

Agile Software Development (TCS 562)

Unit-II Agile Project Management
Sprint Planning and Sprint Retrospective



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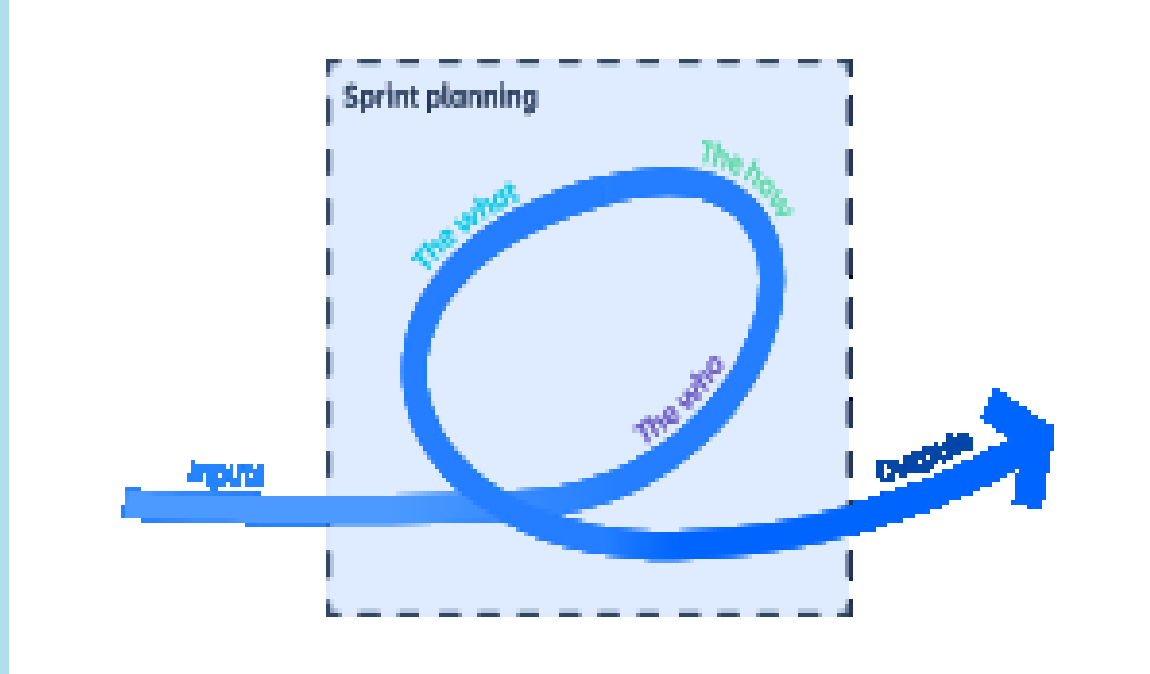
Sprint Planning

- Sprint planning is an event in scrum that kicks off the sprint.
- The purpose of sprint planning is to define what can be delivered in the sprint and how that work will be achieved.
- Sprint planning is done in collaboration with the whole scrum team.

“Unlike in sport, scrum encourages you to be always sprinting so you can deliver working software, while continuously learning and improving”.

- In scrum, the sprint is a set period of time where all the work is done.
- However, before you can leap into action you have to set up the sprint. You need to decide on how long the time box is going to be, the sprint goal, and where you're going to start.
- The sprint planning session kicks off the sprint by setting the agenda and focus.
- If done correctly, it also creates an environment where the team is motivated, challenged, and can be successful. Bad sprint plans can derail the team by setting unrealistic expectations.

- **The What** – The product owner describes the objective(or goal) of the sprint and what backlog items contribute to that goal. The scrum team decides what can be done in the coming sprint and what they will do during the sprint to make that happen.
- **The How** – The development team plans the work necessary to deliver the sprint goal. Ultimately, the resulting sprint plan is a negotiation between the development team and product owner based on value and effort.
- **The Who** – You cannot do sprint planning without the product owner or the development team. The product owner defines the goal based on the value that they seek. The development team needs to understand how they can or cannot deliver that goal. If either is missing from this event it makes planning the sprint almost impossible.
- **The Inputs** – A great starting point for the sprint plan is the product backlog as it provides a list of ‘stuff’ that could potentially be part of the current sprint. The team should also look at the existing work done in the increment and have a view to capacity.
- **The Outputs** – The most important outcome for the sprint planning meeting is that the team can describe the goal of the sprint and how it will start working toward that goal. This is made visible in the sprint backlog.



