Sprint planning
• **What is Scrum?**
  • Scrum is an Agile Framework for developing, delivering and sustaining complex products.
  • Founded by Ken Schwaber and Jeff Sutherland in the 90s
  • It is:
    • Lightweight
    • Simple to understand
    • Difficult to master
  • Employs an iterative and incremental approach.
• **What Scrum is not?**
  • A process
  • A technique
  • Definitive method for developing products.
Scrum

• It is used for:
  • Research and identify viable markets, technologies, and product capabilities;
  • Develop products and enhancements;
  • Release products and enhancements;
  • Develop and sustain Cloud and other operational environments for product use;
  • Sustain and renew products.
Scrum – Pillars

• Transparency
  • See and understand

• Inspection
  • Investigate

• Adaption
  • Improve
Why Scrum?

- Focus on the value returned to the client (ROI) on each increment of the product
- Ability to adapt
- Avoids waste
  - Only develop what is going to be used
  - Plan just the necessary
  - Only generates necessary and sufficient artifacts (e.g., Documentation)
Level of Detail
Scrum Team

- Product Owner
- Development Team
- Scrum Master
Product Owner (PO) - Attributions

• Responsible for
  • Guarantee and maximize ROI
    • Managing the product backlog
    • Managing the stakeholders
    • Managing the Product vision
    • Managing the releases of the product

• Participate actively in Sprints
  • Be available for the development team.
  • Be present on:
    • Sprint planning
    • Sprint review
    • and release planning
Product Owner (PO) - Attributions

- Accept or reject the work performed by the development team during the sprint
- Guarantee that there is enough budget for the project during its entire development.
Product Owner (PO) – Characteristics

• One person
  • Not a committee

• Available
  • To answer questions from the development team
  • To make decisions about the product
  • To contact the stakeholders and update the product backlog frequently

• Representative
  • Needs to have enough power and knowledge to make quick and correct decisions about the product
  • Has the final saying about the Product Backlog
• Work on delivering a potential increment of the product using the product backlog.
• Contact the product owner frequently
  • Ask questions about the product when needed
• Inform the Scrum Master of any impediment
Development Team - Characteristics

• Self-organized
• Cross-functional
  • Should possess all the skills (as a team) to create a product increment.
• There are no titles for the team members
• There are no sub-teams
• Motivated
• Focused on technical excellence
• Be committed to reaching the goals
• Sufficiently small: between 3 and 9 members
Scrum Master - Attributions

• Responsible for promoting and supporting Scrum
  • Helps everyone to understand Scrum theory, practices, rules and values
• Remove impediments to the development team's progress
• Coach the development team in self-organization and cross-functionality
• Facilitate Scrum events as requested or needed
• Align the needs of the Development team and the organization
• Can help to choose the Product Owner
Scrum Master - Attributions

- Guarantee that the Product Owner possesses everything he/she needs to do his job
Scrum Master - Characteristics

- Soft skills:
  - Communication
  - Motivation
  - Problem-solving
  - Conflict managing
  - Facilitation
  - Etc.

- Courage

- Present during all the time while the development team is working.

- Impartiality
Product Backlog

• List of requirements of the product
• It is ordered by priority
• Estimable
• Incomplete and dynamic
  • Changed constantly
Product Backlog

Developed earlier
(higher priority and more detail)

Developed later
(lower priority and less detail)

Next Sprint

Next Release

Future Releases
Definition of Done (DoD)

• What it means to work to be complete.
• It is like a contract between the development team and Product Owner.
• Unique for each project
• Example:
  • Coding complete
  • Unit tests and Acceptance tests updated
  • Manual or documentation updated
Scrum cycle - Sprint
Sprint

• The iteration(cycle) itself
  • Sprint planning
  • Development
  • Daily Scrum
  • Sprint Review
  • Sprint Retrospective

• Each Sprint:
  • Has a goal
    • Example: eCommerce application
      • Sprint Goal: Implement basic shopping cart functionality including add, remove, and update quantities.
  • Delivers an increment according to this goal
Sprint Planning
Sprint Planning

• It is the iteration planning

• Development team and Product Owner define:
  • The items to be developed during the sprint taking account the priority of the product backlog
  • Sprint Goal

