Scrum Cheat Sheet

1. Definition

Scrum is a **framework** within which people can address complex adaptive problems.

Scrum is not a methodology, a process or a technique. It's a framework.

Scrum is founded on **empirical process control theory**, or **empiricism**.

2. Pillars of Scrum

Three pillars of Scrum are: **T**ransparency, **I**nspection, and **A**daptation.

Scrum events for inspection and adaptation are:

- Sprint Planning
- Daily Scrum
- Sprint Review
- Sprint Retrospective

3. Scum Values

- Commitment
- Courage
- Focus
- Openness
- Respect

4. Scrum Team

Scrum team consits of <u>only</u>:

- Product Owner
- Development Team
- Scrum Master

Scrum does NOT have following roles:

- ~~Manager~~
- ~~Project Manager~~
- ~~Developer~~
- ~~Architect~~
- ~~Tester~~
- ~~Designer~~
- ...

All development tasks are carried out by **Development Team**, there is no specific role like Developer, Tester, Architect,...

a. Product Owner (PO)

- **PO** is the only person responsible for managing the Product Backlog:
  - Clearly expressing Product Backlog items;
  - Ordering the items in the Product Backlog;
  - Optimizing the value of the work the Development Team performs;
  - Ensuring that the Product Backlog is visible, transparent, and clear to all;
  - Ensuring the Development Team understands Product Backlog items.
- **PO** is one person, not a committee.
- **PO** monitors progress toward business objective or release.
- **Only PO** can terminate a Sprint.

b. Development Team

- **Self-organizing:** Choose how best to accomplish their work, rather than being directed by others outside the team;
- **Cross-functional:** Should have all skills as a team necessary to create a product increment;
- No titles for Team members other than Developer;
- Development Team monitors progress toward Sprint goal;
- Development Team decides how many Product Backlog Items to do in a Sprint;
- Responsible for:
    - Delivering a potentially releasable Increment;
    - Creating Definition of "Done";
    - The Sprint Backlog;
    - Conducting the Daily Scrum;
    - All estimates in the Product Backlog;
- Recommended size for a Development is between 3-9 people.
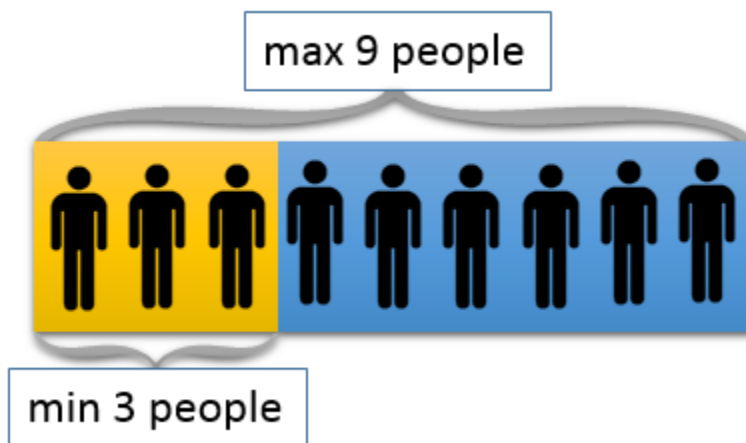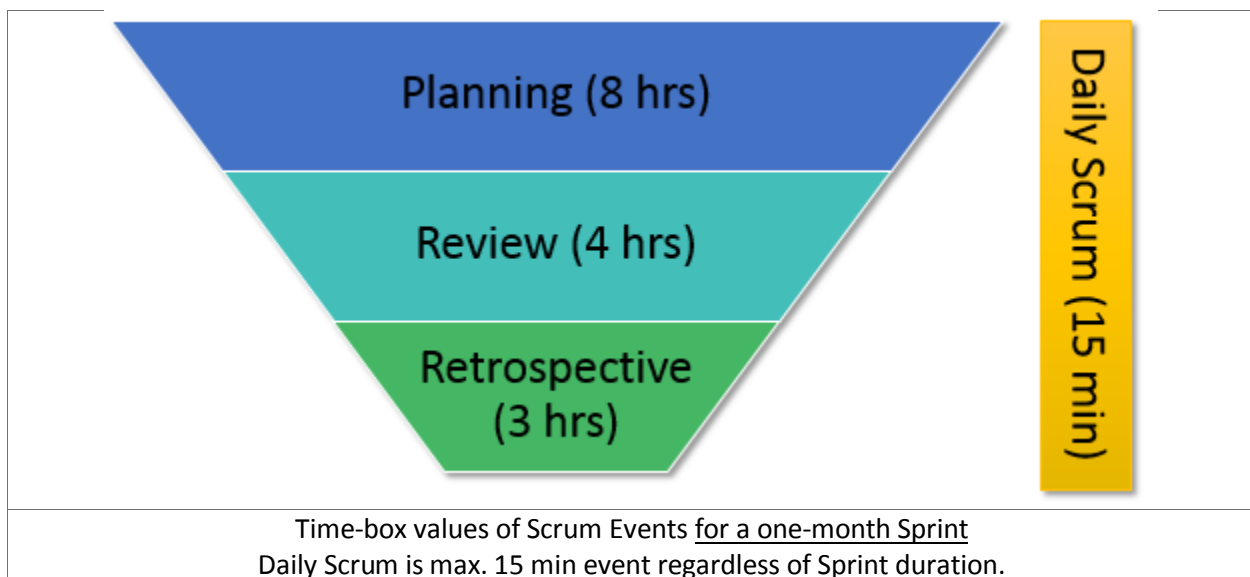

c. Scrum Master (SM)

