

Agile Ways Of Working

AGILE METHODOLOGY AND FRAMEWORKS

BY SWAPNA DESAI

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Topic 8#

Scrum Artifacts-

Scrum's artifacts represent work or value. They are designed to maximize transparency of key information. These are as follows-

The **Product Backlog** is an emergent, ordered list of what is needed to improve the product. It is the single source of work undertaken by the Scrum Team.

The **Sprint Backlog** is composed of the Sprint Goal (why), the set of Product Backlog items selected for the Sprint (what), as well as an actionable plan for delivering the Increment (how).

An **Increment** is a concrete steppingstone toward the Product Goal. Each Increment is additive to all prior Increments and thoroughly verified, ensuring that all Increments work together.

Topic 8#

Scrum Artifacts-

Definition Of Done(DOD)#

The DoD is usually a short document in the form of a checklist, that defines when a product backlog item (i.e., user story) is considered "done".

Definition Of Ready(DOR)#

It is a checklist of what needs to be done to a product backlog item before the team can start implementing it in the next sprint. The Product Owner must fulfil so that the Development Team accepts the story in the Sprint Planning meeting.

It should also meet the **INVEST** Criteria.

Scrum Amigos/Roles-

There are 3 important roles in SCRUM. They are as follows-

Product Owner

Scrum Master

Development Team

Scrum Amigos/Roles-

PO Role#

Develop the direction and strategy for the products and services, including the short and long-time goals.

Understand and explain customer needs for the Development Team.

Gather, prioritize, and manage the product or service requirements.

Determine the release date for the product or service features.

Accept or reject completed features related to the Sprints.

Managing the Product Backlog.

Scrum Amigos/Roles-

SM Role#

Act as a coach to help the team follow scrum values and practices.

Remove impediments and protect the team from external interference.

Promote good cooperation between the team and stakeholders.

Facilitator of all Scrum Ceremonies.

Protect the team from organizational distractions.

Acts as a servant leader.

Scrum Amigos/Roles-

Team Role#

To create and deliver the products or services.

Be self-organized and self-managed.

Be cross-functional.

To fully dedicate themselves to the product or service they are working on.

To be good listeners.

To be good decision makers and should possess the ability to say **NO** when needed.

Scrum Ceremonies-

Scrum ceremonies are important elements of the agile methodology and software delivery process. The scrum ceremonies provide the framework for teams to get work done in a structured manner, help to set expectations, empower the team to collaborate effectively, and ultimately drive results.

There are 4 Scrum Ceremonies in ideal situations. These are as follows-

Sprint Planning

Daily Scrum

Sprint Review

Sprint Retrospective

Scrum Ceremonies-

Sprint Planning is the scrum ceremony designed to make sure the team is prepared to get the right things done every sprint.

Purpose-

This scrum meeting happens at the beginning of a new scrum sprint and is designed for the Product Owner and Development Team to meet and review the prioritized Product Backlog.

Through a series of discussions and negotiations, the team should ultimately create a sprint backlog that contains all items they are committing to complete at the end of the sprint.

The sprint goal should be a shippable increment of work, meaning it can be demonstrated at the end of a sprint. The Product Owner is responsible for having the Product Backlog ready for review before Sprint Planning begins.

Scrum Ceremonies-

Daily Scrum is the team's chance to get together, define a plan for the day's work, and identify any blockers.

Purpose-

This scrum ceremony provides a frequent opportunity for the team to get together and communicate individual progress toward the sprint goal.

It's not a status update. Instead, it should illuminate any impediments the team is having.

The Scrum Master is responsible for clearing these roadblocks for the Development Team so they can focus on delivering the work identified in Sprint Planning.

Each participant in this scrum meeting should be listening to each other and remain present through the entirety of the meeting.

Scrum Ceremonies-

Sprint Review is the scrum ceremony where all work completed during the sprint can be showcased to the stakeholders.

Purpose-

At the conclusion of each sprint, the Sprint Review provides a platform for the Development Team to showcase all the work that has been completed.

This allows stakeholders to see things sooner than later and inspect or adapt the product as it emerges.

The work showcased during this time should be fully demonstrable and meet the definition of done that the team is operating on.

The team should feel empowered to show off the work they've been able to complete over the course of the sprint.

Scrum Ceremonies-

Sprint Retrospective is the final scrum ceremony in the sequence that allows the team to look back on the work that was just completed and identify items that could be improved.

Purpose-

Post Sprint Review has been conducted, the scrum team needs to have the opportunity to reflect on the work that was just showcased and discuss ways in which to improve.

It gives the scrum team a platform to discuss things that are going well, things that could go better, and some suggestions for changes.

All actionable feedback should be collected and assigned so that members of the scrum team understand who is responsible for what.

Topic 11#

Scrum Metrics-

The following are some key metrics that helps measure the work done by scrum teams and value delivered to customers:

Sprint Goal Success

Team Velocity

Sprint Burndown

Time to Market

ROI

Customer Satisfaction

Agile Estimation-

Agile estimation is "the process for estimating the effort required to complete a prioritized task in the product backlog".

This effort is usually measured with respect to the time it will take to complete that task, which, in turn, leads to accurate sprint planning.

Agile teams also make estimations with reference to story points.

A story point is used in Agile Development project to estimate the difficulty of implementing a given user story.

Agile Estimation Techniques-

Planning Poker

T-Shirt Size

Fibonacci Sequence

Agile Estimation Techniques-

Planning Poker#

Number-coded playing cards are used to estimate an item. The cards are distributed across the team (sized 2-10), with each of the cards representing a valid estimate. The reading on the cards could be something such as -0, 1, 2, 3, 5, 8, 13, 20, 40, and 100. Now, the product owner or the analyst describes the user story to the team, and the team can ask any related queries.

Each team member secretly selects a card number for an estimate, which is revealed when all the cards are turned over. The card with the most voting is the finalized estimate for the item under discussion. In case of uneven estimates, meetings are held, and the next round of voting commences to produce an estimate everyone agrees with.

Agile Estimation Techniques-

T Shirt Sizing

In this t-shirt sizing Agile estimation technique, the items are estimated in standard t-shirt sizes (i.e., XS, S, M, L, and XL). This is more of an informal but creative technique, and numbers can be assigned to each user story categorized under different t-shirt sizes for better understanding.

A story estimated as XS is usually small and requires less effort than the XL story, which is large and has a big estimation number.

Relative Estimation is one of the several distinct flavours of estimation used in Agile teams, and consists of estimating tasks or user stories, not separately and in absolute units of time, but by comparison or by grouping of items of equivalent difficulty.

Agile Estimation Techniques-

Fibonacci Sequence#

The Fibonacci sequence is one popular scoring scale for estimating agile story points. In this sequence, each number is the sum of the previous two in the series. The Fibonacci sequence goes as follows: 0, 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89... and so on.

Topic 13#

User Story Splitting-

"Splitting" consists of breaking up one user story into smaller ones, while preserving the property that each user story separately has measurable business value.

Story splitting user stories avoids overwhelm by giving the team smaller, more manageable pieces of work.

Story splitting helps teams deliver value to customers early and often.

Story splitting changes the mindset from thinking about layers of development to the experience of the user.

Story splitting requires that the team prioritizes the highest-value goals and features for users .

Topic 13#

User Story Splitting Techniques-

Split the user stories by roles

Break down the user stories by workflows

Divide the user stories by data types

Split the user stories by data entry

Split the user stories by business rules

Split user stories by acceptance criteria



