Scrum Framework

Scrum is an Agile framework for managing and completing complex projects. It is a lightweight, iterative approach that enables teams to deliver valuable software incrementally and adapt to changing requirements. The Scrum framework consists of three main roles, five events(ceremonies),five values and three artifacts.

Scrum framework has 5 values, 3 roles, 5 ceremonies and 3 Artifacts.

1. 5 Values
   - Focus
   - Openness
   - Respect
   - Courage
   - Commitment
2. 3 Roles
   - Product Owner
   - Scrum Maste
   - Development Team
3. 5 Ceremonies
   - Sprint
   - Sprint Planning
   - Sprint Review
   - Sprint Retrospective
   - Scrum Call
4. 3 Artifacts
   - Product Backlog
   - Sprint Backlog
   - Product Backlog Grooming

5 Values

Focus:
An iterative-incremental approach and timely delivery in Scrum helps to keep us stay focused towards the project goal. Once the requirements are clear and the goal is set, the most effective way to attain the goal is to be goal-oriented. This motivates you for delivering faster, better and yield more. By focusing more on a goal, you can avoid resource wastage and deliver on time. This Scrum value leverages lower rate of risks and provides ample time to improve and deliver the needful.

Openness:

The Scrum induction requires transparency and openness. We need to investigate reality with a specific end goal to make sensible adjustments. Team members should be open about their work, progress, what they learned and the issues they are facing. Also, you should be open to working with colleagues, recognizing individuals to be individuals, and not assets, robots, or replaceable pieces of hardware.

You should always be open to team up with the stakeholders in terms of orders and abilities. You should be open to work together with team members in any extensive condition. As a team member, you should be open towards sharing feedback and gaining from each other.

Respect:

As a part of the Scrum team, you should respect colleagues, their decisions, and their experience. As an efficient team member, you should also respect diversity. You should respect your stakeholders by not building anything in which people are not interested. You need to equally respect your users by resolving their problems. As a responsible team member, you need to completely adhere to the Scrum framework and the associated Scrum roles. As a part of the Scrum team, you should respect each other's skills, knowledge, and insights.

Courage:

Adaptability to change forms the bedrock of any Scrum project and to accept a change, courage is needed.

Scrum is all about taking risks and finding out an optimized solution. The Scrum team is allowed to think of different approaches to workshop the best and most appropriate solutions. In order to implement new things to the project, we need to explain these new ideas to the team.

Commitment:

Scrum teams must be committed to progress and willing to have practical objectives and stick to them. This is a team activity where you are a part of a team, and you are accountable to work together and to conform to your commitments.

3 Roles:

Product Owner:

A Product Owner maximizes a product's value by managing the product backlog, defining the product vision, and ensuring clear communication between the development team and stakeholders. Key responsibilities include prioritizing backlog items, translating stakeholder needs into product goals, collaborating with the team, and validating product increments to deliver maximum value

Scrum Master:

A Scrum Master is a servant-leader and Scrum framework expert who coaches a Scrum Team and its organization to improve their Agile practices and ensure the team's effectiveness by removing impediments to progress. They facilitate communication, coach the team in self-management, and ensure all Scrum events are productive and held within their timeboxes, ultimately helping the team deliver high-value increments.

Development Team:

A development team is a group of professionals, such as developers, testers, and designers, who collaborate to bring a product, service, or software from initial concept to completion, ensuring it meets specific requirements and delivers value to users. Key characteristics include strong collaboration, diverse expertise to cover all project aspects, creative problem-solving skills, and the ability to manage challenges throughout the development lifecycle.

5 Ceremonies

1. Sprint
2. Sprint Planning
3. Sprint Review
4. Sprint Retrospective
5. Scrum Call

Sprint:

In Agile, a sprint is a short, fixed-length period, typically one to four weeks(preferably 2 weeks mostly), during which a team focuses on completing a defined set of tasks and delivering a valuable, working product increment. Sprints are a core concept in Agile methodologies like Scrum, enabling iterative development, continuous improvement, adaptability, and quicker delivery of valuable features to customers.

