SYNTAX
TECHNOLOGIES

SDLC

Class 2

Agenda

What is Agile?

Scrum Framework

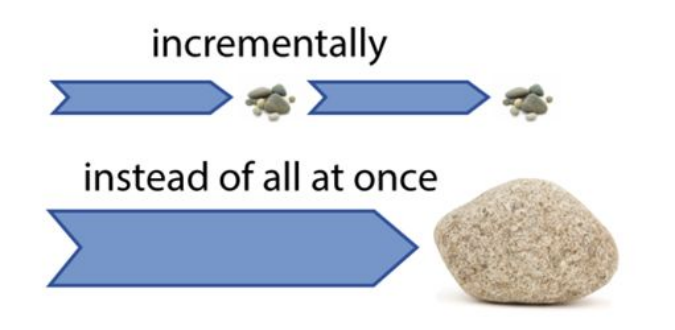
Scrum Artifacts

Scrum Roles

Agile

Definition - Able to move quickly & easily.

IT Definition - Agile is a time box iterative approach to software delivery that built software incrementally from the start of the project instead of trying to deliver all at once near the end.



Agile

- Agile came as a “solution” to the disadvantages of Waterfall. Instead of a sequential process, Agile follows an incremental approach.
- The Team starts off with a project design, and then begin to work on small modules. The modules is done in weekly or monthly sprints, and the end of each sprint, the project priorities are evaluated and tests and run.
- These sprints allow for bugs to be discovered & fixed, and customer feedback is incorporated before starting next sprint run.

Manifesto for Agile

Manifesto for AGILE SOFTWARE DEVELOPMENT

2001

« *We are uncovering better ways of developing software by doing it and helping others do it.*

THROUGH THIS WORK WE HAVE COME TO VALUE :

INDIVIDUALS & INTERACTIONS	WORKING SOFTWARE	CUSTOMER COLLABORATION	RESPONDING TO CHANGE
OVER	**OVER**	**OVER**	**OVER**
COMPREHENSIVE DOCUMENTATION	UNE DOCUMENTATION EXHAUSTIVE	CONTRACT NEGOTIATION	FOLLOWING A PLAN

THAT IS, WHILE THERE IS VALUE IN THE ITEMS ON THE [BOTTOM], WE VALUE THE ITEMS ON THE [TOP] MORE. »

When to use Agile

- When there isn't a clear picture of what the final product should be.
- When rapid production is more important than the quality of the product.
- When clients will be able to change the scope of the product.
- When rapid changing standards.

Advantages of Agile

Allows for changes - Agile allows for changes to be made after initial planning. Changes can be made per client request.

End of sprint evaluation - At the end of each sprint, project priorities are evaluated. The client can add their feedback for the next sprint to get their desired product.

Testing completed at each sprint - Testing at the end of each sprint ensures that the bugs/defects are caught and taken care.

Release product at end of cycle - Product is launched at the end of each cycle. All the testing and development is completed before going into production

Advantages of Agile

- People & interactions are emphasized processes & tools.
- Face-to-Face conversations.
- Regular adaptation to changing circumstances.
- Late changes in requirements are welcomed.

Disadvantage of Agile

- Less importance given to Design and Documentation.
- Unclear client requirements leads to a messy project.
- Bigger & complex project, difficult to determine the efforts estimation at beginning of the project.

