Agile:

- In Agile requirements are break down into small modules and delivered to customers in specified time.
- The general sprint duration is from 1 week to 4 week.
- It is incremental and iterative process
- Agile means move quickly.
- Requirements are changing frequently in the agile methodology.
- It's not plan driven methodology it's value driven methodology
- Agile methodology mainly use in service based companies
- In the agile methodology customer can request for changing the requirement at any phase
- This change in requirement does not affect development & testing.
- There are different types of agile methodology:
  Scrum
  Kanban
  Extreme Programming(XP)
  Lean Development
  Crytal
- In my organisation we are using the scrum agile methodology.

Scrum:

- Scrum is a framework that helps teams work together.

The Agile Scrum Framework at a glance

Stakeholder:
- Stakeholder means client/customer.
- In agile methodology customer is member of top most body of company
- They have a bunch of requirements for product/project.
- They will provide requirements to the product owner.

Product Owner:
- Product owner gather requirements from customer.
- After collecting the requirement product owner will add the requirement in Product Backlog
- Product owner is responsible for maintaining the product backlog
- Product owner will arrange the product backlog according to the customer priority.

Product Backlog
- Product Backlog is a list of all future requirements for a project according to priority.
- Product Owner maintains the Product Backlog.

Sprint Planning Meeting

- In Scrum, the sprint planning meeting is attended by the product owner, ScrumMaster and the entire Scrum team. Outside stakeholders may attend by invitation of the team, although this is rare in most companies.
- In this meeting the Product Owner explains the list of requirements that need to be delivered in the sprint.
- Scrum team will discuss all doubts related to requirements with Product Owner
- So in this meeting decide how many requirements the team is able to deliver in a particular sprint.

Sprint Backlog

- The sprint backlog is a list of tasks identified by the Scrum team to be completed during the Scrum sprint.
- During the sprint planning meeting, the team selects some number of product backlog items, usually in the form of user stories, and identifies the tasks necessary to complete each user story.

Daily Standup Meeting

1. Daily Standup meeting is also called scrum call/ Status call.
2. The main agenda is "What is the progress of the project?"
3. The Scrum Master, Product Owner, Scrum team is involved in the meeting.
4. The three main questions ask in scrum meeting:
   1. What we did yesterday?
   2. What are we going to do today?
   3. What are the roadblocks or issues?

Sprint Review Meeting

- The sprint review is an informal meeting where the team gives a demo of the product and will determine what is finished and what isn't.
- In Sprint Review, customers will provide the feedback.
- In other words we can say that, The Scrum team and the stakeholders collaborate during a Sprint Review and discuss what was done in the last Sprint and what more changes are required in the product. Based on this review, all the participants collaborate and decide on the things that could be done to get an optimized value.

Sprint Retrospective:

- The sprint retrospective is usually the last thing done in a sprint. Many teams will do it immediately after the sprint review. The entire team, including both the ScrumMaster and the product owner should participate.
- The sprint retrospective is a recurring meeting held at the end of a sprint used to discuss what went well during the previous sprint cycle and what can be improved for the next sprint.

Burnup and Burndown chart

- Used to show progress of the project.
- **Burnup chart** shows how much work is complete
- **Burndown chart** shows how much work is remains

Advantages of Agile:

1.Product is developed fastly & frequently delivered.
2.Customer satisfaction is more
3.Changes in requirement is allowed
4.Continuous improvement
5.Reduced risk

Disadvantages of Agile:

1.Strict deadlines
2.Regular pressure of team
3.Team must be knowledgeable
4.If product owner is not clear about the requirements and end output then project go out of track.

What are the different types of Agile Ceremonies?

1.Sprint Planning
2.Daily Standup Meeting
3.Sprint Review
4.Sprint Retrospective