Sprint Planning:

Sprint Planning means, what can be delivered and how that work will be achieved.

Entire Scrum Team collaborates to select tasks from the product backlog and create a plan for completing them within the upcoming sprint. This meeting results in a Sprint Goal (a shared objective for the sprint) and a Sprint Backlog (the selected work and the plan for doing it). The Product Owner presents product backlog items and their value, while the Developers determine how much work they can realistically complete to achieve the Sprint Goal.

Sprint Review:

A sprint review is a collaborative meeting that is typically held at the end of every sprint. This is when the team runs through work items they completed during the sprint or iteration. A sprint review ensures key stakeholders are up to date, and it enables them to provide feedback.

Sprint Retrospective:

A sprint retrospective is a review conducted after a sprint that plays a key role in the Agile Methodology. A sprint retrospective aims to determine what went well and where you had problems and identify areas where you can improve.

Scrum call:

A Scrum call, formally known as the Daily Scrum or Daily Standup, is a 15-minute time-boxed meeting where the Scrum Team inspects progress toward the Sprint Goal and adapts the Sprint Backlog, as necessary. The meeting helps the team synchronize activities, plan for the next 24 hours, and identify any obstacles (impediments) that might prevent them from reaching their goal. The Scrum Master ensures the meeting happens, but the Developers are responsible for conducting it.

1. What did you do yesterday?
2. What you will do today?
3. If any impediments happened, how to resolve?

Story Point Estimation:

1. Fibnocci Series Story point estimation
2. T- Shirt sizing Story point estimation
3. Planning Poker Story point estimation

Fibnocci Series:

Fibonacci series story point estimation is an agile software development technique that uses the Fibonacci sequence (e.g., 1, 2, 3, 5, 8, 13) to assign relative effort or complexity points to user stories, promoting better team consensus and accommodating the

increasing uncertainty of larger tasks by using exponentially increasing gaps between points. This non-linear scale helps avoid the illusion of precision with linear scales (like 1, 2, 3, 4, 5) by encouraging discussion to determine the best estimate from a limited set of options, leading to more accurate planning and velocity measurement.

How it Works

1. **Choose a Modified Sequence:**

Instead of the purely mathematical sequence (0, 1, 1, 2, 3, 5, 8...), teams often use a modified version that avoids the repetition of '1' and simplifies large numbers, such as: 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 100.

2. **Estimate Relative Size:**

Team members discuss and compare user stories, estimating the relative effort, complexity, and uncertainty required to complete them.

3. **Assign Story Points:**

Each story is assigned a point value from the chosen Fibonacci scale.

4. **Foster Discussion and Consensus:**

The limited number of options on the scale encourages teams to have conversations and reach a consensus on the most appropriate estimate, rather than getting bogged down in precise, linear estimates.

Benefits of Using Fibonacci Story Points

- **Reduces Estimation Bias:**

The non-linear scale makes it harder to compare very similar estimates, such as a 4 vs. a 5, encouraging teams to focus on the relative size of tasks.

- **Accommodates Uncertainty:**

The growing gaps between numbers in the sequence reflect the increasing uncertainty in estimating larger, more complex tasks, aligning with Weber's Law.