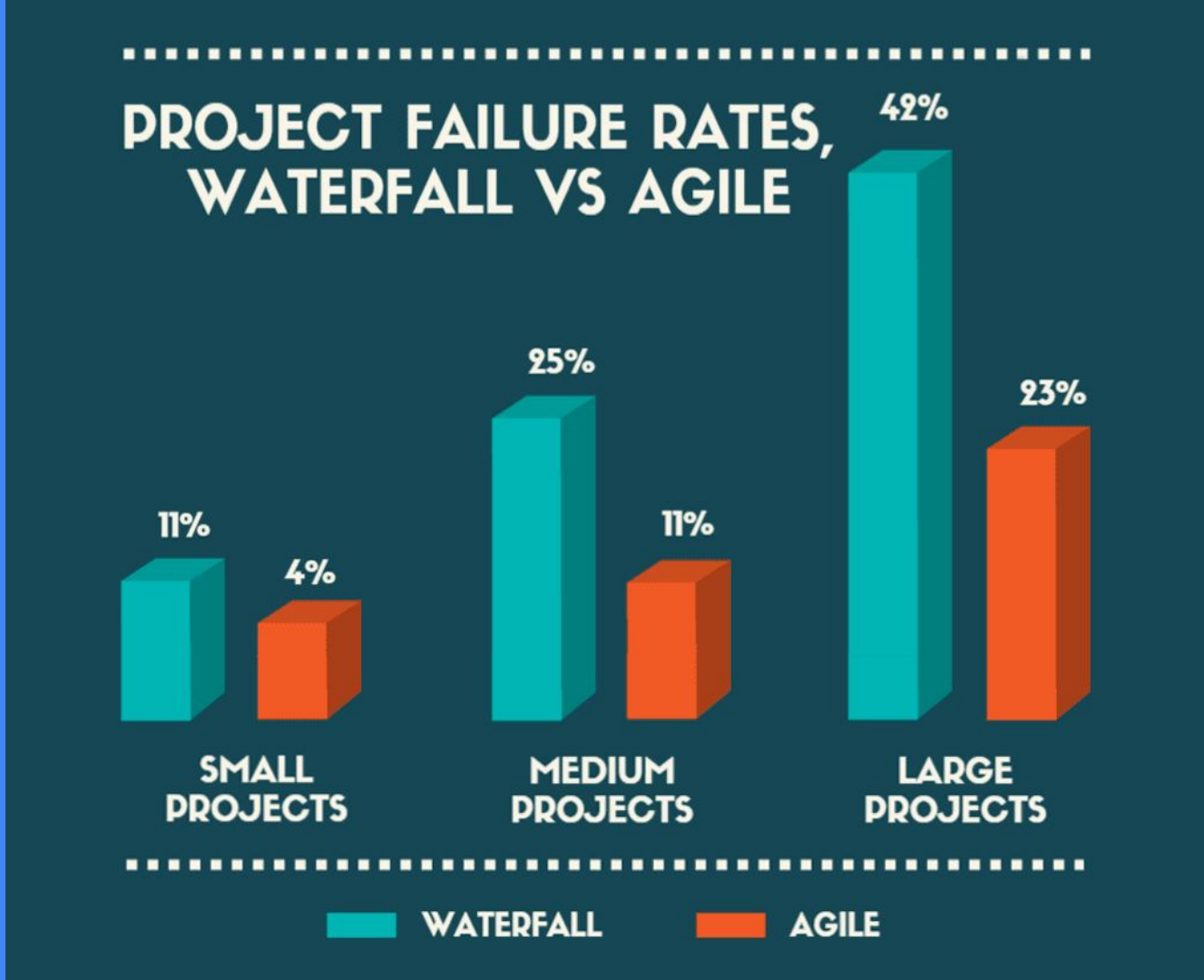
Which is better ???

The key to deciding which methodology right comes down to the context of the project.

If it is going to change rapidly – Choose **Agile**.

