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Agile For Developers

2017

People matter, results count.

Agenda

1	Agile Overview
2	Scrum Overview

Agile Overview

Outline

|	
1	What is Agile?
2	Principles

What is Agile?

- Agile is not :
  - Methodology
  - Specific way of Developing Software
  - Framework and process

- **Agile is a set of values and principles**

Water Fall Model

- At a high level, the project teams would spend 15% of their time on gathering requirements and analysis (1.5 months)

- 20% of their time on design (2 months)

- 40% on coding (4 months) and unit testing

- 20% on System and Integration testing (2 months).

- At the end of this cycle, the project may also have 2 weeks of User Acceptance testing by marketing teams.

- In this approach, the customer does not get to see the end product until the end of the project, when it becomes too late to make significant changes.
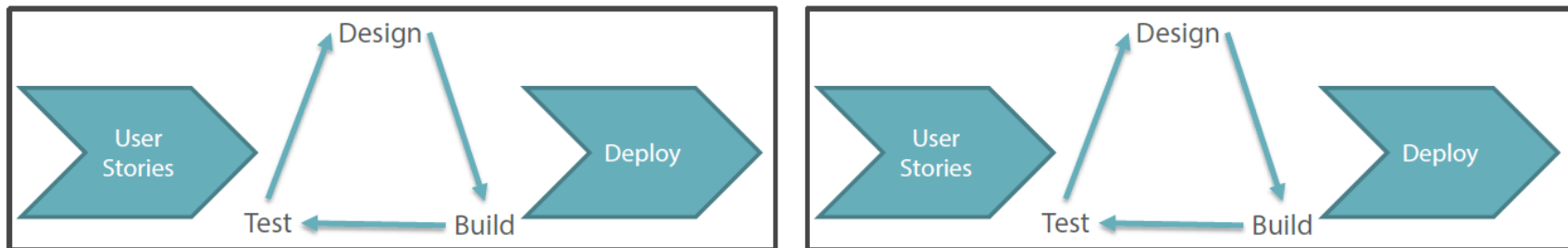
Water Fall Model
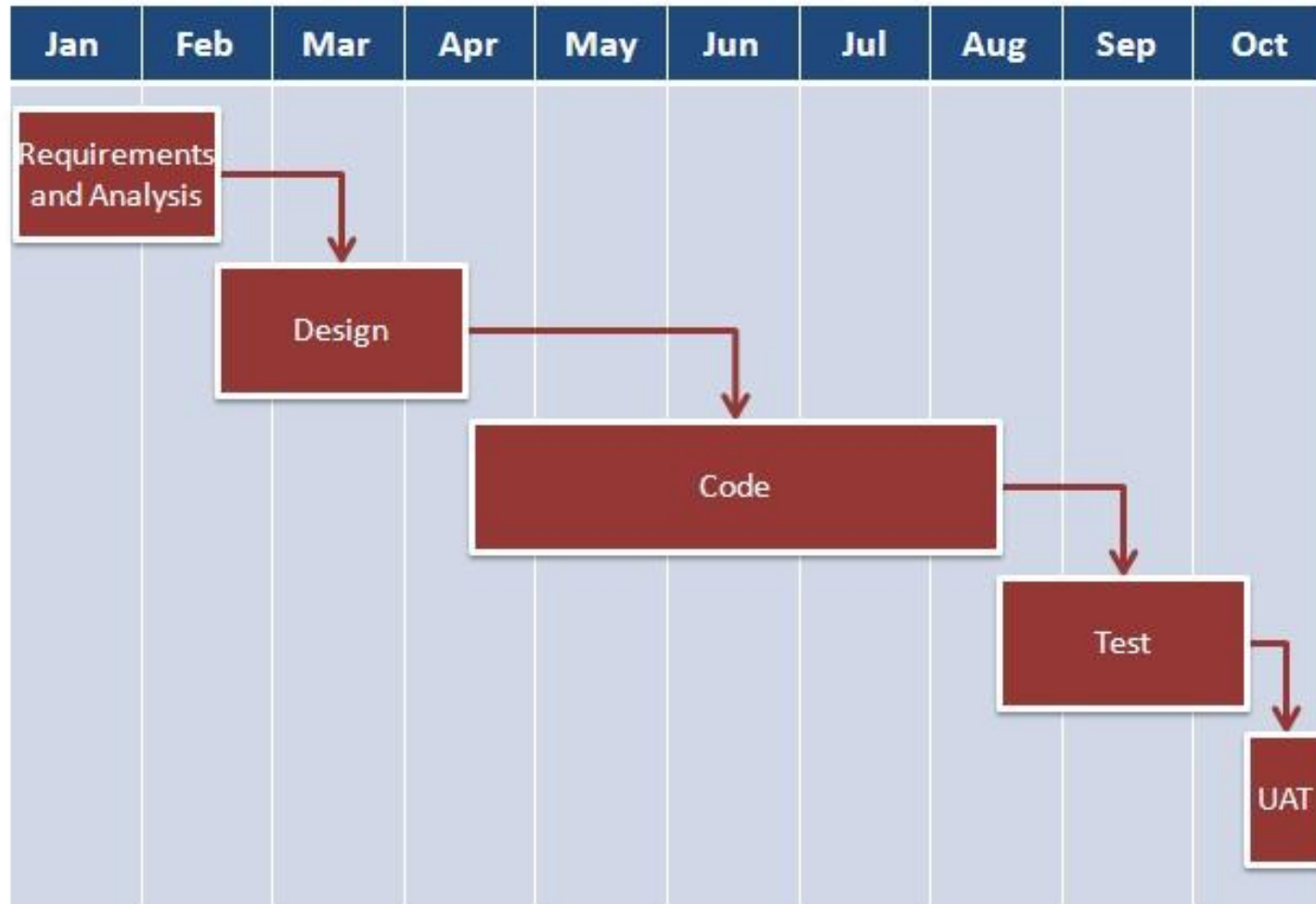
What is Agile?

