Scrum: Sprint Planning

Sprint Planning

- **When?**
  - At the beginning of each sprint.
- **How long?**
  - Four to eight hours (for a two-week to month-long sprint).
- **By whom?**
  - The full Scrum team:
  - The product owner shares the initial sprint goal, presents the prioritized product backlog, and answers any questions the team might have on PBIs.
  - The development team works diligently to determine what it can deliver and then makes a realistic commitment (forecast) at the end of sprint planning.
  - The Scrum Master, acting as the coach, observes the planning activity, asks probing questions, and facilitates to help ensure a successful result.
    - Also, challenges the team's commitment to ensure that it is realistic.

Sprint Planning: Process - Input

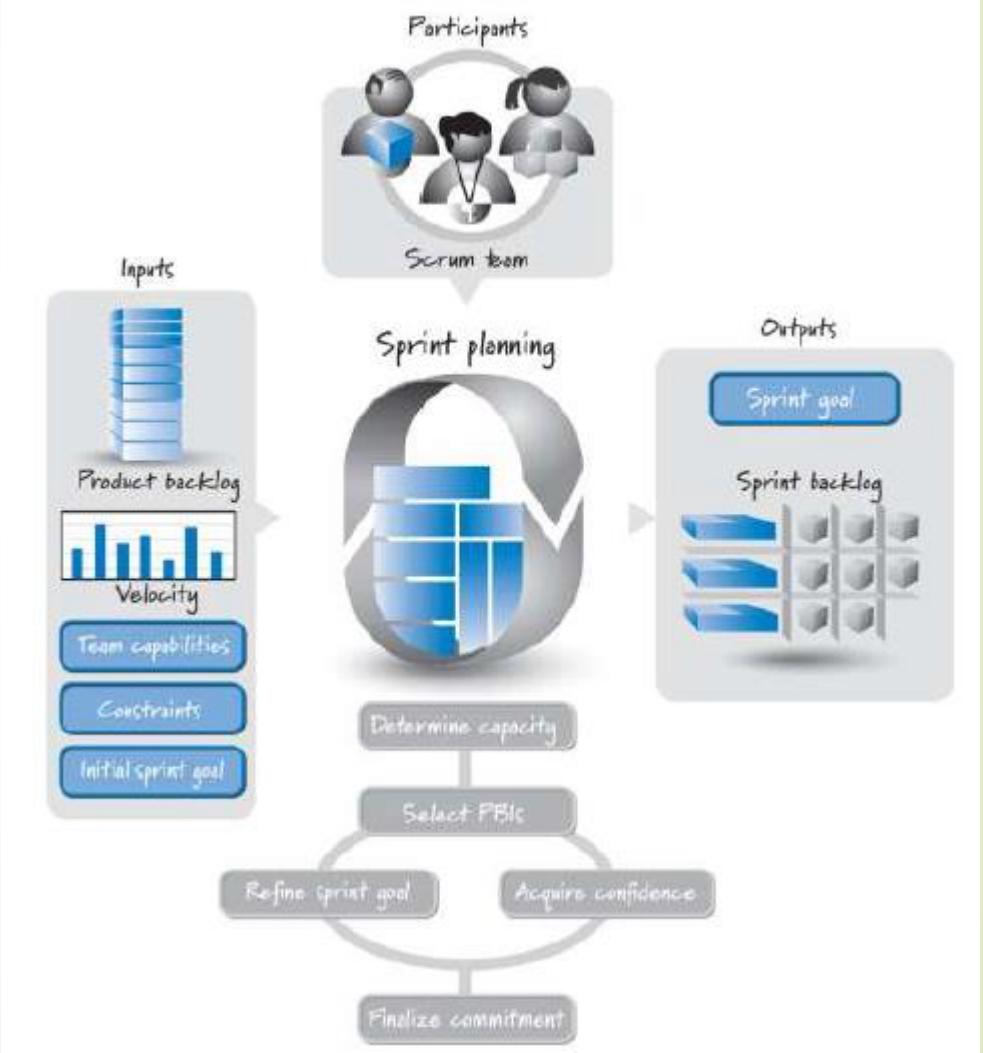
- **Inputs:** Product backlog, Team velocity, Constraints, Team capabilities, Initial sprint goal.
  - Initial sprint goal is presented by the product owner:
  - It might be a specific set of high-priority product backlog items: "I'd really like to get the top five product backlog items done this sprint," or
  - It might be in the form of a more general notion: "At the end of this sprint I want a typical user to be able to submit a simple keyword query."

Sprint Planning: Process - Activities

- **Activities:** Determine capacity, Select PBIs, Refine sprint goal, Acquire confidence, Finalize commitment.
  - A realistic commitment is achieved through collaboration (and negotiation) between the product owner and the development team.
  - To acquire confidence in what it can accomplish, the development team will create a plan by breaking down each targeted PBI into a set of estimated tasks.
  - Teams typically follow a helpful rule of breaking down tasks so that no one task is more than eight hours of effort, although some might be a bit larger.

Sprint Planning: Process - Outputs

- **Outputs:** Sprint goal and Sprint backlog, which collectively form the commitment.



Approaches: Two-Part Sprint Planning

- **Part 1 (the "what" part):** The team determines its capacity to complete work and then forecasts the PBIs that it believes it can deliver in the sprint.
- So if the team believes it can accomplish 40 story points, it will select about 40 story points' worth of work.