If you know what exactly you need – Choose **Waterfall.**

Waterfall & Agile

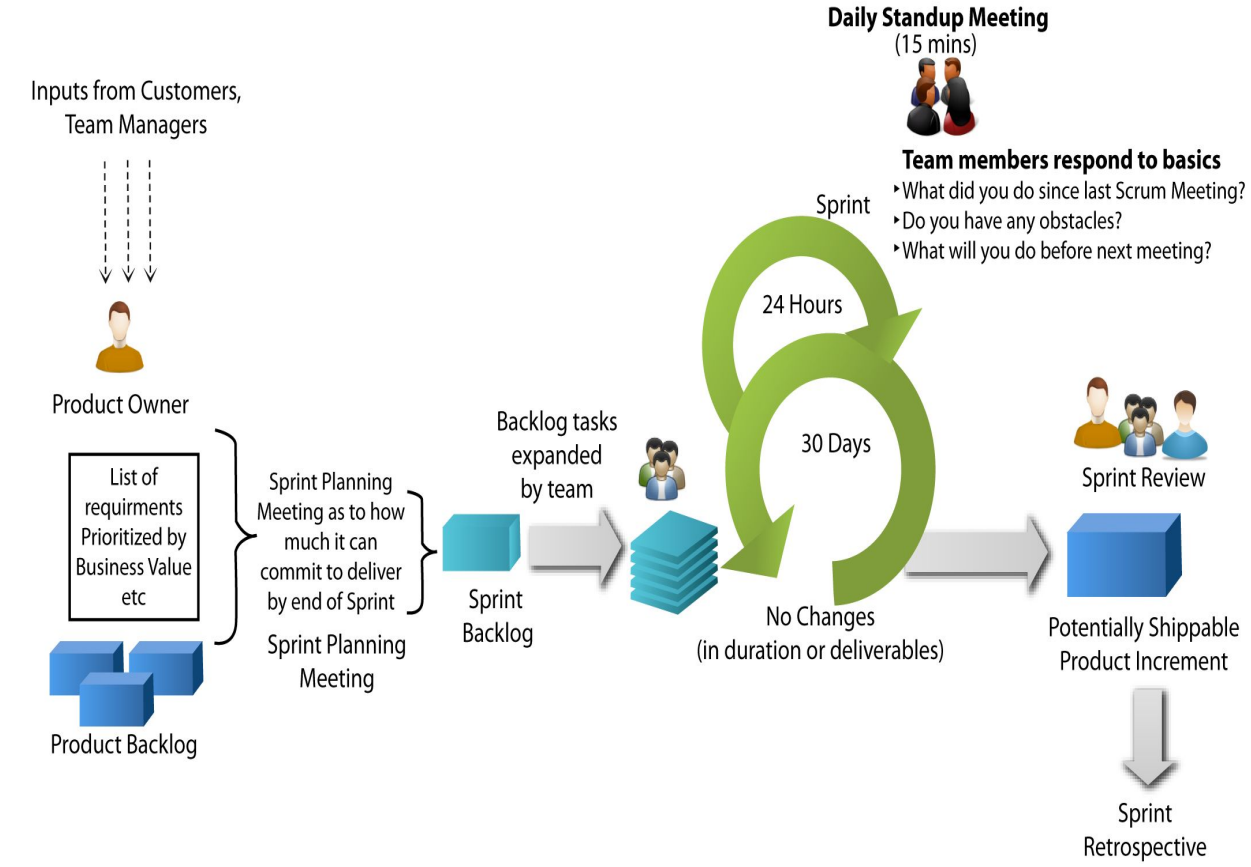


Agile Frameworks

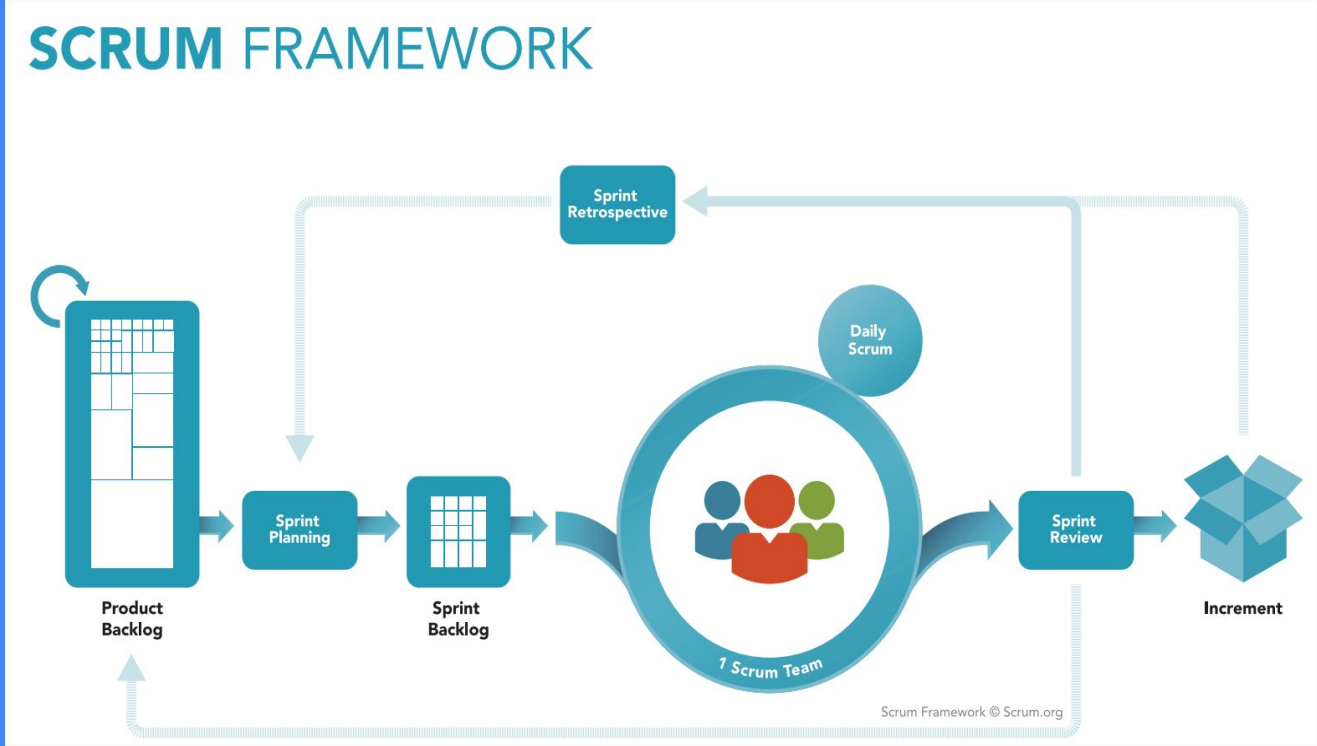
- Scrum
- Kanban
- Scrumban
- Crystal
- Extreme Programming (XP)

