scrum

- agile project management framework that helps teams structure and manage their work through a set of values, principles, and practices.
- Much like a rugby team
- designed to help self-organized teams execute projects quickly in an agile environment.

Scrum Values?

Courage, Focus, Commitment, Respect, and Openness

Scrum Roles?

The entire Scrum team usually has the following responsibilities:

- Breaking down the requirements, creating tasks, estimating, and distributing them.
- Arranging Daily Scrum meetings.
- Ensuring that potentially shippable functionality will be delivered at the end of the Sprint.
- Updating statuses and the remaining efforts for their tasks to allow the creation of a Sprint Burndown diagram.

Scrum team
Product Owner

- define user stories and create a product backlog.
- primary point of contact on behalf of the customer to identify the product requirements for the development team.
- The Product Owner has the complete responsibility and ownership of defining and even prioritizing user requirements.

- The Product Owner must communicate with the development team to explain the product features to be implemented.
- Any queries that come from the development team must be addressed by the Product Owner on key user requirements.
- The Product Owner has to collaborate and work closely with various stakeholders such as customers, business leaders, development teams, project managers, and other stakeholders.

- The product backlog must be clearly defined, and all the items need to be mentioned elaborately.
- Prioritize and order the product backlog in the right manner so that the important tasks are given topmost priority.
- Prioritize work items and product backlog, this must be in line with customer vision and goals.
- Evaluate the work done by the development team and provide constant feedback.
- The Product Owner must ensure that the product backlog is communicated clearly to all team members.
- The Scrum Team must have clarity on the product requirements and user expectations.

Scrum Master?

- Responsible for ensuring that the Scrum team follows the processes that were agreed upon.
- Keeping obstacles and distractions out of the team's path is one of the responsibilities of the Scrum master.
- **Keep all Parties on Track and Informed:** hosts daily team meetings to get updates on the progress of the project, address potential roadblocks, and ensure that the project is on track.
-

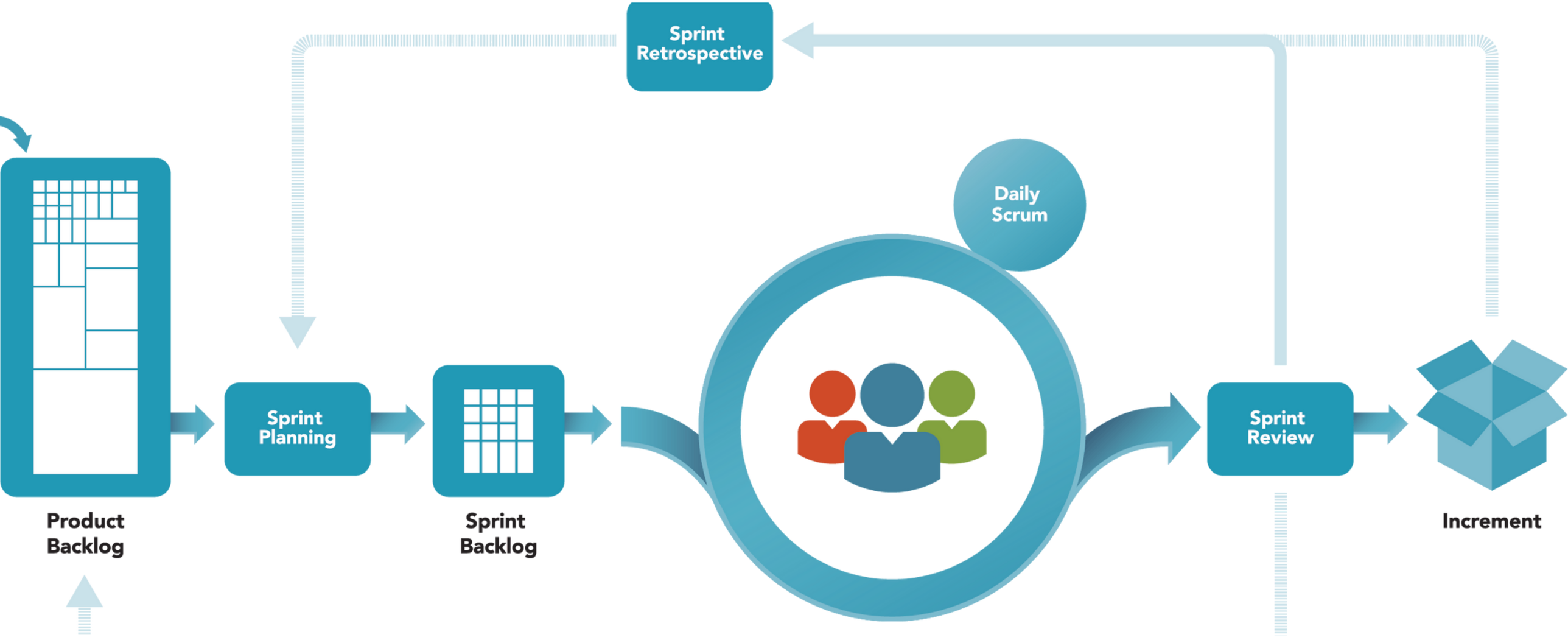
- **Coach Team Members :** ensure that the team is adequately trained to understand Agile processes, the team members know their specific roles and are dedicated to the project
- Host Daily Stand-up Meetings
- Remove Roadblocks