- **Promotes Team Collaboration:**

The method facilitates discussions and helps build a shared understanding of what different levels of effort mean within the team.
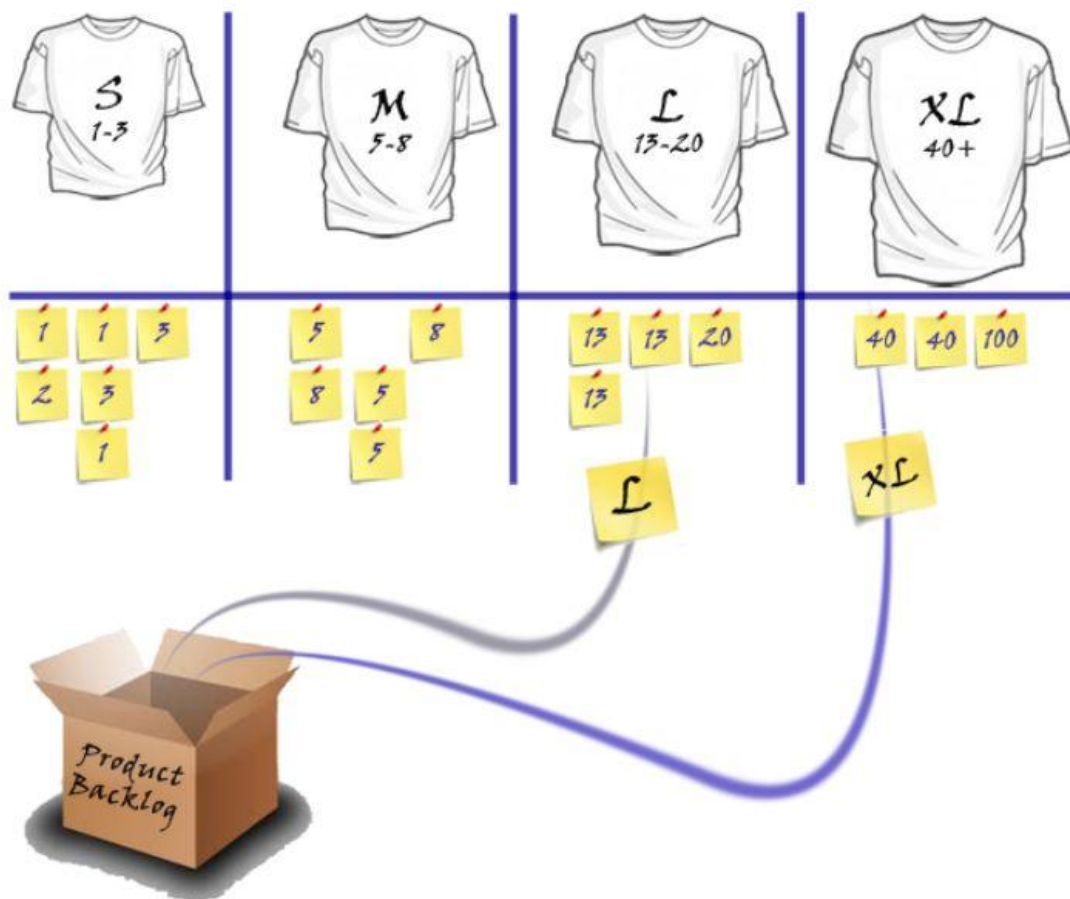
- **Improves Planning Accuracy:**

By providing a more accurate reflection of task complexity, Fibonacci story points improve a team's ability to measure velocity and forecast project completion dates.

T- Shirt Sizing Story point estimation:

What is t-shirt sizing?

T-shirt sizing is a project estimation and capacity planning tool that helps you track how much time or effort an initiative will take. To do this, you assign each project or task a t-shirt size—from Extra Small to XXL—to represent that task's relative effort. Depending on how you choose to use this tool, a t-shirt size can represent task scope, effort, complexity, work hours, time estimates—or all of the above.

T-shirt sizing is a helpful tool for your entire team:

- Project leads can quickly gauge team capacity.
- Individual contributors can communicate their bandwidth and priorities clearly.
- Team members can understand who's doing what by when.

This technique is often used by engineering and software development teams, but any team can benefit from it—in fact, we use t-shirt sizing here at Asana for content projects (this article, for example, is a Medium).

