## What is the duration of a scrum sprint?

It depends on the number of people in the development team and the size of project. In general, a scrum sprint is completed in 1-4 weeks.

## What do you know about the Velocity in Scrum?

At the end of each sprint, velocity is calculated by summing up the story points for completed user stories. Points from not completed or partially completed user stories should not be considered in calculating velocity. After calculating the velocity at the end of the first sprint, the team can make a new estimation of how long the project will take to complete. Suppose the total story points for the remaining user stories is 80, and the total story points for the completed user stories in the first sprint is 20. That means the team needs 4 more sprints to complete the whole project.

## Do you know about Agile Manifesto & its Principles? Explain in brief.

There are four values in the manifesto. Individuals and interactions, working software, customer collaboration and responding to the changes are the values. Stemming from these values there are 12 principles in agile. These principles can be summarized as: to satisfy the customer, to welcome changing requirements, good cooperation between business people and developers (working together), face to face conversation, motivated individuals and simplicity.

## Explain the difference between a [traditional Waterfall model](https://www.softwaretestinghelp.com/what-is-sdlc-waterfall-model/) and Agile testing?

Agile testing is done parallel to the development activity whereas a traditional waterfall model testing is done at the end of the development.As done in parallel, agile testing is done on small features whereas, in a waterfall model, testing is performed on the whole application.

## What is the use of burn-down charts?

A burn-down chart demonstrates the amount of work remained to complete a project. So, the burn-down chart is used to trace the progress of a project.

## What is the difference between burn-up and burn-down charts?

Burn-up and burn-down charts are used to keep track of the progress of the project. Burn-up charts represent how much work has been completed in any project whereas Burn-down chart represents the remaining work in a project.

## What is timeboxing in [Scrum](https://www.softwaretestinghelp.com/agile-scrum-methodology-for-development-and-testing/)?

A timebox is a period of time in which a team works to achieve a goal. Instead of waiting until the goal is reached, the timeboxing approach stops when the time limit is reached. The timeboxing aims **to define and limit the amount of time dedicated to a certain event**.

## Define the roles in [Scrum](https://www.softwaretestinghelp.com/agile-scrum-methodology-for-development-and-testing/)?

1. Project Owner, has the responsibility of managing the product backlog. Works with end-users and customers and provides proper requirements to the team to build the proper product.
2. Scrum Master, works with the scrum team to make sure each sprint gets completed on time. Scrum master ensures proper workflow for the team.
3. Scrum Team: Each member of the team should be self-organized, dedicated and responsible for the high quality of the work.

## What is the role of the Scrum Master?

Scrum Master coaches the team, protects the team from organizational distraction, clears any obstacles encountered and helps team members focus on what they do. Scrum master ensures that scrum is understood well by the team members and it is working properly. Scrum master constantly improves the team's environment. While product owner has a directing role, scrum master has an enabling role in a scrum team.

## What are different ceremonies and their importance in Scrum?

In the scrum process, a series of meetings called ceremonies are held regularly. These ceremonies aim to minimize the need for meetings that are not defined in the scrum and to ensure regularity. These ceremonies are:

1. Sprint Planning Meeting,

2. Grooming Meeting,

3. Daily Stand Up Meeting or Daily Scrum,

4. Sprint Review Meeting,

5. Sprint Retrospective Meeting.

## What is the scrum of scrums?

Suppose there are 6 teams working on a project and each team has 6 members. Each team leads its own special scrum meeting. However, in order to coordinate and communicate with different teams, it is required to organize a separate scrum meeting. The meeting organized to hold coordination between scrum teams is called the scrum of scrums. There is one team leader from every group, known as ambassador, who is responsible to represent his team in the scrum of scrums.

## Explain the term ‘increment' in Scrum.

The Product Increment is the sum of all the product backlog items finished during the sprint. In other words, by the end of each sprint, the development team creates a new software that gets built into the main product and this new software is called product increment. The product increment aims to invest in small amounts in the new features of the main product. This helps to shorten the time before receiving feedback. As the name implies, product increment continues to increase within the subsequent sprints. That means each product increment includes all the previous sprint increment values as it is cumulative.

## Describe the places where ‘Scrum' and ‘Kanban' are used?

Scrum is a better choice when you need a more prominent process. However, if you want improvement in running the process without much changes in the whole scenario, you should use Kanban.

## What is a user story?

It describes a software feature from the customer’s perspective and includes the type of user, what they want, and why they want it. Therefore, it answers the ‘who’, ‘what’ and ‘why’ in a simple language. The product owner has the responsibility of user stories. Leaving out the technical aspect, it should describe the behavior from a user’s perspective. Examples of User Storie: As a registered user, I want to add items to the cart so that I can purchase multiple items at once.

## What is the difference between Epic, User stories & Tasks?

**User Stories:** It defines the actual business requirement. Generally created by the business owner.  
**Task:** To accomplish the business requirements development team create tasks.  
**Epic:** A group of related user stories is called an Epic.

## Why aren't user stories simply estimated in man-hours?

Estimation of user stories on the basis of man-hours is possible but not preferred. Because in that case, you won't be able to concentrate on the quality product to be delivered to the customer. In addition to that, you will concentrate on the cost and budget of the management while using man-hours. Rather than man-hours, story points are used, as it provides a complete idea about both the complexity of work and required efforts.

## Explain what is Kanban.

A Kanban is like a flash card carrying all the information about the current status of your work and the work required to be done on the product at each stage of the software development process.

## How does Kanban improve visibility?

Kanban uses digital or physical boards to demonstrate the team’s workflow. The tasks demonstrated by cards move from left to right representing the progress. So at any given time, the organization can see progress, capacity, productivity, and efficiency.

## Ideally, how WIP limit is calculated with respect to team size?

You can start with a WIP limit of 1 to 1.5 times the number of people taking part in each stage or each column. For example, if team size is 4 in a particular stage, max 6 items can be in progress at any given time.

## What is lead time in Kanban?

Lead time is the period between creating a task in your workflow and its final departure from the kanban board. Therefore, kanban helps you monitor workflow, identify blockages, and make adjustments to improve the flow for reducing the lead time.

## Are there any drawbacks of the Agile model? If yes, please explain.

Yes, there are some drawbacks of the Agile method, some of them are as follows:

- It is not easy to make an estimation of the effort required to complete a task. It becomes more complex in the case of large projects as it becomes difficult to make a prediction about the total effort required.

- In case the desired requirements of the client are not understood properly, the final project will not meet the customer requirements. Thus, this will lead to customer dissatisfaction.

- Only the leader who has considerable experience in the Agile model is capable to take important decisions. The team members with less or no experience are not involved in the decision-making process, thus they don’t have a chance to advance their knowledge.

## What is the purpose of a retrospective?

Like sprint review meetings this meeting is also held at the end of each sprint. The attendees of this meeting are the development team, the scrum master and the product owner. In this meeting, all the participants discuss:

- What went well in the previous sprint?

- What didn’t work well?

- What are the improvement areas to increase team performance?

## What is Scrum ban?

It is a software development model that is a combination of Scrum and Kanban. Scrumban is considered for maintaining projects in which there are frequent changes or unexpected user stories. It can reduce the minimum completion time for user stories.