# **My SCRUM Notes**

#### 1. SCRUM:

Scrum is a process FRAMEWORK that defines certain rules, events, and roles to bring in regularity.
 However, it can be adapted to any organization, based on needs, provided the basic Scrum rules are not violated.

## 2. ROLES:

## ■ [Stakeholder]

## ■ Scrum Team:

- The Scrum Team works together closely, on a daily basis, to ensure the smooth flow of information and the quick resolution of issues.
- The Scrum Team delivers product iteratively and incrementally, maximizing opportunities for feedback.

## O Product Owner:

- Is responsible for maximizing the value of the product and the work of the Scrum Team.
- Is responsible for ensure customer satisfaction.
- Is the sole person responsible for managing the Product Backlog.
- Ordering the Product Backlog Items (PBIs) to best achieve goals and missions.
- The Product Owner may do the above work, or have the Scrum Team do it. However, the Product Owner remains accountable for these tasks.
- The Product Owner is one person, not a committee.
- The Product Owner interfaces with stakeholders needs.

#### O Scrum Master:

- Is the keeper of the Scrum process.
- Making the process run smoothly.
- Removing obstacles that affect productivity.
- Organizing and facilitating the critical meetings.

#### O Development Team:

- The Development Team is self-organizing and cross-functional.
- The Development Team size should be kept in the range from 3 to 9 people, if possible (not including the Product Owner and Scrum Master!).
- Fewer than 3 members decrease interaction and results in smaller productivity gains.
- Having more than 9 members requires too much coordination.

## 3. EVENTS:

The Scrum events are time-boxed events.

## ■ Sprint:

- 2-4 weeks.
- During a Sprint, a working product Increment is developed.
- A new Sprint starts immediately after the conclusion of the previous Sprint.
- The Sprint Goal is an objective set for the Sprint.
- A Sprint should be cancelled if the Sprint Goal becomes obsolete.
- Only Product Owner can cancel a Sprint, though others have an influence on the same.

## O Sprint Planning

- 8 h
- Sprint Planning meeting is of duration of maximum of 4 h for 2 weeks Sprints and 8 h for 4 weeks Sprints.
- The Scrum Master moderates the Sprint Planning meeting.
- The Scrum Team comes up with the Sprint Goal.

- Sprint Planning focuses on the following two questions:
  - 1. What needs to be and can be delivered in the Sprint Increment?
  - 2. How will the work needed for the execution of Sprint be achieved?
- By the end of the Sprint Planning meeting, the work is divided into tasks of duration of 1 day or less.
- The Scrum Team may also invite others (not part of Scrum Team) to attend the Sprint Planning meeting to obtain technical or domain advice or help in estimation.
- In Scrum Projects, estimation is done by the entire team during Sprint Planning meeting.

## O Daily Scrum

- 15 min/day.
- The Daily Scrum meeting is held at the same time and same place every day to reduce complexity.
- The Scrum Master moderates the Daily Scrum meeting.
- This meeting is also referred to as Daily Stand up Meeting.
- Quickly understand the work since the last Daily Scrum Meeting.
- Create a plan for the next 24 hours.
- During the meeting, each Team member explains:
  - 1. What did he do yesterday?
  - 2. What will he do today?
  - 3. Does he see any impediments that prevent him or the Team from meeting the Sprint Goal?
- If necessary, the Team may meet immediately after the Daily Scrum meeting, for any detailed discussions, or to re-plan the rest of the Sprint's work.

#### O Sprint Review

- 4 h.
- The Sprint Review meeting is normally held for 2 h for 2 weeks Sprints and for 4 h for 4 weeks Sprints.
- A Sprint Review is held at the end of every Sprint.
- The Scrum Master moderates the Sprint Review meeting.
- During the Sprint Review, a presentation of the increment that is being released is reviewed.
- In this meeting, the Scrum Team and the stakeholders collaborate to understand what was done in the Sprint.
- The objective of Sprint Review is to obtain feedback and progress unitedly.
- The outcome of the Sprint Review is an updated Product Backlog, which defines the probable Product Backlog Items (PIBs) for the next Sprint.

