Definition of Scrum

Scrum (n): A framework within which people can address complex adaptive problems, while productively and creatively delivering products of the highest possible value.
Scrum is simple to understand, but difficult to master.

Scrum Values

Openness: Being open drives continuous improvement.
Focus: Teams focus to deliver customer value incrementally.
Commitment: Teams commit to goals and improvement.
Respect: Accept & respect the strengths of different people.
Courage: Be brave. Be honest. Embrace failure.

- The **Product Owner** owns the Product Backlog as he/she has to maximize Return of Investment.
- The Product Owner is responsible for expressing backlog items and prioritizing them.
- The Product Owner discusses and agrees with Stakeholders what to do, why and when to release.
- Collaborates with the Development Team on the details of the Product Backlog during the Sprint.

- The **Development Team** is a cross-functional team with an optimal size between 3 and 9 members.
- The Development Team delivers a Potentially Shippable Increment at the end of each Sprint.
- They are self-organizing. No one (not even the Scrum Master) tells the Development Team how to turn the Product Backlog into Increments of potentially releasable functionality.
- Scrum recognizes no titles for Development Team members other than Developer, regardless of the work being performed by each person.

- The **Scrum Master** is responsible for ensuring Scrum is understood and enacted. Scrum Masters do this by ensuring that the Scrum Team adheres to Scrum theory, practices, and rules.
- The Scrum Master is a servant-leader for the Scrum Team, supporting the Product Owner with managing the Product Backlog and coaches the team in self-organization and cross-funtional collaboration.
- Helps with removing impediments to the Development Team's progress.
- The Scrum Master leads and coaches the organization in its adoption of Scrum.

- The **Scrum Team** consists of a **Product Owner**, the **Development Team**, and a **Scrum Master**.
- The team model in Scrum is designed to optimize flexibility, creativity, and productivity.


- The **Product Backlog** is an ordered list of Product Backlog Items (PBI's).
- Product Backlog Items are requirements for changes to the product (e.g: user stories...).
- The Product Backlog is ordered by priority, the highest items need to be more detailed.
- The team needs to be able to estimate and test all of the Product Backlog Items.
- The list of items is constantly evolving, changing and updating, the Product Owner is responsible for reflecting the changes in the Product Backlog.

- The **Sprint Backlog** is list of Product Backlog Items selected by the Development Team for delivery in the sprint, plus a plan to deliver the increment.
- Only the Development Team can change its Sprint Backlog during a Sprint. This happens throughout the Sprint and in particular in the Daily Scrum when necessary changes are understood.
- The Development Team tracks total work remaining in every Daily Scrum to forecast the likelihood of achieving the Sprint Goal.

- The **Increment** is the sum of all the Product Backlog items completed during a Sprint and the value of the increments of all previous Sprints.
- An Increment must meet the Scrum Team's Definition of "Done".
- It must be in useable condition regardless of whether the Product Owner decides to actually release it.
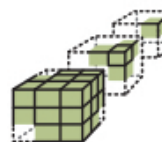
- **Artifact Transparency** is crucial in Scrum. Decisions to optimize value and control risk are made based on the perceived state of the artifacts.
- The Scrum Master must work with the Scrum Team, and other involved parties to make sure the artifacts are transparent and understood.

- The heart of Scrum is a **Sprint**, a time-box of one month or less during which a "Done", useable, and potentially releasable product Increment is created.
- No changes are made during the Sprint that would endanger the Sprint Goal.
- The Scope may be clarified and re-negotiated between the Product Owner and Development Team.

- **Sprint Planning** is a two part meeting time-boxed to a maximum 8 hours for a 1 month Sprint.
- Part 1: The Development Team creates a forecast of the items that will be developed in the Sprint.
- The Scrum Team crafts a Sprint Goal for the Sprint through the implementation of the Product Backlog.
- Part 2: The items in the Sprint Backlog are broken down into units of work of one day or less by the Development Team.

- The **Daily Scrum** is a daily 15-minute time-boxed event for the Development Team to synchronize activities and create a plan for the next 24 hours.
- This is done by inspecting the work since the last Daily Scrum and forecasting the work that could be done before the next one.

- The **Sprint Review** is held at the end of the Sprint to inspect the product increment.
- During the Sprint Review, the Scrum Team and stakeholders review what was done in the Sprint.
- The result of the Sprint Review is a revised Product Backlog that defines the probable Product Backlog items for the next Sprint.

- The **Sprint Retrospective** occurs after the Sprint Review and prior to the next Sprint Planning.
- The purpose is to inspect the process of the last Sprint and identify potential improvements.
- The Scrum Team creates a plan to incorporate these improvements into the way they do their work.
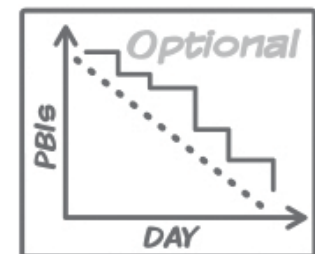

- The Scrum Team regularly does **Product Backlog Refinement** together with the stakeholders to add detail, estimates, and order to items in the Product Backlog.
- The Scrum Team decides how and when refinement is done.
- Product Backlog Refinement usually consumes no more than 10% of the capacity of the Development Team.

Scrum in a Nutshell

PO — Product Owner

Product Backlog
- PBI 1
- PBI 2
- PBI 3
- PBI 4
- PBI 5
- PBI 6

Sprint Planning

PBI 1, PBI 2, PBI 3, PBI 4, PBI 5, PBI 6

The Sprint — One Month or Less

Sprint Backlog

PBI	UNITS ONE DAY OR LESS	
1	1a	1b
2	2a	2b
3	3a	3b

Daily Scrum — 15min.

Visible Progress

PBI	TO DO	DOING	DONE
1		1a	1b
2		2a / 2b	
3	3a / 3b		

Optional — PBIs / DAY

STAKEHOLDERS

Backlog Refinement

PBI 4, PBI 5, PBI 6 →

- PBI 5.1
- PBI 4.2
- PBI 4.1
- PBI 6.1
- PBI 5.2
- PBI 6.3
- PBI 6.2

PO

Sprint Retrospective

Development Team

STAKEHOLDERS

Sprint Review

Scrum Master

Increment — Potentially Shippable

QUALITY

Definition of Done