Development Team

- people working together to develop and deliver the requested and committed product increments.
- Scrum developers are cross-functional members who are capable to achieve the Sprint goals.
- The team may include software engineers, architects, system admins, analysts, UI designers, QA experts, etc.

sprints?

- A sprint is a short, time-boxed period when a scrum team works to complete a set amount of work.
- "Sprints make projects more manageable, allow teams to ship high-quality work faster and more frequently, and gives them more flexibility to adapt to change."


Sprint Retrospective
Daily Scrum
Sprint Planning
Sprint Review
Product Backlog
Sprint Backlog
Increment

SPRINT

- **!Sprint planning** : What work can get done in this sprint and how will the chosen work get done?
- Choosing the right work items for a sprint is a collaborative effort between the product owner, scrum master, and development team.

- **DAILY STANDUPS** : about how the work is progressing.
- The goal of this meeting is to surface any blockers and challenges that would impact the teams ability to deliver the sprint goal.
- **SPRINT REVIEW** : team demonstrates what they’ve completed
- **SPRINT RETROSPECT** : team reflects on the past to improve the future.

Scrum - Artifacts

- key information that the Scrum Team and the stakeholders need to be aware of for understanding the product under development, the activities done, and the activities being planned in the project.
- Product Backlog
- Sprint Backlog
- Burn-Down Chart
- Increment

Product Backlog

- The Product Backlog lists all features, functions, requirements, enhancements, and fixes that constitute the changes to be made to the product in future releases.
- Product Backlog items have the attributes of a description, order, estimate, and value.
- These items are normally termed as User Stories.
- The Product Owner is responsible for the Product Backlog, including its content, availability, and ordering.