How to use t-shirt sizing for Agile projects

Agile and Scrum teams initially popularized t-shirt sizing as a way to measure story points. Story points—also known as planning poker—are a way to estimate effort or relative size of work during Sprint planning. Typically, story points are assigned to requests or work in a product backlog. When the Scrum master begins the next sprint cycle, they pull tasks from the backlog until they hit a certain number of story points. That way, the Scrum team ensures they have enough to work on during the sprint—without biting off more than they can chew.

T-shirt sizing for Scrum teams is a form of relative estimation. This is an alternative to the more traditional, numerical story points estimation technique. Unlike numbers, relative estimating allows team members to think in more dimensions—numbers are often associated with time, but t-shirt sizes can represent more complex ideas, including time, effort, and complexity.

6 steps to using t-shirt sizing for project estimation

To use t-shirt sizing effectively, it's important to establish up front what each t-shirt size represents and where team members should clarify relative sizing.

1. Start by deciding on your sizes

Before you introduce t-shirt sizing to your team, decide on the sizes you want to use. Avoid using too many sizes so team members aren't confused. If you're just getting started, stick to Small, Medium, Large, and Extra Large. If your projects vary widely in scope, use Extra Small or Extra, Extra Large as well.

2. Align on what each size represents

T-shirt sizing only works if everyone understands what each size represents. So as you introduce this project estimation practice to your team, make sure everyone is on the same page about it. It's helpful to provide common examples of a Small vs. Large project. For example, on the content team at Asana, an article like this one is a Medium. Alternatively, a cross-functional content initiative with multiple pieces and a variety of project stakeholders is a Large or, in some cases, even an Extra Large.

3. Decide who assigns t-shirt sizes

Depending on your team structure, consider limiting who can assign t-shirt sizes or opening it up for the entire team. Here are a few common ways to limit who can assign t-shirt sizes:

- For product backlog projects, the product owner assigns t-shirt sizes, because they're closest to the work.

- For Agile teams running Scrum, the Scrum master reviews t-shirt sizes, which were previously assigned by a product owner, before a sprint.

- For general project teams, each team member sets their own t-shirt sizes, based on the team's understanding of what each size of work represents.

4. Assign t-shirt sizes to each initiative

- If you're just starting out, you may have to retroactively assign t-shirt sizes to work in flight. But, moving forward, each piece of work should have an associated t-shirt size when it's assigned, so you and the team member both understand how much effort that work represents.

5. Track t-shirt sizes using a work management tool
Having t-shirt sizes associated with work is good—but seeing that information in a clear, centrally accessible tool is much, much better. Make sure your team tracks t-shirt sizes in a shared work management tool, like Asana. That way, you—and all other team members—get at-a-glance insight into each team member's current workload.

6. Use t-shirt sizing to gauge workload

Once each task has an associated t-shirt size, you also have built-in workload tracking for your team. Use a work management tool, like jira, to gauge associated effort and get a sense of how much work each team member has on their plate. By tracking this work, you can ensure team members aren't getting burnt out.

Planning Poker Story point estimation:

What is Planning Poker?

Planning Poker® is a consensus-based technique for agile estimation. It is a fun and engaging way for teams to apply relative estimates to planned work.

To start a poker planning session, the product owner or customer reads one of the desired user stories or describes a feature to the estimators.

Each estimator has a physical or virtual deck of cards. These Planning Poker cards display values like 1, 2, 3, 5, 8, 13, 20, 40 and 100 (the modified Fibonacci Sequence). The values represent the number of story points, ideal days, or other units in which the team estimates.

The estimators discuss the feature, asking questions of the product owner as needed. When the feature has been fully discussed, each estimator privately selects one card to represent their estimate. The estimators then reveal all of their cards at the same time.

If all estimators all selected the same value, that becomes the estimate. If not, the estimators discuss their estimates. The high and low estimators, especially, should share their reasons. After further discussion, each estimator reselects an estimate card, and all cards are again revealed at the same time.

The team repeats the process until they achieve consensus on an estimate. If they lack enough information to agree on an estimate, the estimators can defer a particular item until those details can be acquired.