



Roles

Scrum Team

- Team is cross-functional and consists of 5-9 people
- There are no set project roles within the team
- Team defines tasks and assignments
- Team is self-organizing and self-managing
- Maintains the Sprint Backlog
- Conducts the Sprint Review

Product Owner (PO)

- Accountable for product success
- Defines all product features
- Responsible for prioritizing product features
- Maintains the Product Backlog
- Insures team working on highest valued features

Scrum Master (SM)

- Holds daily 15 minute team meeting (Daily Scrum)
- Removes obstacles
- Shields the team from external interference
- Maintains the Sprint Burndown Chart
- Conducts Sprint Retrospective at the end of a Sprint
- Is a facilitator not a manager

Artifacts

Product Backlog - (PB)

- List of all desired product features
- List can contain bugs, and non-functional items
- Product Owner responsible for prioritizing
- Items can be added by anyone at anytime
- Each item should have a business value assigned
- Maintained by the Product Owner

Sprint Backlog – (SB)

- To-do list (also known as Backlog item) for the Sprint
- Created by the Scrum Team
- Product Owner has defined as highest priority

Burndown Chart – (BC)

- Chart showing how much work remaining in a Sprint
- Calculated in hours remaining
- Maintained by the Scrum Master daily

Release Backlog – (RB)

- Same as the Product Backlog. May involve one or more sprints dependent on determined Release date

“DONE”= Potentially Shippable!

FAQ

- **Who decides when a Release happens?** At the end of any given Sprint the PO can initiate a Release.
- **Who is responsible for managing the teams?** The teams are responsible for managing themselves.
- **What is the length of a task?** Tasks should take no longer than 16 hours. If longer then the task should be broken down further.
- **Who manages obstacles?** Primary responsibility is on the Scrum Master. However, teams must learn to resolve their own issues. If not able then escalated to SM.
- **What are two of the biggest challenges in Scrum?** Teams not self-managing, Scrum Master managing not leading.

Meetings

Sprint Planning – Day 1 / First Half

- Product backlog prepared prior to meeting
- First half – Team selects items committing to complete
- Additional discussion of PB occurs during actual Sprint

Sprint Planning – Day 1 / Second Half

- Occurs after first half done – PO available for questions
- Team solely responsible for deciding how to build
- Tasks created / assigned – Sprint Backlog produced

Daily Scrum

- Held every day during a Sprint
- Lasts 15 minutes
- Team members report to each other not Scrum Master
- Asks 3 questions during meeting
 - “What have you done since last daily scrum?”
 - “What will you do before the next daily scrum?”
 - “What obstacles are impeding your work?”
- Opportunity for team members to synchronize their work

Sprint Review

- Team presents “done” code to PO and stakeholders
- Functionality not “done” is not shown
- Feedback generated - PB maybe reprioritized
- Scrum Master sets next Sprint Review

Sprint Retrospective

- Attendees – SM and Team. PO is optional
- Questions – What went well and what can be improved?
- SM helps team in discovery – not provide answers

Visibility + Flexibility = Scrum

Glossary of Terms

- **Time Box** - A period of time to finish a task. The end date is set and can not be changed
- **Chickens** – People that are not committed to the project and are not accountable for deliverables
- **Pigs** – People who are accountable for the project’s success
- **Single Wringable Neck** – This is the Product Owner!

SCRUM CHEAT SHEET

Estimating

User Stories

- A very high level definition of what the customer wants the system to do.
- Each story is captured as a separate item on the Product Backlog
- User stories are NOT dependent on other stories
- **Story Template:**
 - “As a <User> I want <function> So that <desired result>
- **Story Example:**
 - As a user, I want to print a recipe so that I can cook it.

Story Points

- A simple way to initially estimate level of effort expected to develop
- Story points are a relative measure of feature difficulty
- Usually scored on a scale of 1-10. 1=very easy through 10=very difficult
- **Example:**
 - “Send to a Friend” Story Points = 2
 - “Shopping Cart” Story Points = 9

Business Value

- Each User Story in the Product Backlog should have a corresponding business value assigned.
- Typically assign (L,M,H) Low, Medium, High
- PO prioritizes Backlog items by highest value

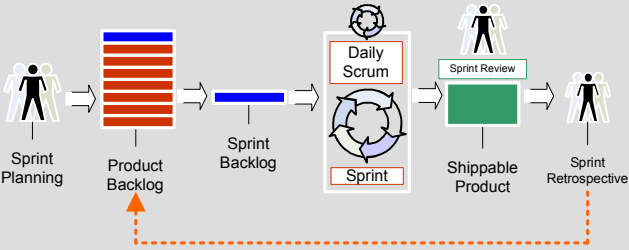
Estimate Team Capacity

- Capacity = # Teammates (Productive Hrs x Sprint Days)
- Example – Team size is 4, Productive Hrs are 5, Sprint length is 30 days.
- Capacity = 4 (5 x30) = 600 hours
- **NOTE:** Account for vacation time during the Sprint!

Velocity

- The rate at which team converts items to “DONE” in a single Sprint – Usually calculated in Story Points.

Process



Tools

Task Board

- White Board containing teams Sprint goals, backlog items, tasks, tasks in progress, “DONE” items and the daily Sprint Burndown chart.
- Scrum meeting best held around task board
- Visible to everyone