Agile Scrum

Agile Scrum Methodology



Agile Scrum


SCRUM FRAMEWORK
Sprint Retrospective
Daily Scrum
Sprint Planning
Sprint Review
Product Backlog
Sprint Backlog
1 Scrum Team
Increment
Scrum Framework © Scrum.org

Agile Scrum

Scrum is an Agile framework for completing complex projects.

It is applied to any project or product development effort.

Roles

- Product Owner
- Scrum Master
- Development Team

Artifacts

- Product Backlog
- Sprint Backlog
- Burn-down Chart

Ceremonies

- Sprint Grooming
- Sprint Planning
- Sprint Review
- Sprint Retrospective
- Daily Scrum Meeting

Product Owner

- Defines the items in the Product Backlog Manages project features & release to optimize ROI
- Prioritizes features according to user & stockholders needs.
- Can change feature and priority every sprint.
- Accepts or reject work from the Development team

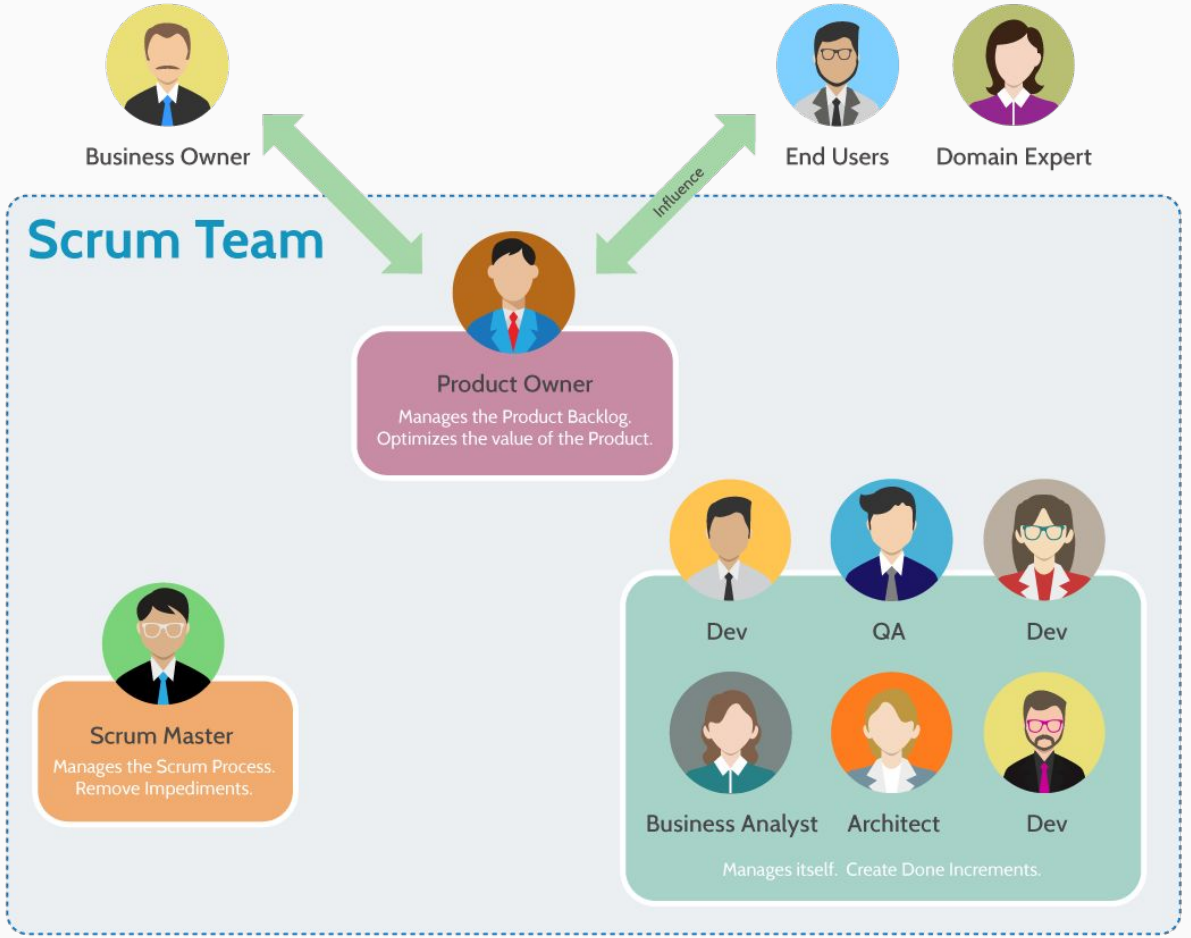
Scrum Master

