The Rules of Scrum

The **ScrumMaster** assures everyone related to the project (*Chickens* and *Pigs*) follow the rules! The rules, which have been successfully used on thousands of projects, hold Scrum together and let everyone know how to play. Disputing rules waste time but they can be changed.

Changes to rules originate solely from the **Team** and are discussed during the *Sprint Retrospective Meeting*. Rules can only be changed when the **ScrumMaster** determines that everyone involved understands *Scrum* enough to "skillfully and mindfully make such changes". (Schwaber 2004, p.133).

Sprint Planning Meeting (4 to 8 hrs)

The Sprint Planning Meeting is time-boxed into two consecutive two to four hour segments (based on sprint length). In Segment 1, the **Team** selects from the Product Backlog. In Segment 2, the **Team** prepares the Sprint.

Attendees

The **Product Owner** must be available for both meeting segments and is responsible for the *Product Backlog* (suggestions can come from the **Team**). If this is the first meeting then the **Product Owner** also prepares the business case, funding, contractual agreement, vision and stake holder buy-in.

- The ScrumMaster takes over for the Product Owner if the Product Backlog or Product Owner is not available.
- In Segment 1, the **Team** analyses the *Product Backlog* refining as many large-grained high priority items as possible in the four hours allotted. Further analysis takes place in the *Sprint*.

The **Team** commits to the analyzed items from the *Product Backlog* they believe can be turned into an "increment of potentially shippable product functionality" in a single *Sprint*. The increment is demonstrated to the **Product Owner** and *Stakeholders* at the *Sprint Review Meeting* held at the end of the *Sprint*.

- In Segment 2, the **Team**, **completely on their own**, plans how to turn the selected items into an "increment of potentially shippable product functionality". The **Team** can ask for help but all other attendees may not offer help or suggestions. The *Sprint Backlog*, created during this segment, can be incomplete but must be clear enough that the **Team** can commit to the work for the first part of the sprint.
 - Others are allowed but dismissed immediately after providing additional business domain, technology domain and advice. No chickens as observers.

Daily Scrum Meeting (15 min)

The *Daily Scrum Meeting* is time-boxed to 15 minutes (no matter how many team members) and is always held at the same place and time (preferably in the morning). In the meeting, the **Team** reports their status to each other (not the **ScrumMaster**).

Attendees

Team members must attend the meeting. When a member cannot be present, they should attend by phone/internet or have another member report on their behalf. Team members who are late must immediately pay the **ScrumMaster** \$1.00.

The team member immediately to the left of the **ScrumMaster** starts the meeting by answering the following:

- What have you Done¹ since the last Daily Scrum Meeting regarding this project?
- What will you do between now and the next Daily Scrum Meeting regarding this project?
- What impedes you from performing your work as effectively as possible?

Reporting continues counter clockwise with only ONE person talking at any one time. Upon hearing anything of interest or a request for assistance, any team member can arrange to get interested parties together after the *Daily Scrum Meeting*.

The **ScrumMaster** assures answers are kept to the point: no issues, design problems or gossip allowed. The **ScrumMaster** may limit chicken attendance and assures everyone conforms to the rules. Non conformance means chickens can be removed from the meeting and Team members from the **Team**. The **ScrumMaster**, after the meeting, works to remove any impediments.

Chickens stand on the peripherals of the **Team** and may not talk, make faces or be obtrusive in any way during or after the meeting.

Sprint (Max 30 Consecutive Calendar Days²)

The *Sprint* is between 2 to 4 consecutive weeks where the **Team** turns the *Sprint Backlog* into an "increment of potentially shippable product".

Attendees

The **Team** has committed, in the *Sprint Planning Meeting*, to the *Sprint Backlog*. Corresponding *Product Backlog* items are frozen until the end of the *Sprint*. The **Team** is **100% self managed** but can seek outside advice, help, information, direction, comments and support. However, **NO ONE** from the outside may offer any advice, help, information, direction, comments or support.

If the **Team** has overcommitted, they may work with the **Product Owner** to remove *Sprint Backlog* items. If the *Sprint* "loses its value," the **ScrumMaster** can abnormally terminate the *Sprint*. Time permitting, the **Team** can commit to more *Product Backlog* consulting with the **Product Owner**.

During the Sprint, Team member's administration responsibilities are:

- · Attend the Daily Scrum.
- Update the Sprint Backlog by adding new tasks when conceived and for each task, update time estimates.

