

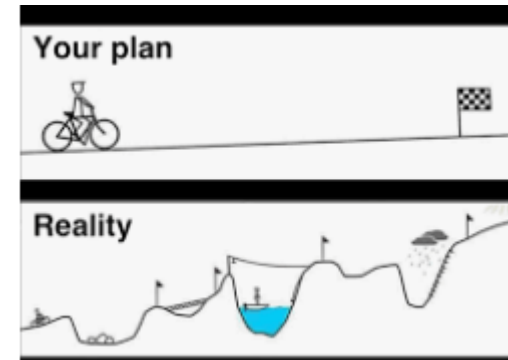
SCRUM OVERVIEW

31 July 2020

Why Scrum ?

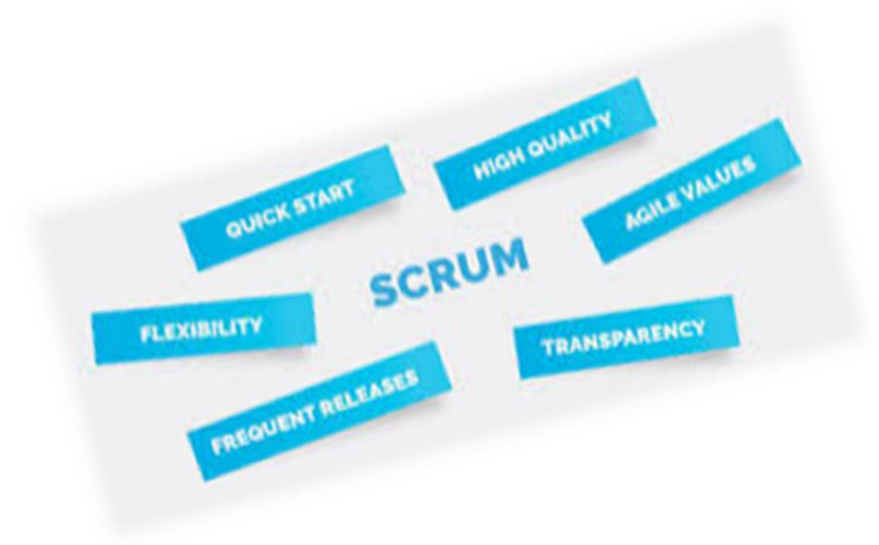
Flawed Assumptions of Traditional Waterfall methods

- The first flawed assumption is that it is possible to plan such large software project.
- The second flawed assumption is that it is possible to protect against late changes.
- The third flawed assumption is that it even makes sense to lock in big projects early.



Benefits of Scrum

- Helps save time and money
- Easy to use
- Develops self organizing team and encourages teamwork
- Responsive to changes
- Early feedback



What is Scrum ?

- Developed by Ken Schwaber and Jeff Sutherland
- It is a framework to
 - Manage work on complex products
 - Deliver products of the highest possible values
- It is Lightweight, Simple to understand but Difficult to master



Pillars of Scrum

- **Transparency**
 - Significant aspects of processes must be visible to those responsible for outcome
 - Aspects to be defined by a common standard
- **Inspection**
 - Frequent inspection of Scrum artifacts and Sprint goal
 - Helps in determining undesirable variances
- **Adaption**
 - Adjustment in case of deviation
 - Early adjustment to minimize further deviation



Scrum Values

- Commitment
- Courage
- Focus
- Openness
- Respect



Scrum Team

- **Product Owner**
 - Is a single person, who may represent desires of a committee
 - Responsible for maximizing the value of the outcome and for content and priority of Product Backlog
- **Development Team**
 - Professionals who deliver a potentially releasable increment
 - Self-organizing, Cross-functional, with no titles
 - Small enough to be agile and large enough to complete the work
- **Scrum master**
 - Servant-Leader responsible for promoting and supporting Scrum
 - Provide service to Product Owner, Development team and Organization
 - Responsible for effective Product backlog management, remove impediments and facilitating Scrum Events



Scrum Events

- **The Sprint**
 - Time-box of a 1 month or less during which a “Done”, useable and potentially releasable increment is created
 - No changes are made that would endanger the Sprint Goal
- **Sprint Planning**
 - Planning of Work to be performed in a Sprint (with duration of max 8 hrs for 1 month Sprint)
- **Daily Scrum**
 - 15 mins time-boxed event of Development team to inspect progress toward Sprint Goal
 - Opportunity to adapt or re-plan the rest of Sprint’s work



Scrum Events (contd..)

- **Sprint Review** (max 4 hrs. for a 1 month Sprint)
 - Informal meeting held at the end of a Sprint to inspect the increment and adapt Product backlog
 - Opportunity to collaborate on next things which can optimize the value
- **Sprint Retrospective** (max 3 hrs for a 1 month Sprint)
 - Occurs after Sprint Review and before next Sprint Planning
 - Opportunity for Scrum team to inspect and improve in next sprint



Scrum Artifacts

- **Product Backlog**

- A dynamic ordered list of everything that needs to be done and is single source of requirements
- Product owner is responsible for the content, ordering and availability



- **Sprint Backlog**

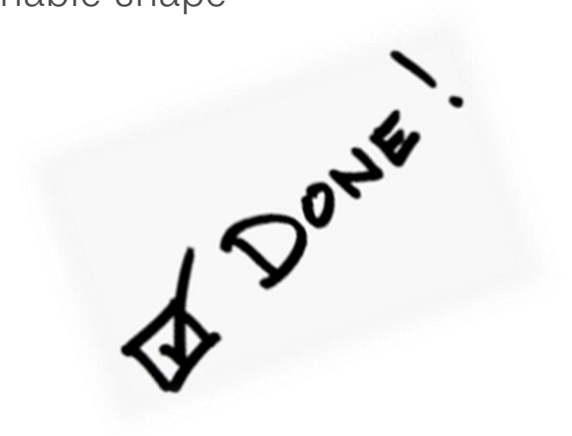
- Set of Product Backlog items selected for the Sprint + plan for delivering the increment and realizing the sprint goal
- Makes visible all the work required to meet the sprint goal and is modified by team throughout the Sprint

- **Increment**

- Sum of all Product Backlog items completed during a Sprint
- It must be in useable condition and should meet the Definition of Done and is a step toward a vision or goal.

DoD and DoR

- **Definition of Done (DoD)**
 - Shared understanding of what is meant for work to be complete
 - Used to assess when work is complete on a Product Increment
 - Is expected to Expand to include more stringent criteria for higher quality as the team matures
- **Definition of Ready (DoR)**
 - Criteria to determine whether a task is ready to be picked up in a Sprint
 - Development team should work with Product owner to get a task in an actionable shape



Common terms in Scrum

- **Epics**
 - Very high level summary of a functionality
- **User Story**
 - Is a unit of delivery which can be estimated, planned, developed, tested and released
- **Story Point**
 - Estimate the difficulty of implementing a user story
- **Features**
 - Group of stories which would be released together
- **Burndown Chart**
 - Graphical representation of work left / time. Useful for predicting when all the work will be completed
- **Velocity** (story point)
 - Key metric to measure amount of work done in a Sprint
- **Capacity** (efforts)
 - Amount of Product Backlog items that a team can implement in a Sprint



Summary

- Scrum is an Agile framework to manage work on complex products
- The Scrum team comprises of Product Owner, Development Team and Scrum Master
- Scrum Events are Sprint, Planning, Daily Scrum, Review and Retrospective
- Scrum artifacts are Product Backlog, Sprint Backlog and Increment
- Stories are the workable requirements which can be estimated, planned, developed, tested and released
- Story points is the measure of difficulty in implementing a Story