- Ensures Scrum is fully functional, improves quality.
- Ensures Scrum is understood & enacted.
- Shields the team from external interferences.
- Communicates to Product Owner & Team Does not Make decisions for the team.

Development Team

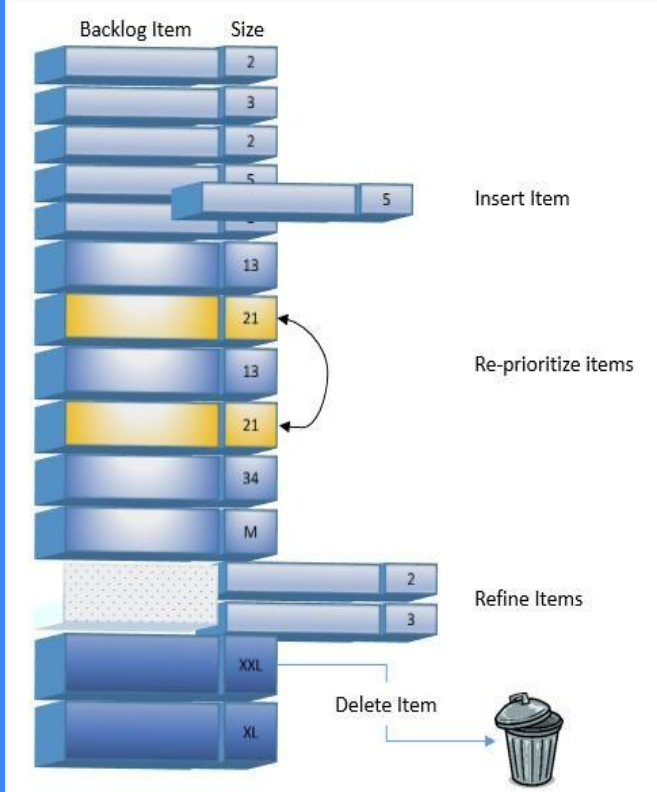
- Cross-functional
- Six +/- 3 members
- Selects the sprint goals & specific work results.
- Commits to what it feels it can accomplish.
- Self organized, manages itself & Sprint Backlog.
- Demonstrate Sprint results to Product Owner.

SCRUM TEAM


Business Owner
End Users
Domain Expert
Influence
Scrum Team
Product Owner
Manages the Product Backlog.
Optimizes the value of the Product.
Scrum Master
Manages the Scrum Process.
Remove Impediments.
Dev
QA
Dev
Business Analyst
Architect
Dev
Manages itself. Create Done Increments.

Artifacts Product Backlog

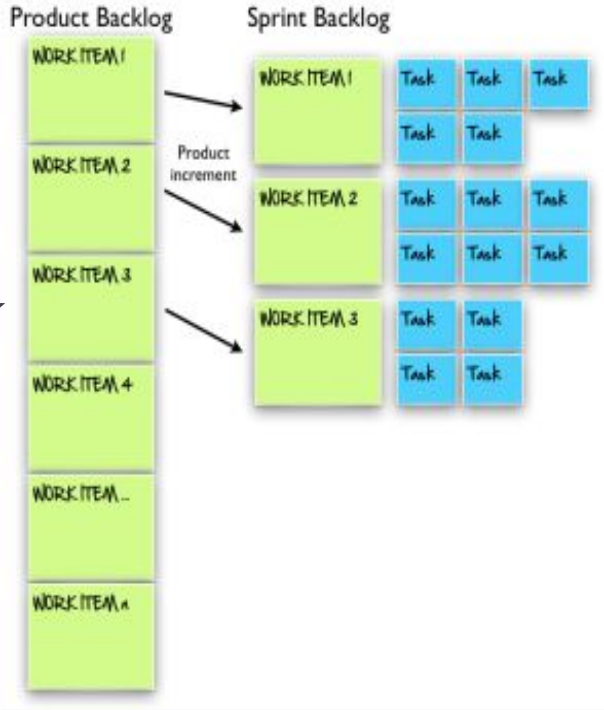
A wish list of all desired work on the project. Prioritize by the Product owner.