Agile Principles
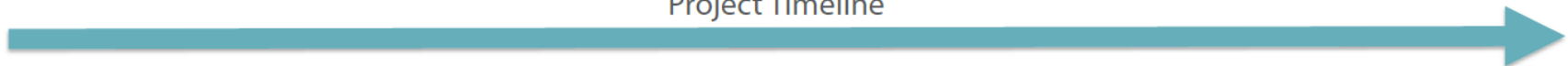
- Our highest priority is to satisfy the customer through early and continuous delivery of valuable software.

- Welcome changing requirements, even late in development. Agile processes harness change for the customer's competitive advantage.

- Deliver working software frequently, from a couple of weeks to a couple of months, with a preference to the shorter timescale.

- Business people and developers must work together daily throughout the project.

- Build projects around motivated individuals. Give them the environments and support they need, and trust them to get the job done.

- The most efficient and effective method of conveying information to and within a development team is face-to-face conversation.

Agile Principles

- Working software is the primary measure of progress.

- Agile processed promote sustainable development. The sponsers, developers and users should be able to maintain a constant pace indefinitely.

- Continous attention to technical excellence and good design enhances agility.

- Simplicity - the art of maximizing the amount of work not done - is essential.

- The best architectures, requirements and designs emerge from self - organizing teams.