Sprint Backlog

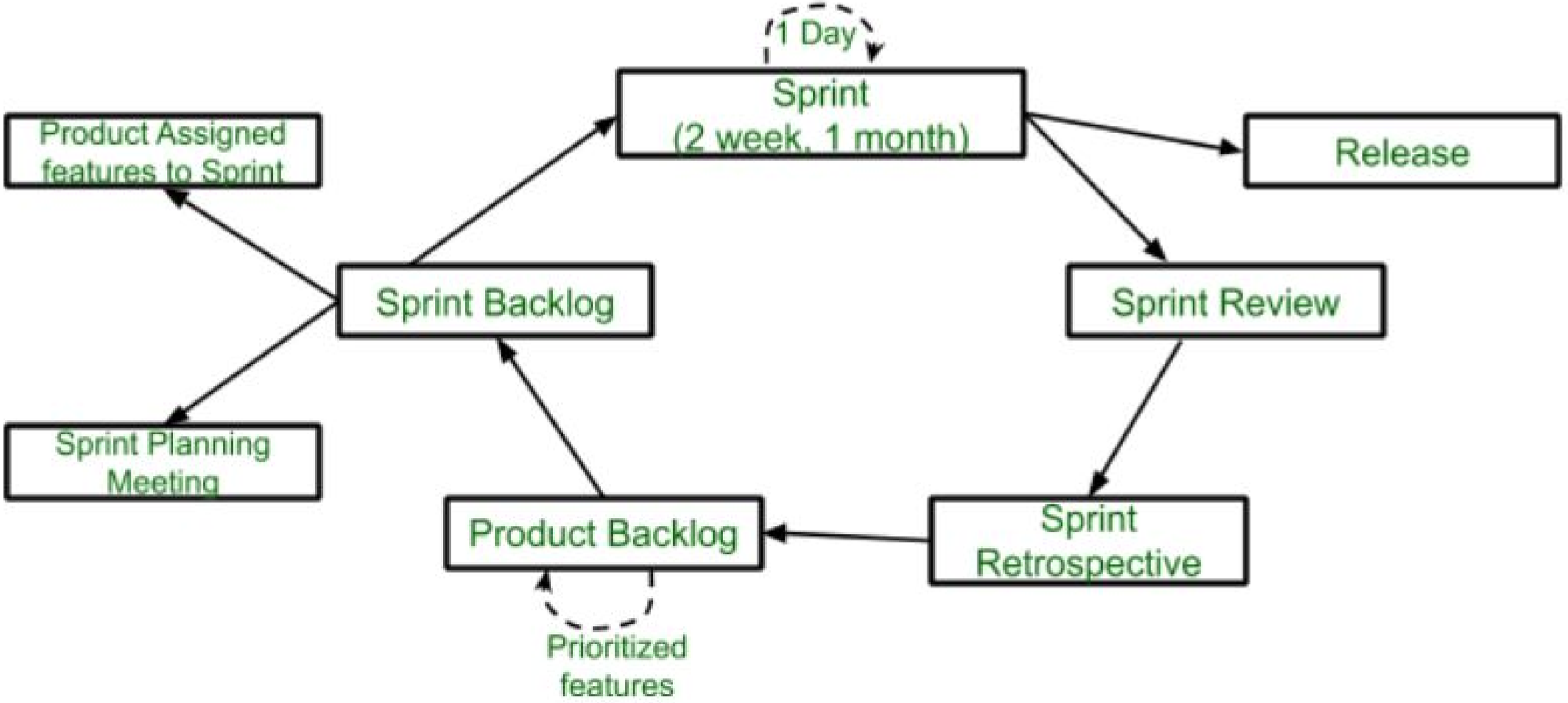
- set of Product Backlog items selected for the Sprint, plus a plan for delivering the product Increment and realizing the Sprint Goal.
- The Sprint Backlog is a plan with enough detail that can be understood by the Team to track in the Daily Scrum.
- The Team modifies the Sprint Backlog throughout the Sprint,

Increment

- The Increment is the sum of all the Product Backlog items completed during a Sprint combined with the increments of all previous Sprints.
- At the end of a Sprint, the new Increment must be a working product, which means it must be in a useable condition.

Sprint Burn-Down Chart

- At any point in time in a Sprint, the total work remaining in the Sprint Backlog can be summed.
- The Team tracks this total work remaining for every Daily Scrum to project the likelihood of achieving the Sprint Goal.
- By tracking the remaining work throughout the Sprint, the Team can manage its progress.


1 Day
Sprint
(2 week, 1 month)
Product Assigned
features to Sprint
Release
Sprint Backlog
Sprint Review
Sprint Planning
Meeting
Product Backlog
Sprint
Retrospective
Prioritized
features

scrum is a framework that teams and organizations can use to manage products of different types. Scrum doesn't dictate which software engineering practices developers should use

Extreme programming

- Really cares about programming.
- Puts a lot of emphasis on the programming techniques developers should use to ensure a high-quality result.
- But from its very roots, XP has always been a more technical approach than scrum.

1. Scrum teams typically work in iterations (called sprints) that are from two weeks to one month long. XP teams typically work in iterations that are one or two weeks long.
2. Scrum teams do not allow changes into their sprints, XP teams are much more amenable to change within their iterations.
3. Extreme Programming teams work in a strict priority order. Features to be developed are prioritized by the customer the team is required to work on them in that order. By contrast, the Scrum product owner prioritizes the product backlog but the team determines the sequence in which they will develop the backlog items.