Actual User Stories

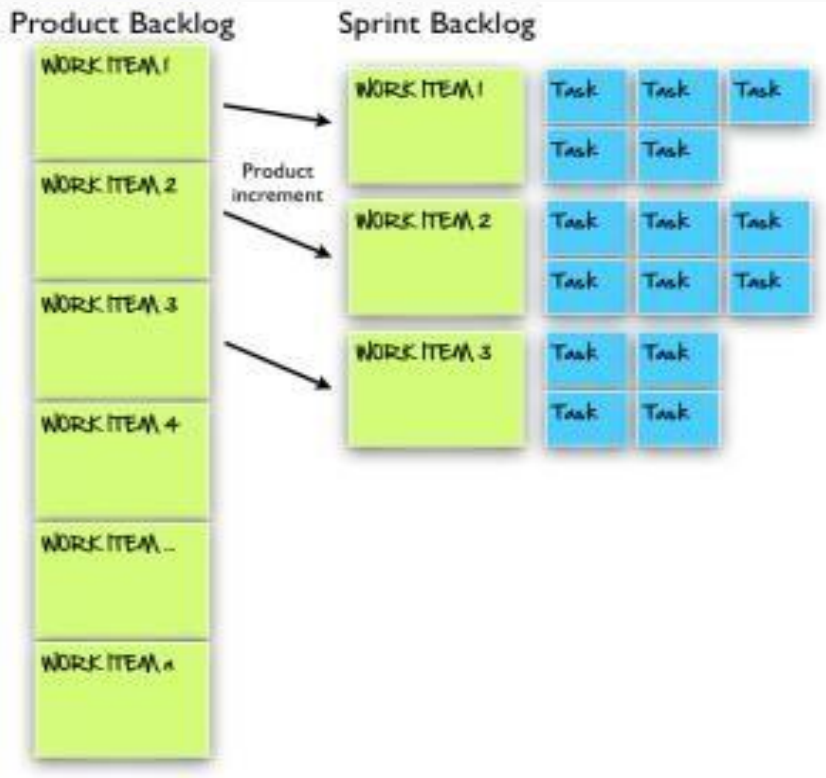
Title	User Story
View tables	**As a** user, **I want** to see tables on pages **so that** I can engage with this content.
View page info	**As a** user, **I want** to see the creator, timestamp, and title of a page **so that** I can see the relevant info.
View macros	**As a** user, **I want** to see macros on pages **so that** I can see advanced dynamic content.
Scaled images and files	**As a** user, **I want** to see appropriately sized images and files that are on pages **so that** I can easily consume them on mobile.
View notifications	**As a** user, **I want** to access my notifications easily **so that** I can respond promptly to relevant information

User story description
A user wants to sign up via Facebook
A user wants to view the latest updates via the mobile dashboard so that they can get a better understanding of what is in place
A user wants to be able to post status updates on the go