- At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behavior accordingly.
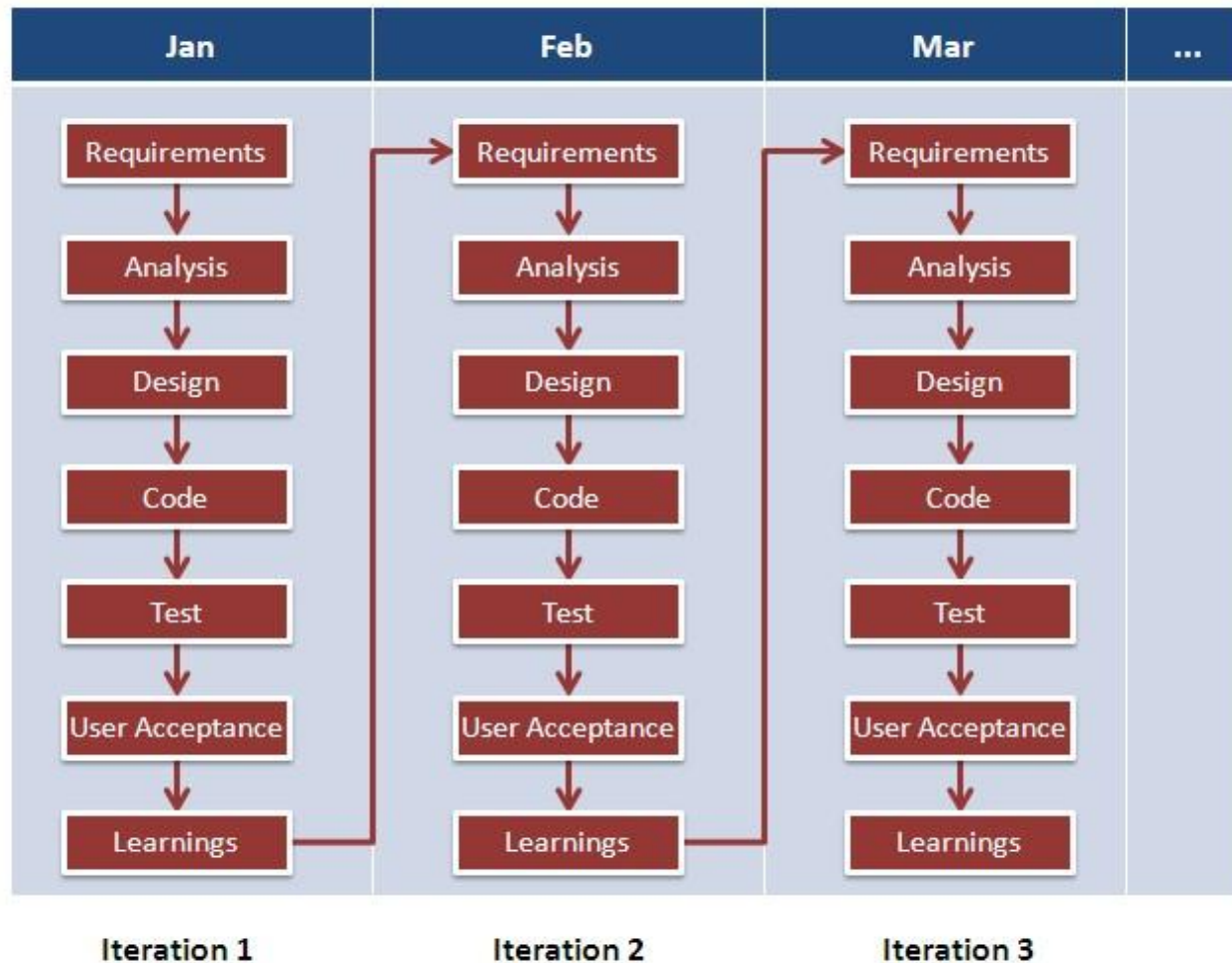
Agile Methodology

- In the **Agile methodology**, each project is broken up into several '**Iterations'.**

- All Iterations should be of the same time duration (**between 2 to 8 weeks).**

- At the end of each iteration, a working product should be delivered.

- In simple terms, in the Agile approach the project will be broken up into **10 releases** (assuming each iteration is set to last 4 weeks).

- Rather than spending 1.5 months on requirements gathering, in Agile software development, the team will decide the basic core features that are required in the product and decide which of these features can be developed in the first iteration.

- Any remaining features that cannot be delivered in the first iteration will be taken up in the next iteration or subsequent iterations, based on priority.

- At the end of the first iterations, the team will deliver a working software with the features that were finalized for that iteration.

- There will be **10 iterations** and at the end of each iteration the customer is delivered a working software that is incrementally enhanced and updated with the features that were shortlisted for that iteration.

Agile Methodology

Agile Methodology

Jan	Feb	Mar	...
Requirements	Requirements	Requirements	
Analysis	Analysis	Analysis	
Design	Design	Design	
Code	Code	Code	
Test	Test	Test	
User Acceptance	User Acceptance	User Acceptance	
Learnings	Learnings	Learnings	
Iteration 1	Iteration 2	Iteration 3	

Advantages of Agile

- In Agile methodology the delivery of software is unremitting.