#### O Sprint Retrospective

- 3 h.
- This is usually a 1 h meeting for 2 weeks duration Sprints and a 3 h meeting for 4 weeks duration Sprints.
- The Sprint Retrospective occurs after the Sprint Review and prior to the next Sprint Planning.
- The Sprint Retrospective is an opportunity for the Scrum Team to introspect and improve within the Scrum process framework to make the next Sprint outcome more effective.

## 4. ARTIFACTS:

#### ■ Product Backlog

- The Product Backlog is an ordered list of Product Backlog Items (PBIs).
- The Product Backlog lists all features, functions, requirements, enhancements, and fixes that constitute the changes to be made to the product in future releases.
- Each PBI must have these attributes:

- 1. Description: What the goal of the PBI is.
- 2. Value: the Business Value of the PBI as determined by the Product Owner.
- 3. Estimate: the Development Team needs to estimate the relative effort it will take to move the PBI to Done.
- 4. Order: The Product Owner needs to prioritize PBIs by their relative value.
- The PBIs are normally in the format of User Stories: "As a <who? (type of user)>, I want <what? (some goal or objective)> so that <why? (some reason, benefit, value)>."
- Anyone in the Scrum Team can write the User Stories, and the activity can be spread across the
  project as requirements get refined and new functionalities get added.
- The Development Team is responsible for all estimates. The Product Owner may influence the Development Team by helping it understand and select trade-offs, but the people who will perform the work make the final estimate.
- The Product Owner is responsible for the Product Backlog, including its content, availability, and ordering.
- Higher-ordered PBIs are usually clearer and more detailed than lower-ordered ones.

## Sprint Backlog

- The Sprint Backlog is the Product Backlog Items (PBIs) selected for a Sprint plus a plan for delivering the product Increment and realizing the Sprint Goal.
- The Development Team can modify the Sprint Backlog throughout the Sprint.
- As new work is required, the Development Team adds it to the Sprint Backlog.
- Only the Development Team can change its Sprint Backlog during a Sprint.

## Increment (of Product)

- The Increment is the sum of all the PBIs completed during a Sprint combined with the increments of all previous Sprints.
- At the end of a Sprint, the new Increment must be a working product, which means it must be in a useable condition.
- It must be in working condition regardless of whether the Product Owner decides to actually release it.

## **5. CONCEPTS:**

## ■ Definition of Done (DoD)

• A shared understanding of expectations that the Increment must live up to in order to be releasable into production. Managed by the Development Team.

## **6. PRACTICES:**

## ■ Scrum Board

- We can make the Sprint Backlog visible by putting it on a Scrum Board.
- Development Team members update the Scrum Board continuously throughout the Sprint.
- If someone thinks of a new task ("Test the snarky code on Windows 8.1"), he writes a new card and puts it on the board.

## **■** Burndown Chart

Burnup Chart

## 7. ESTIMATION TECHNIQUES:

## ■ Scrum Estimation of User Stories

- Is in terms of the degree of difficulty for each of the User Stories.
- There are several types of scales that are used in Scrum Estimation. Following are some examples:
  - Numeric Sizing (1 through 10)
  - T-shirt Sizes (XS, S, M, L, XL XXL, XXXL)
  - Fibonacci Sequence (1, 2, 3, 5, 8, 13, 21, 34, etc.) --> Planning Poker

Dog Breeds (Chihuahua,....,Great Dane)

## 8. PHASES:

• SCRUM is made up of the following groups of phases and is all about:

## ■ Pre-game:

- Planning: Defines a new release based on current backlog, together with schedule and cost estimate which is considered limited analysis, while new system development is considered as conceptualization and analysis.
- Architecture: Comprises of architecture modification and high level design, including designing implementation of backlog items.

#### ■ Game:

• Development Sprints involve multiple, iterative development sprints, or cycles, used to evolve the system, developing development new release functionality, in respect to time, requirements, quality, cost, and competition variables. And, interaction with these variables defines end of the phase.

## ■ Post-game:

• Closure: this phase is all about preparing for release, including final documentation, prerelease staged testing, and release.