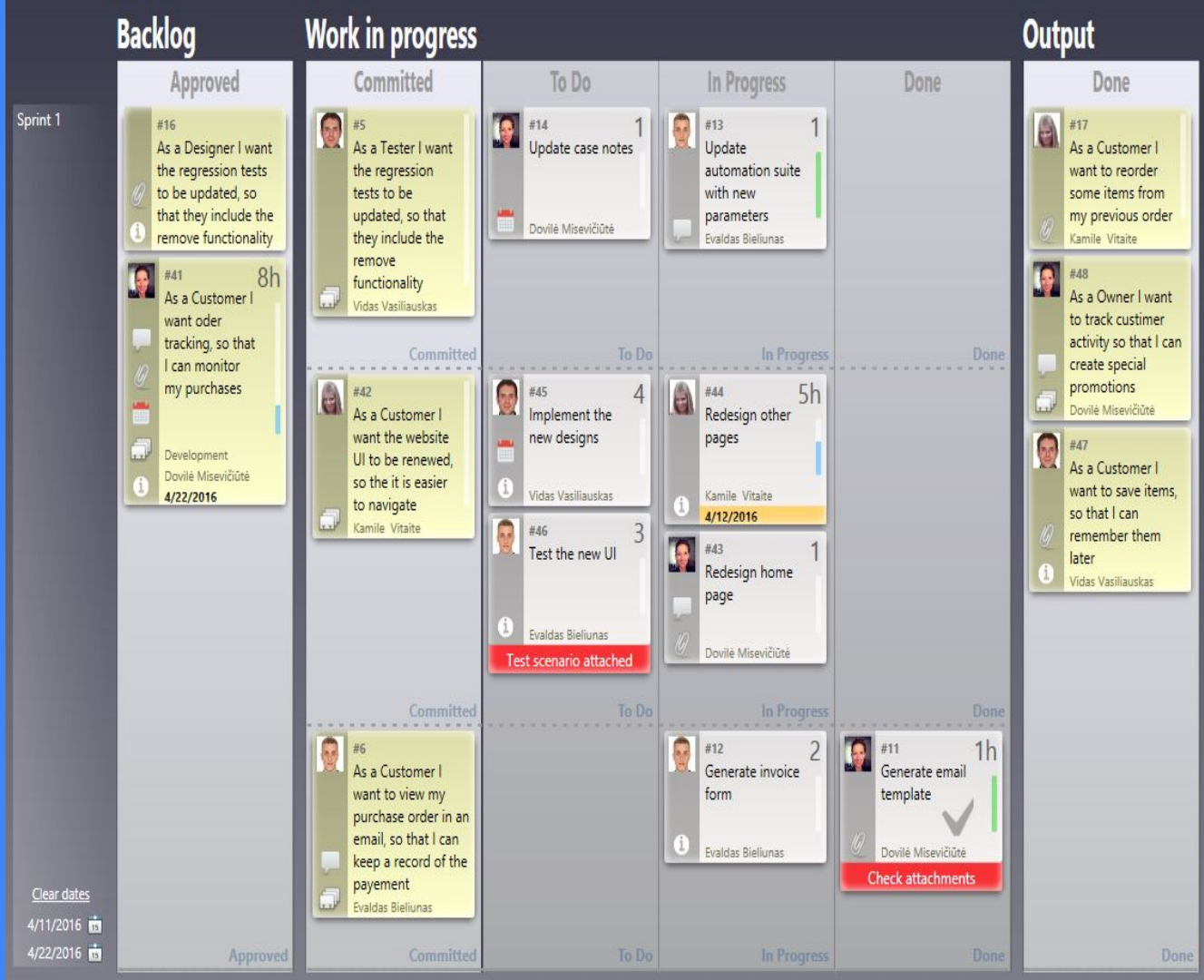
Artifacts Sprint Backlog

Items picked from the Wish list by the development team and executed during the sprint. Prioritize by the Development team. Each user story will be assigned points or Hours