- The customers are satisfied because after every Sprint working feature of the software is delivered to them.

- Customers can have a look of the working feature which fulfilled their expectations.

- If the customers has any feedback or any change in the feature then it can be accommodated in the current release of the product.

- In Agile methodology the daily interactions are required between the business people and the developers.

- In this methodology attention is paid to the good design of the product.

- Changes in the requirements are accepted even in the later stages of the development.

Agile Principles

- Helps in
  - Development
  - Testing
  - Decision making
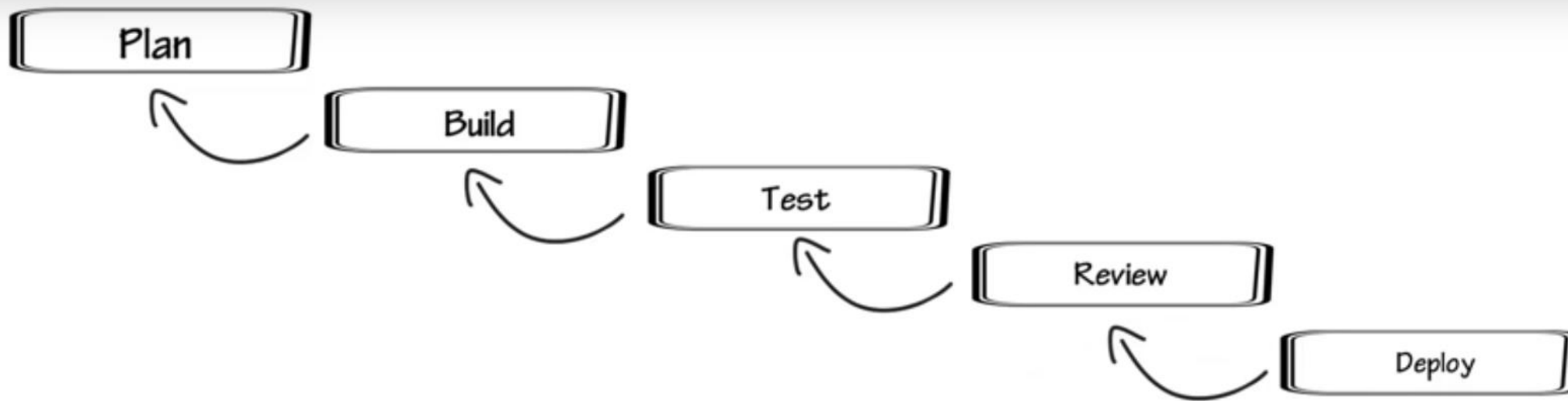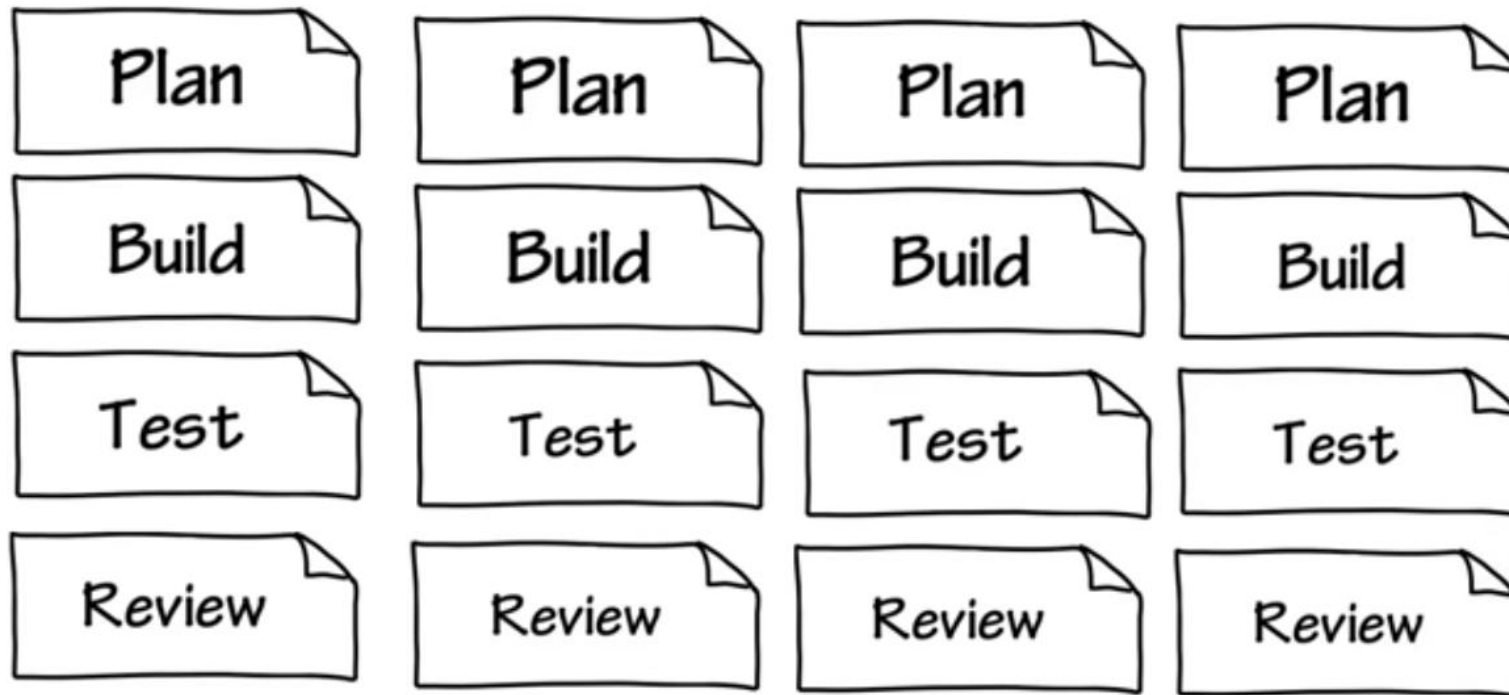
Scrum Overview