Sprint Review Meeting (4 Hours)

The Sprint Review Meeting is time-boxed to four hours. In this meeting, the Team demonstrates, to the Product Owner and Stakeholders, ONLY the functionality that is considered Done. Artifacts that aren't functionality can not be presented as work product but can be used to demonstrate functionality.

Attendees

- 1) The **ScrumMaster** should determine the number of people attending the *Sprint Review Meeting* and make appropriate accommodations.
- 2) A Team member starts the Sprint Review Meeting by presenting the Sprint goal, Product Backlog committed to and Product Backlog completed. Different team members then discuss what did and did not go well during the Sprint.
- 2b) Team members then present, preferably from their workstation and against closest production server (usually QA), functionality that is done. Questions from *Stakeholders* are answered and noted.
- Stakeholders, between presentations, can voice any comments, observations or criticisms regarding functionality just presented.
 - 3b) After all presentations, *Stakeholders* are polled (one at a time) to get their impressions, desired changes and priority of changes (if any). *Stakeholders* can identify and request A) functionality not delivered and/or B) functionality not delivered as expected and/or C) new functionality to be added to the *Product Backlog*.
- 4) The **Product Owner** discusses with *Stakeholders* and the Team potential rearrangement of the *Product Backloa*.
- 5) Finally, the **ScrumMaster** announces the place and time of next *Sprint Review Meeting*.

Sprint Retrospective Meeting (3 Hours)

The Sprint Retrospective Meeting is time-boxed to three hours and allows the team to reflect on the last Sprint.

Attendees

Team members start the meeting by answering the following:

- What went well during the last Sprint?
- What could be potentially improved on in the next Sprint?

Answers are written down by the **ScrumMaster**. The Team prioritizes potential improvements to discuss.

The **ScrumMaster** facilitates the **Team's** search for ways to improve on how *Scrum* can work for them. Actionable items are added to the *Product Backlog* (and so next *Sprint*) as "high-priority non-functional action items".

The **Product Owner** may (optionally) attend the meeting.

See Definitions – Done for an explanation of what "done" means.

² Why? Because 4 weeks is the maximum time that A) a *Team* can do work without a significant amount of Artefacts and B) the maximum time the *Stakeholders* will keep faith in the **Team**.

Scrum Process Overview

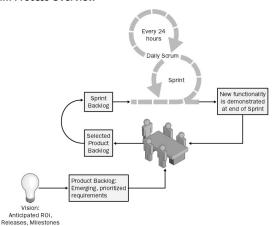


Figure 1 - 'Scrum Process Overview' [image] Schwaber, K. 2004, P. 9

Artifacts

Burndown Graph

The Burndown Graph shows the working trend within a Sprint, release or product. Data comes from Product Backlog and Sprint Backlog.

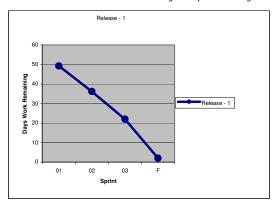


Figure 2 - Burndown graphs show Sprint trend.

Product Backlog

A *Product Backlog* (see Figure 3) is an evolving prioritized list of requirements estimated, in days to completion, and grouped by *Sprints*. Higher priority Items, placed at the top of the *Product Backlog*, are more precise and very granular.

Backlog Description						Days of Work Rema				
TITLE			Sprint	01	02	03				
			Total	49	36	22				
	Initial									
	Estimate	Adjust	Adjusted							
Title Import	(Days)	Factor	Estimate							
01 Product Backlog Item (More Refined)	3.0	0.2	3.6	3.6	0.0	0.0				
01 Product Backlog Item 2 (More Refined)	2.0	0.3	2.6	2.6	0.0	0.0				
01 Product Backlog Item 3 (More Refined)	5.0	0.1	5.5	5.5	0.0	0.0				
01 Product Backlog Item 4 (More Refined)	1.0	0.4	1.4	1.4	0.0	0.0				
Sprint - 1 (Totals)	11.0	0.0	13.1	13.1	0.0	0.0				
02 Product Backlog Item 5 (Less Refined)	2.0	0.2	2.4	2.4	2.4	0.0				
02 Product Backlog Item 6 (Less Refined)	4.0	0.2	4.8	4.8	4.8	0.0				
02 Product Backlog Item 7 (Less Refined)	5.0	0.4	7.0	7.0	7.0	0.0				
Sprint - 2 (Totals)	11.0	0.0	14.2	14.2	14.2	0.0				
03 Product Backlog Item 8 (Not Refined)	11.0	0.0	11.0	11.0	11.0	11.0				
03 Product Backlog Item 9 (Not Refined)	3.0	0.0	3.0	3.0	3.0	3.0				
03 Product Backlog Item 10 (Not Refined)	6.0	0.0	6.0	6.0	6.0	6.0				
Sprint - 3 (Totals)	20.0	0.0	20.0	20.0	20.0	20.0				
F Future Backlog Item 1	2.0	0.0	2.0	2.0	2.0	2.0				
F	0.0	0.0	0.0	0.0	0.0	0.0				
Future Sprints (Totals)	2.0	0.0	2.0	2.0	2.0	2.0				
Release - 1				0.0	0.0	0.0				

