0.1 Scrum

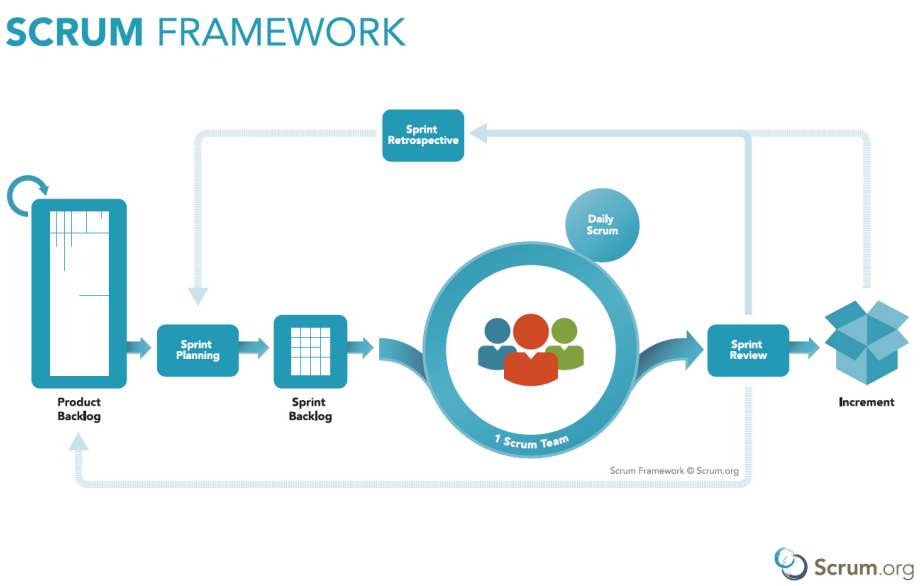

Figure 1: Scrum Overview

0.1.1 Events

- Sprint planning meeting
  Review the features for the next Sprint
- Daily scrum
  Daily stand-up meeting for coordination and commitment among peers
- Sprint review
  The team presents what it accomplished during the sprint
- Sprint retrospective
  Team discusses what they'd like to start/stop/continue doing

0.1.2 Artifacts

- Product backlog
  A list of all desired work on the project
- Sprint backlog
  Shows list of tasks and estimates of work remaining (h)
- Sprint burndown chart
  Shows, during a sprint, the total work remaining per day

0.1.3 Roles

- Product Owner
  - Define the features of the product and priorities
  - Decide on release date and content
  - Accept or reject work results
- Scrum Master
  - Enact Scrum values and Practices
  - Remove impediments and external interferences
  - Ensure that the team is fully functional and productive
- Development Team
  - Does the work
  - Self-organizing
  - Typically 5-9 people, ideally full time and multifunctional

0.1.4 Agile Estimation

User story - Describes something of value to the user or the System Example: **As a** student, **I want to** indicate preferences for colleagues to share the same scholar timetable, **so that** I can be more productive in group works.

Story points - Relative measure for expressing the "size" of a user story, Influenced by difficulty, risk, complexity, etc. Typically exponential.

Team velocity - The number of story points implemented per Sprint

0.2 eXtreme Programming (XP)

Developed by Kent Beck.

0.2.1 Core Values

- Communication
- Simplicity
- Feedback
- Courage

0.2.2 Practices

- The Planning Game
  Developers estimate 'size' of each story (effort to implement)
- Small Releases
- System Metaphor
- Simple Design
- Test-driven Development
- Refactoring
- Pair Programming
- Collectice Code Ownership
- Continuous Integration
- Sustainable Pace
- On-Site Customer
- Coding Standards