Sprint Planning Meeting:

- Running a great sprint planning event requires a bit of discipline.
- The product owner must be prepared, combining the lessons from the previous sprint review, stakeholder feedback, and vision for the product, so they set the scene for the sprint.
- For transparency, the product backlog should be up-to-date and refined to provide clarity.
- Backlog refinement is an optional event in scrum, because some backlogs don't need it. However, for most teams, it's better to get the team together to review and refine the backlog prior to sprint planning.

Time limit for sprint planning:

- Sprint planning should be constrained no more than two hours for each week of the sprint.
- So, for example, the sprint planning meeting for a two-week sprint would be no longer than two hours.
- This is called "timeboxing", or setting a maximum amount of time for the team to accomplish a task, in this case, planning the sprint.
- The scrum master is responsible for making sure the meeting happens the timebox is understood.
- If the team is happy before the timebox is finished, then the event is over.
- A timebox is a maximum time allowed; there is no minimum time allowed.

“Focus the first part of the sprint planning on the objective of the sprint rather than detail of the backlog. By focusing on the goal rather than the work it is possible to find smart alternatives for how that goal achieved”

➤ Focus on the outcomes, not the work

Not knowing something is different from being vague. Don't ignore the unknowns, they are the reality of doing difficult work. But don't hide them by using vague words. Instead, be clear when you don't know something and frame the work in terms of gaining an understanding.

➤ Estimates are required but don't pretend you know more than you do

- Sprint planning requires some level of estimation. The team needs to define what can or cannot be done in the sprint: estimated effort vs capacity.
- Estimates are by their very nature forecasts based on the knowledge at hand.
- Good estimation requires a trust-based environment where information is given freely, and assumptions are discussed in the pursuit of learning and improvement.
- If estimates are used in a negative, confrontational way after the work is completed, then it's likely that future estimates will be either be much bigger to ensure they never are wrong again or the time taken to create them will be much longer as the team second guesses itself worrying about the implications of getting them wrong.

Sprint planning best practices

- A good sprint plan motivates everyone by defining an outcome and a clear plan for success. But be careful planning too upfront.
- Instead of building the most complete, “every minute of the sprint is accounted for” sprint plan, focus on the goal and build enough of a sprint backlog to get started.
- Next, ensure that the product backlog is ordered to allow the team to pick up work if they delivered on the sprint goal early.
- Scrum is a process framework aimed at solving complex problems.
- Complex problems require an empirical process (learning by doing).
- Empirical processes are very hard to plan, so don’t kid yourself--you can’t build the perfect plan.

Sprint Retrospective

- The purpose of the Sprint Retrospective is to plan ways to increase quality and effectiveness.



- The Scrum Team inspects how the last Sprint went with regards to individuals, interactions, processes, tools, and their Definition of Done.
- Inspected elements often vary with the domain of work.
- Assumptions that led them astray are identified and their origins explored. The Scrum Team discusses what went well during the Sprint, what problems it encountered, and how those problems were (or were not) solved.

- The Scrum Team identifies the most helpful changes to improve its effectiveness.
- The most impactful improvements are addressed as soon as possible. They may even be added to the Sprint Backlog for the next Sprint.
- The Sprint Retrospective concludes the Sprint. It is timeboxed to a maximum of three hours for a one-month Sprint.
- For shorter Sprints, the event is usually shorter.
- During the Sprint Retrospective, the team discusses:
 1. What went well in the Sprint
 2. What could be improved
 3. What will we commit to improve in the next Sprint
- During each Sprint Retrospective, the Scrum Team plans ways to increase product quality by improving work processes or adapting the definition of “Done” if appropriate and not in conflict with product or organizational standards.
- By the end of the Sprint Retrospective, the Scrum Team should have identified improvements that it will implement in the next Sprint.
- Implementing these improvements in the next Sprint is the adaptation to the inspection of the Scrum Team itself. Although improvements may be implemented at any time, the Sprint Retrospective provides a formal opportunity to focus on inspection and adaptation.