- Responsible for:
    - Ensuring Scrum is understood and enacted;
    - Facilitating Scrum events as requested or needed;
    - Removing impediments to the Development Team's progress;
    - Coaching the Development Team
    - Leading and coaching the organization in its Scrum adoption
- **SM** ensures that the Development Team has the Daily Scrum meeting (but the Development Team is responsible for conducting the Daily Scrum).
- **SM** teaches the Development Team to keep the Daily Scrum within the 15-minute time-box.
- **SM** enforces the rule that only Development Team members participate in the Daily Scrum.

5. Scrum Events

All events are **time-boxed** events (i.e. they have a maximum duration).

a. The Sprint

- Scrum consists of sprints
- <u>Time-box:</u> One month or less
- Sprint consists of the development work and other Scrum Events
    - Sprint Planning
    - Daily Scrums
    - Sprint Review
    - Sprint Retrospective.
- Only the Product Owner can cancel the Sprint (if the Sprint Goal becomes obsolete).

Time-box values of Scrum Events <u>for a one-month Sprint</u>
Daily Scrum is max. 15 min event regardless of Sprint duration.

b. Sprint Planning

- Entire Scrum Team attends Sprint Planning meeting.
- <u>Time-box:</u> 8 hours for a one-month Sprint
- answers the following:
    - What can be done this Sprint?
    - How will the chosen work get done?
- <u>Development Team</u> members select the Product Backlog items for the Sprint.
- Scrum Team crafts a Sprint Goal in Sprint Planning meeting.
- **Sprint Goal** is a short description of what the team plans to achieve during the sprint.

c. Daily Scrum

- Development Team holds this meeting to synchronize activities and create a plan for the next 24 hours.
- Daily Scrum is used for inspecting progress toward the <u>Sprint Goal</u>.
- <u>Time-box:</u> 15 minutes
- This meeting is held at the same time and place each day.
- Development Team members explain:
    o What did I do yesterday?
    o What will I do today?
    o Do I see any impediment that prevents me?
- Development Team is responsible for conducting the Daily Scrum.
- Scrum Master ensures that the Development Team has the meeting (and keep it within the 15-minute time-box).

d. Sprint Review

- Sprint Review is held at the end of the Sprint to inspect the Increment.
- <u>Time-box:</u> 4 hours for a one-month Sprint.
- Stakeholders and Scrum Team attend this meeting.
- Key stakeholders invited by the Product Owner.
- Based on this meeting, Product Backlog might be updated.

e. Sprint Retrospective

- Scrum team attends this meeting.
- <u>Time-box:</u> 3 hours for a one-month Sprint.
- Scrum Team to inspects itself and creates a plan for improvements.
- People, relationships, process and tools are inspected.

6. Scrum Artifacts

a. Product Backlog (PB)
- is an ordered (prioritized) list of all product features
- Higher ordered **PB** items are usually clearer and more detailed than lower ordered ones.
- **PB** can contain business features, defects, technical improvements, non-functional features.
- **PB** is a living artifact, it always changes.
- Product Owner is responsible for **PB**.
- Product Owner can get feedback from Stakeholders and Scrum Team to create/update **PB**.
- If multiple scrum teams are working on the same product, they should have **one PB**.

b. Sprint Backlog (SB)
- **SP** is a list of tasks to be completed during the Sprint.
- During Sprint Planning meeting, Development Team selects items from Product Backlog to achieve the Sprint Goal.
- Development Team can update the **SP** during the Sprint.
- Only the Development Team can **SP** during a Sprint.

c. Increment
- The Increment is the sum of all the Product Backlog items completed during a Sprint and the value of the increments of all previous Sprints.

7. Definition of "Done"

- Definition of "Done" is a checklist of items that must be completed to call an item is finished;

- Definition of "Done" is used to assess when work is complete on the product Increment;

- Definition of "Done" enhances the transparency of increments;

- When many Development Teams are working on the same product, they should have the same Definition of "Done";

- During each Sprint Retrospective, Scrum Team can make changes on the Definition of "Done" if necessary;

8. FAQ

Question 1:

Is it required to release the increment at the end of each Sprint?

Answer 1:

No.

It's required to create an increment ready to release at the end of each Sprint <u>but it's not required to release</u> the increment.

Product Owner decides whether to release or not.

Question 2:

Is it required to deliver an increment in the first Sprint?

Answer 2:

Yes. First Sprint isn't different from other Sprints. In each Sprint it's required to deliver an increment.

Question 3:

Should there be a Release Sprint?

Answer 3:

No. There is no Release Sprint in Scrum.

Question 4:

Should there be a Hardening Sprint to remove technical debts?

Answer 4:

No. There should be no Hardening Sprint just for the purpose of resolving technical debts.

In each Sprint it's required to deliver an increment. Techical debts can be removed regularly during Sprints.

Question 5:

What do burndown charts show?

Answer 5:

It shows the work remaining over time within the sprint.

Question 6:

What should be done in Sprint 0?

Answer 6:

There is no Sprint 0 in Scrum.