• Development team estimate the items regarding complexity and/or time
Result: Initial Sprint Backlog + Sprint Goal

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<thead>
<tr>
<th>Product Backlog</th>
<th>Sprint Backlog</th>
<th>In-Progress</th>
<th>Done</th>
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<td>Sprint Goal</td>
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Sprint Planning
Sprint Backlog

• The items from the product backlog to be developed during the Sprint
• Can be modified during the Sprint
  • Estimates can be updated
  • Tasks can be added to existing items
• Needs to be visible for everyone
• Belongs to the Development Team
Daily Scrum
Daily Scrum

• 15 minutes meeting that should occur every day
• Each member of the development team reports:
  • What has been done since the last Daily Scrum
  • What will be done until the next Daily Scrum
  • Any impediments that prevents the work to be done

• Promotes:
  • Visibility
  • Communication
  • Quick decisions
Sprint Review

• Development team
  • Shows the Product owner and Stakeholders what has been done in the Sprint
  • Answer questions about the product increment

• Product Owner
  • Checks what is done and what is not(according to the DoD) and says if the Goal was achieved

• If anything needs to be changed
  • An item is included on the product backlog
Sprint Retrospective
Sprint Retrospective

• Meeting to inspect how was the Sprint
  • What went well?
  • What can be better?
  • Actions to improve - adaption

• Should be present:
  • Development team and Product Owner
# Sprint Retrospective

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<th>What went well?</th>
<th>What can be better?</th>
<th>Actions</th>
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Scrum cycle - Summary
Scrum cycle - Summary
Sprint - Summary

Sprint Planning

Product Backlog → Sprint Backlog → Iteration → Potentially shippable product increment
Sprint - Summary
Sprint - Summary

Product Backlog → Sprint Backlog → Iteration → Potentially shippable product increment
Sprint - Summary

1. Product Backlog
2. Sprint Backlog
3. Iteration
4. Potentially shippable product increment

Sprint Retrospective
Team composition

- 1 Scrum Master
- 1 Product Owner
- 2 or 3 Development Team
Product Backlog construction and DoD

• Stories/requirements
  • Try to break big stories/requirements into smaller ones (avoid epics)
  • Prioritize the stories/requirements
  • Order them according to the given priority

• Stablish the definition of done:
  • Example
    • Code implemented
    • Unit tests updated
    • Tutorial/manual updated
Sprint - Summary

Sprint Planning
Sprint planning

• Define the items from the product backlog to be implemented during the sprint
• Estimate them (Planning poker)
• Result:
  • Sprint Backlog
  • The goal of the Sprint
Sprint

- Product Backlog
- Sprint Backlog
- Iteration
- Potentially shippable product increment
• Do not allocate 100% of your time on the implementation of items
  • Leave some space for correcting bugs dealing with problems.

• Try to leave the third sprint only for issue solving, refactoring and
  finishing things you shall have finished in the first two sprints.

• Tasks for refactoring an existing implementation or Issue solving
  should be included in the future Sprints when they are necessary.
Sprint

Product Backlog → Sprint Backlog → Iteration → Potentially shippable product increment

Daily Stand-up
Sprint review

• No need to demo to us
  • It can be done between the members of the team.
  • Try to use it to assert that the goal of the sprint is achieved

• Provide a document with some screenshots and a test script/tutorial to test the implementation.
Sprint - Summary
Sprint retrospective

• Discuss about:
  • what went well?
  • what should be better?

• Propose actions
  • Be objective!
Deliverables

- **Product Backlog:**
  - Ordered and prioritized

- **At the beginning of each Sprint:**
  - Sprint backlog
    - Estimated!!!
  - The goal of the Sprint

- **At the end of each Sprint:**
  - Increment of product
  - Tutorial/test script
  - Phase review document
What will be evaluated

• Ability to execute what is planned or most of it in the estimated time
• Ability to manage the repository.
• Ability to manage the backlogs (product and sprint)
  • Trello or Gitlab.
• Planned documentation and tests for the tasks are done.
• «Sprint review» and «Sprint retrospective» are done.
References

• Scrum Guide
• Agile Estimating and Planning: Planning Poker - Mike Cohn