**Agile model:**

**What is agile model:**  Agile is an iterative and incremental approach where requirements keeps on changing as a company we will be flexible enough to take up the requirement changes and develop the changes test the changes and give the quality piece of software to the customer within short span of time is called as Agile

In agile there will be good communication between customer, BA, Developer, Test engineer wherein if the customer has made any change then we can directly contact the customer and understand the changes and develop the change and test the changes and release the quality software to the customer within short span of time

Main goal of agile is customer satisfaction through quick delivery of working piece of software.

**Advantages of Agile :**

* Customer can change the requirement at any stage of the development
* There will be good communication between customer ,BA, Developer, Test engineer.
* Releases will be short.
* It is very simple model to follow.
* Teams will be self Organized.

**Drawbacks of Agile:**

* Less Scope for design and documentation.
* If the customer is unaware about the requirements changes chances are there we might mess-up the project.
* Experience resources are required.

Difference between waterfall model and Agile model

|  |  |
| --- | --- |
| Waterfall | Agile |
| It is a linear and sequential | It is a incremental and iterative |
| It follows independent approach | It follows a whole team approach |
| BA, developers, testers are involved | Domain experts, developers, testers are involved |
| Delivering the product once | Delivering the product in every stage |

**Agile Testing:**

Testing the software by following the principles of agile is called as Agile testing.

**Types of Agile Model:**

* Scrum model
* Extreme Programing (XP)
* Feature driven development/ Test driven development.
* Crystal clear
* Lean and Kanban
* Dynamic system development method(DSDM)
* Adaptive software development method(ASDM)

**Scrum model/Scrum process:**

**Definition:** Scrum model is a standard procedure or step by step procedure or a framework which helps team to work together and develop a new software.

**Agile Terminologies:**

**Release:**

Combination of Sprints is called as Release.

**Sprint:**

It is the actual time spent by Developers and Test Engineers to develop and test one or more stories.

**Story/User story/Story card:**

Stories are nothing but features/modules/functionalities.

**Story point:**

Story point is a rough estimation given by developers and test engineers to develop and test every individual stories.

**Scrum Meetings/Scrum ceremonies:**

**Sprint planning:**

It is an meeting conducted by scrum master on the first day of every sprint.

Wherein in this meeting Developer, Test engineer, scrum master, BA, sometimes PM will be present.

BA will explain the complete requirement to the entire team, wherein BA will explain how each and every features should works and also BA will explain the customer business work flows to the entire team. Scrum master will prioritize the stories from the customer business point of view and scrum master will assign the task to each and every individual Engineers based on their available hours.

**Scrum Meeting:**

It is a meeting conducted by the scrum master on daily basis, this meeting is strictly bounded for 15 minutes. In this meeting BA, Developer, Test engineer, Scrum master, PM (sometimes) will be present

In this we will be discussing below mentioned 3 points

* What did you do yesterday?
* What will you do today?
* Are they any obstacles or Impendent.

**Sprint Retrospective meeting:**

This meeting is conducted by the scrum master on the last day of the sprint . . In this meeting BA, Developer, Test engineer, Scrum master, PM (sometimes) will be present

In this we will be discussing below mentioned 3 points.

* What went well? (Achievements)
* What didn’t went well? (Mistakes)
* What are the action plans?

**Release Retrospective Meeting:**

This meeting is conducted by the scrum master on the last day of the Release . . In this meeting BA, Developer, Test engineer, Scrum master, PM (sometimes) will be present.

In this we will be discussing below mentioned 3 points.

* What went well? (Achievements)
* What didn’t went well? (Mistakes)
* What are the action plans?

**Bug Triaging/ Defect triaging Meeting:**

This meeting is conducted by the Test engineer/BA/scrum master a week before the Release or few days before the sprint . In this meeting BA, Developer, Test engineer, Scrum master will be present.

In this meeting we will collect list of all the pending and open defects which are not fixed by the developer in current and previous release/sprint. As a team we will be re-prioritizing the defect from the customer business point of view and decide which defect should be fixed in the current release/ sprint.

**Pending defects:**

These are the defects which are not fixed by the developer in the previous release.

**Open defects:**

These are the defects which are not fixed by the developers in the current release.

**Product Backlog Grooming/Meeting/Sprint Backlog Grooming:**

This meeting is conducted by the Scrum master a week before the Release or few days before the sprint . In this meeting BA, Developer, Test engineer, Scrum master will be present.

Here entire team will gather the list of pending stories which are not implemented in the current release/sprint. As a team we will be Re-Prioritize the stories from the customer business point of view and we will decide which story should be developed in the current release/sprint and which stories should be moved to the upcoming release/sprint.

**Bug Bucket:**

It is an epic/story created by the Scrum master/BA in the project management tool called “JIRA”. This Bug Bucket will be handled as a part of every release.

Bug Bucket consists of list of all the pending defects which are not fixed by the developers.