Approaches: Two-Part Sprint Planning

- **2. Part 2 (the "how" part):** The team acquires confidence in its ability to complete the items that it forecast in part 1 by creating a plan.
- Teams create this plan by breaking the product backlog items into a set of tasks and then estimating (in hours) the effort required to complete each task.
- The team then compares the estimate of task hours against its capacity, in terms of hours, to see if its initial commitment was realistic.
- If the team finds it has selected too much or too little, or has selected items that cannot be developed in the same sprint given one or more constraints, then:
- The forecast is adjusted, and the sprint goal is refined (if necessary), to fit the available capacity and constraints.
- When the team's forecast is comfortably within its capacity range and constraints, it finalizes its commitment and sprint planning is over.

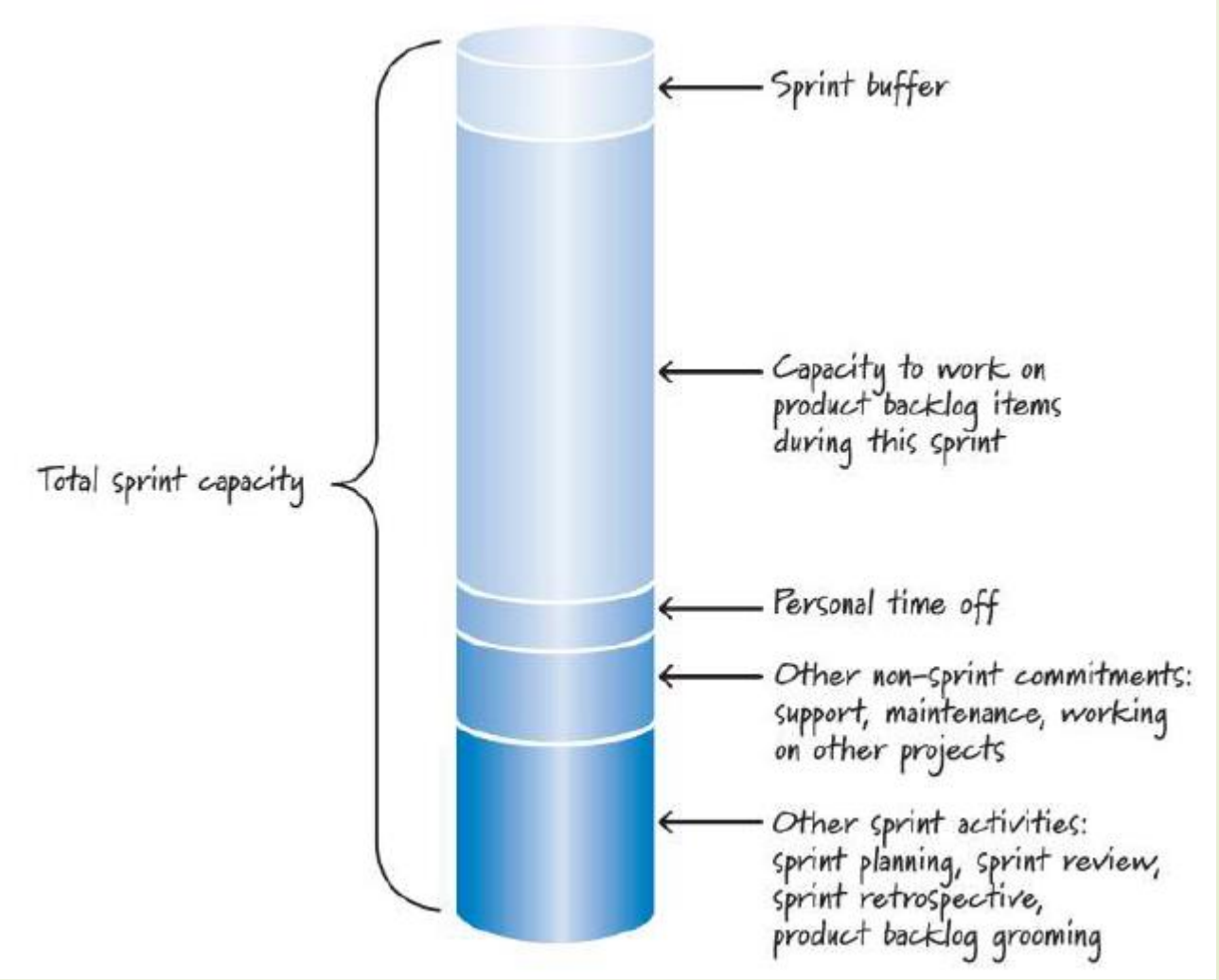
Approaches: One-Part Sprint Planning

- The one-part approach interleaves selecting a PBI and acquiring confidence that it can be delivered.
  - 1. The development team begins by determining its capacity to complete
  - work.
  - 2. Based on available capacity, the sprint goal is refined if necessary.
  - 3. The team selects a PBI and then acquires confidence that the selected item will reasonably fit within the sprint.
    - Consideration should be given to other items already included in the team's evolving commitment.
  - 4. Steps 2 and 3 are repeated until the team is out of capacity to do any more work.

Determining Capacity

- Several factors reduce a team's capacity to work on PBIs during a sprint.
- Important factors include: Other Scrum activities, non-sprint-related commitments, personal time off, and the need for a buffer.
- After considering these factors, what remains is the team's capacity.
- For instance, in a two-week (ten-day) sprint, we need to reserve:
  - One day collectively for sprint planning, sprint review, and sprint retrospective;
  - up to 10% of the time to assisting the product owner with PB grooming;
  - time for work outside the sprint, such as supporting the current product, maintaining another product, etc.;
  - time for the team members' organizational responsibilities, such as attending meetings, responding to emails, interruptions, etc.;
  - time off previously scheduled by team members;
  - some buffer (based on past experience) against things not going quite as planned.

Determining Capacity



References

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