Outline

1	What is Scrum?
2	Scrum Work Flow

Waterfall vs Scrum

Scrum

Plan — Build — Test — Review (×4)

Several incremental releases called Sprints

Potentially Shippable Product

Scrum

Sprint 1   Sprint 2   Sprint 3   Sprint 4

Several incremental releases called Sprints

Potentially Shippable Product
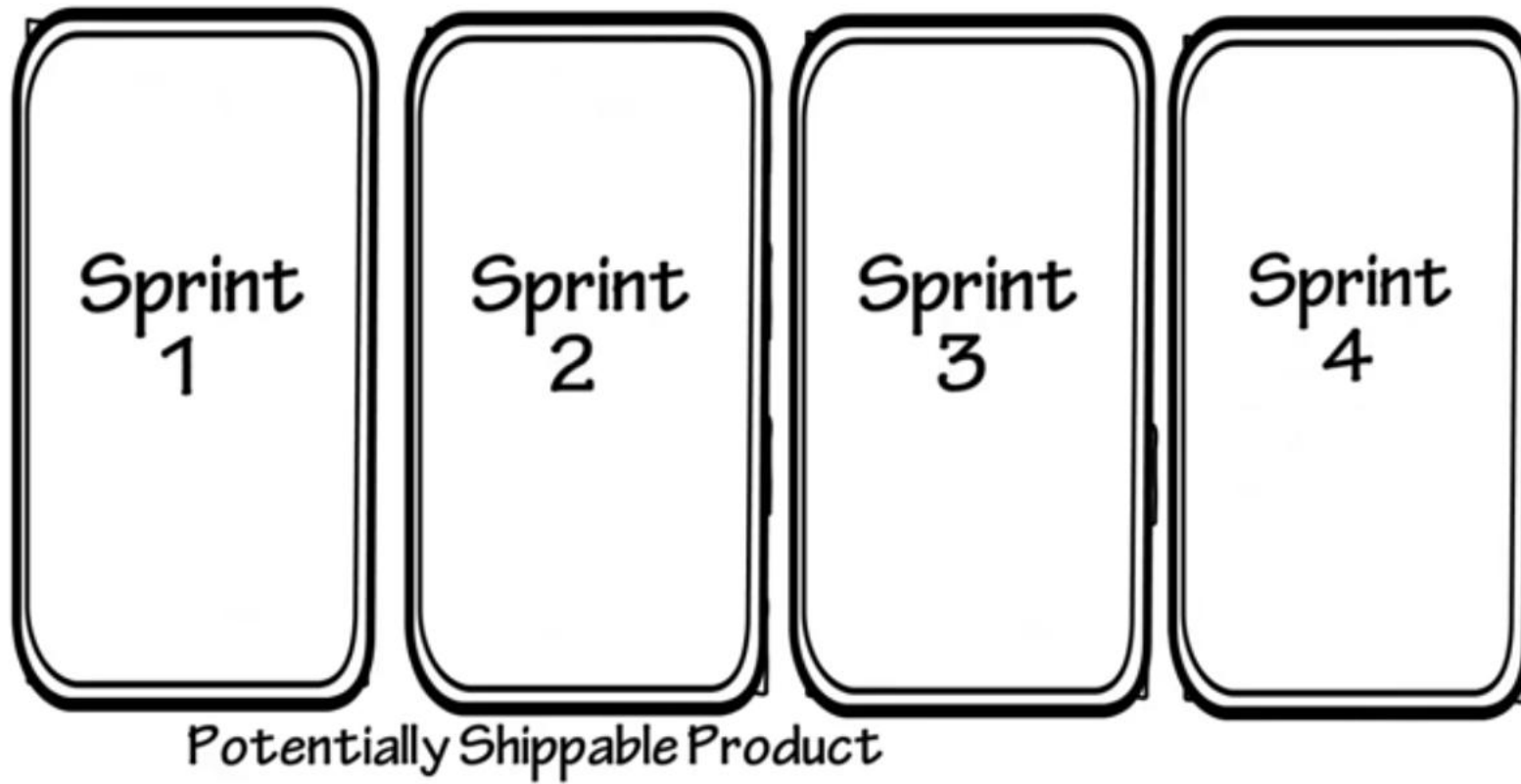
Scrum

3 Roles

Product Owner   Scrum Master   Team
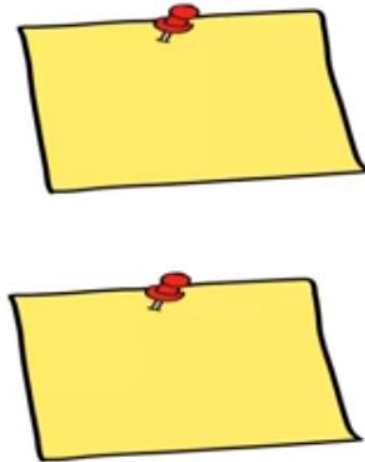
Scrum