Examples of Sprint Backlog

Examples of Sprint Backlog



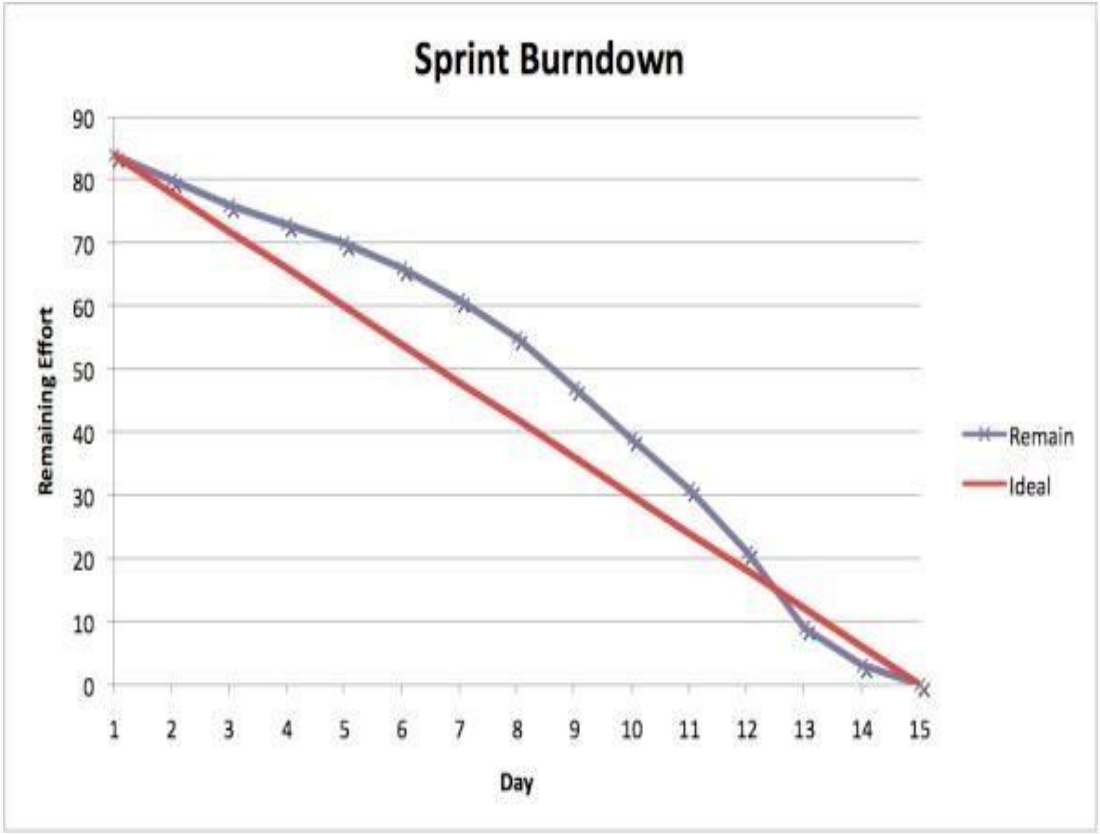
Artifacts Sprint Burndown

Chart to determine the progress of the team on the sprint.

The team should answer the following questions every day.

- How much work remains in the sprint?
- Is the team on track to finish all the work in sprint?
- Should we add work ?

Sprint Burndown Chart



Ceremonies

- Sprint Planning
- Backlog Grooming
- Daily Standup
- Sprint Demo/ Review
- Sprint Retrospective

Daily Standup

Attendees - Development team, Scrum, BA's.

When- Daily 15 mins long

- What you did yesterday ?
- What you plan on doing today ?
- Any blockers/impediments ?

Example Daily Standup

Sprint Grooming

Attendees - Development team, Scrum Master ,Product Owner, BA's.

When :Product owner and team representatives arrange it in the mid-sprint time. In this case, planning and refinement meetings alternate but happen on the same day each week

- Lead by Product owner
- The grooming involves splitting big items into smaller ones, rewriting backlog items to be more expressive, deleting obsolete or no more need items, and so on.

Sprint Planning

Attendees - Development team, Scrum Master ,Product Owner, BA's.

When At the beginning of the Sprint Team meets to discuss User Stories & task.

- Lead by Scrum Master but product owner makes Decision
- Sprint Backlog is Created Task is defined and estimated

User Stories

This looks x2 as big as that.

Small

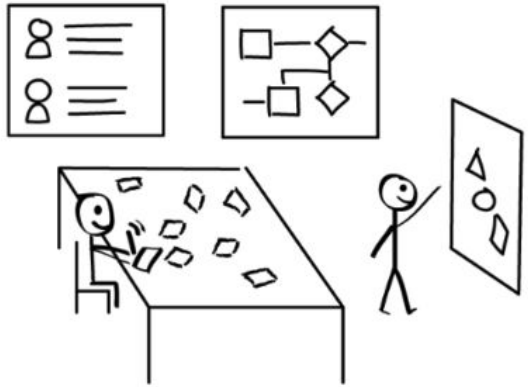
No sweat

Medium

Nothing we can't handle

Large

This is going to take some effort



Sprint Demo/Review

Attendees - Development team, Scrum Master, Product Owner ,BA's, Customers/Stock holders

When - Right after sprint ends. The following day.

- Typically lead by a SME or Test Lead.
- Show what was accomplished in the sprint.
- Demo to client newly created functionality walk them through and receiving feedback

Example Sprint Demo/Review

Sprint Retrospective

Attendees - Development team, Scrum Master, Product Owner ,BA's

When - Right after sprint ends, or the following day

- What went well ?
- What type of issues and problems came up ?
- Continue doing things that worked.
- Stop doing things that causes problems.

Example Sprint Retrospective