Figure 3 - Example product backlog.

Product Backlog Items are functional requirements, non-functional requirements and issues prioritized by importance to business and dependencies (done by the **Product Owner**).

Sprint Backlog

The Sprint Backlog is a daily updated list of tasks (Sprint Backlog Tasks) which should be completed in a single Sprint. Each task is assigned workers and contains an estimate of time to complete and time remaining.

			Status(Not	Hours of Work Remaining							
			Started								
			In Progress								
Task Description	Originator	Responsible	Completed)	01	02	03	04	05	06	07	08
Backlog Item 1 Highly Refined		Member A	Not Started	20	20	20	20	20	20	20	20
		Member B,									
Backlog Item 1 Highly Refined		Member C	Complete	24	20	15	11	0	0	0	0
New Item (Added during sprint)	Member A	Member A	Not Started								
Backlog Item 2 Highly Refined		Member C	In Progress	30	30	30	30	22	12	10	10
Backlog Item 1 Highly Refined		Member D	Not Started	32	32	32	32	32	32	32	32
		Member D,									
Backlog Item 2 Highly Refined		Member, C	Not Started	20	20	20	20	20	20	20	20
Backlog Item 2 Highly Refined		Member A	Domplete	10	6	3	2	2	2	1	0
Backlog Item 1 Highly Refined		Member D	Complete	10	2	0	0	0	0	0	0
		Member A,									
Backlog Item 1 Highly Refined		Member D	Done	2	2	0	0	0	0	0	0
Backlog Item 2 Highly Refined		Member C	Not Started	28	28	28	28	28	28	28	28
Backlog Item 3 Highly Refined		Member A	No Started	7	7	7	7	7	7	7	7
Continued											

Figure 4 - Fine grained backlog of work to complete for current Sprint.

Sprint Backlog Tasks are tasks required to turn *Product Backlog Items* into functionality.

Definitions

Chicken – Interested but not committed or accountable (not a Pig).

Daily Scrum Meeting – Short meeting where team members present their status: impediments noted by **ScrumMaster**.

Done – Complete, as mutually agreed to by all parties, and conforming to an organizations standards, conventions and guidelines.

Estimated Work Remaining – The estimated total hours remaining on any one task which is updated at the end of every *Sprint Backlog* working day.

Increment – Product functionality developed during a Sprint.

Increment of Potentially Shippable Product Functionality – A complete developed increment that contains all parts of a completed product (Note: Does not include *Product Backlog Items* of current *Sprint*).

Iteration – A project cycle which in *Scrum* is 30 sequential calendar days: a *Sprint*.

Pig – A team member, Product Owner, ScrumMaster or other Stakeholder committed and accountable to the project.

Product Owner – Represents all *Stakeholders* and manages *Product Backlog* to maximize project value.

Scrum – A mechanism in the game of rugby for getting an out-of-play ball back into play.

ScrumMaster – Person responsible for the Scrum process, its correct implementation and to maximize on its benefits.

Sprint – 30 sequential calendar days (time-boxed) in which a team attempts to turn the *Sprint Backlog* into an "increment of potentially shippable product functionality".

Stakeholder – People interested in the project because they funded it, will use it or will be affected by it.

Team – Cross-functional group of self managed people who develop product during *Sprints*.

Time-boxed – Period of time, within a meeting or event, that may not be exceeded.

About this Document

This document was created so the rules of *Scrum* could fit on one sheet of paper. An attempt was made to make sure no changes were made to the existing rules described in Appendix A: Rules of Schwaber's book 'Agile Project Management with Scrum.' This document should not be used as an alternate to the rules provided in Schwaber's book.

References

Schwaber, K. 2004, Agile Project Management with Scrum: Scrum Rules, Microsoft Professional.

Version 1.1 Produced by Eric Keith Hosick 2010.