3 Artifacts

Product Backlog
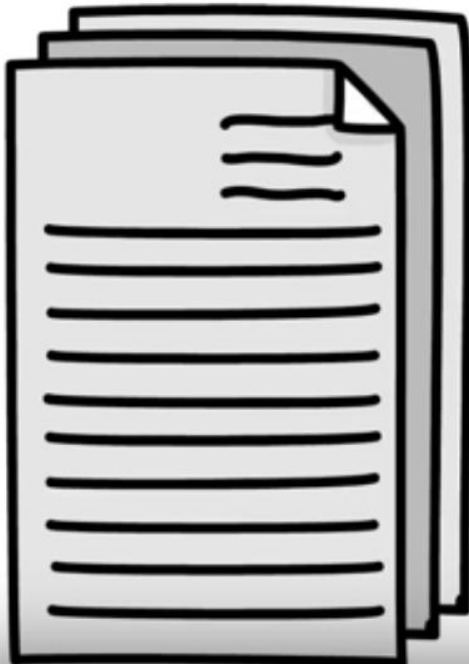
Sprint Backlog
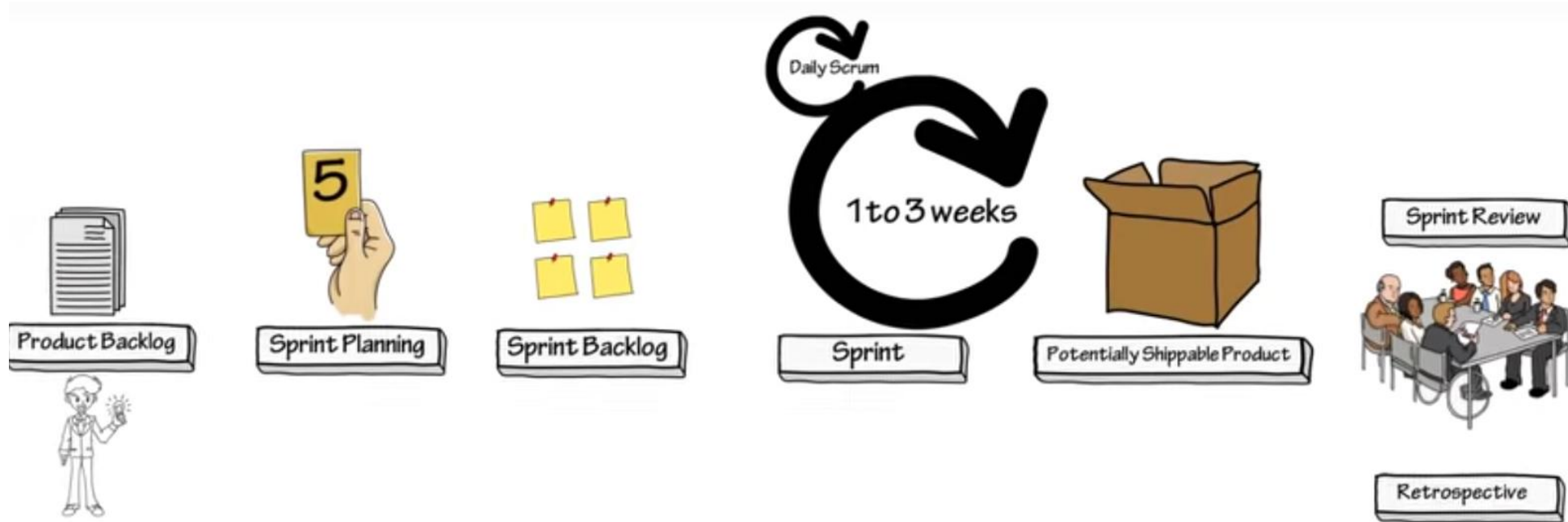
Burndown Chart

Scrum

3 Ceremonies

Sprint Planning

Daily Scrum

Sprint Review

Scrum WorkFlow

Repeat this Work Flow for each sprint

THANK YOU

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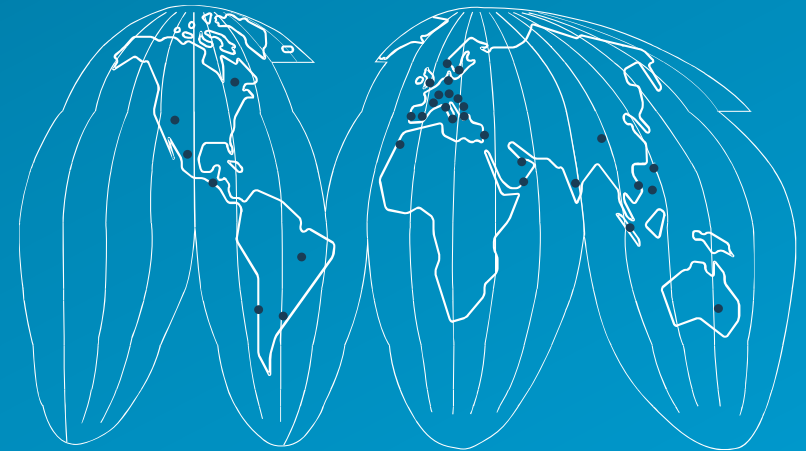**People matter, results count.**

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