

Scrum and Agile Software Development



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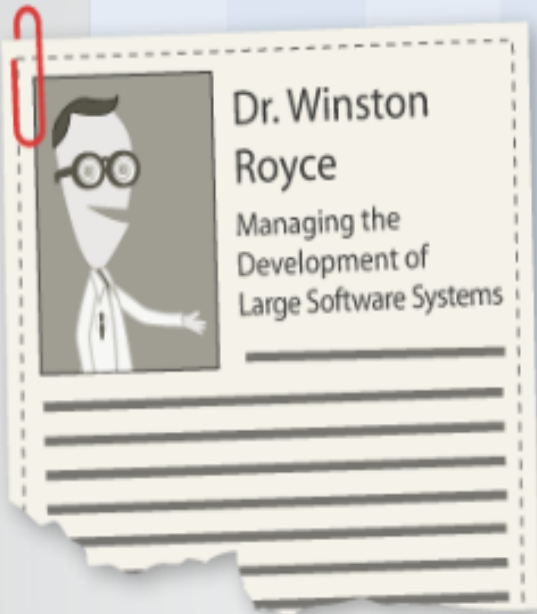
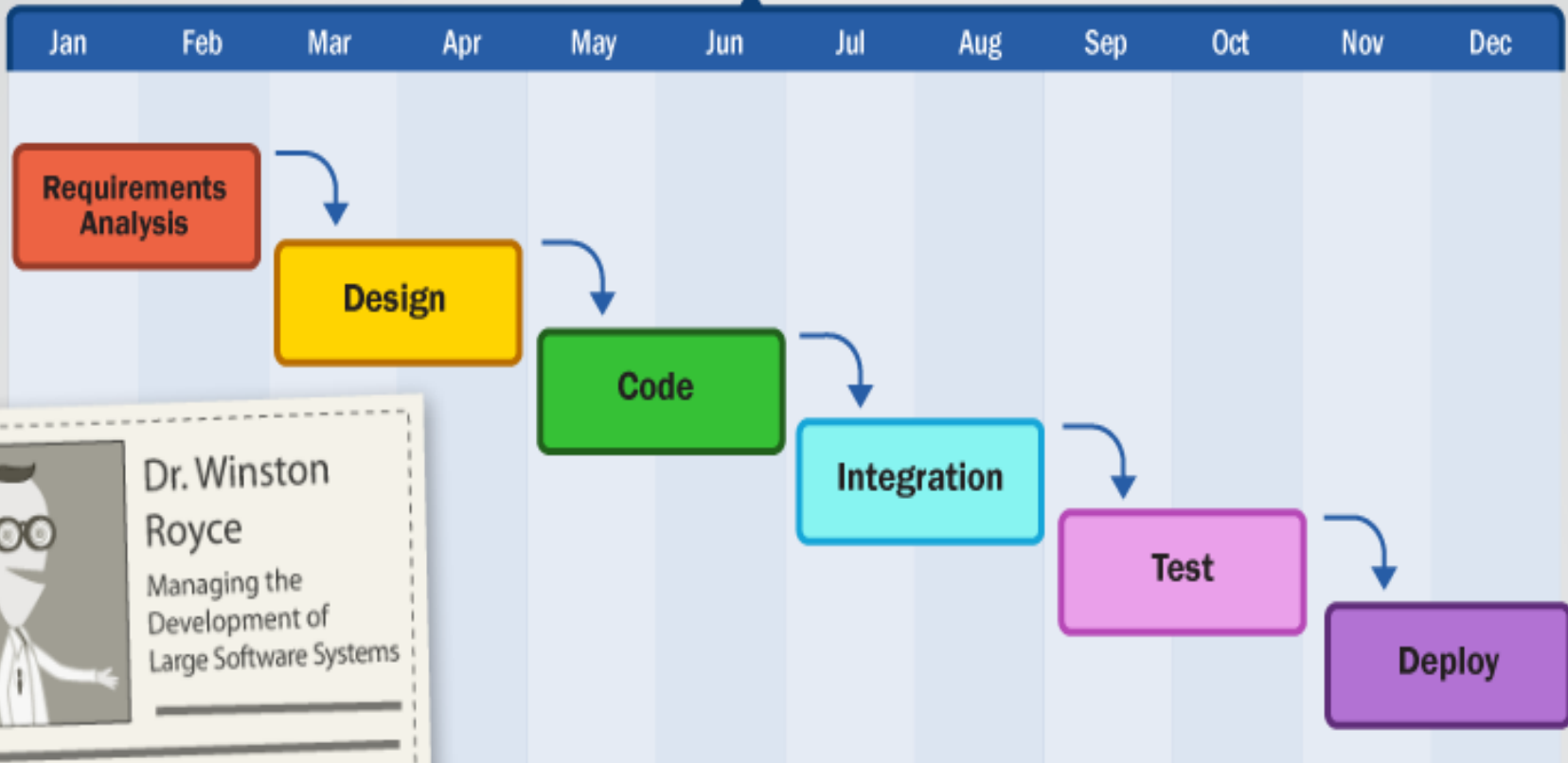


Agile Software Development

Introduction

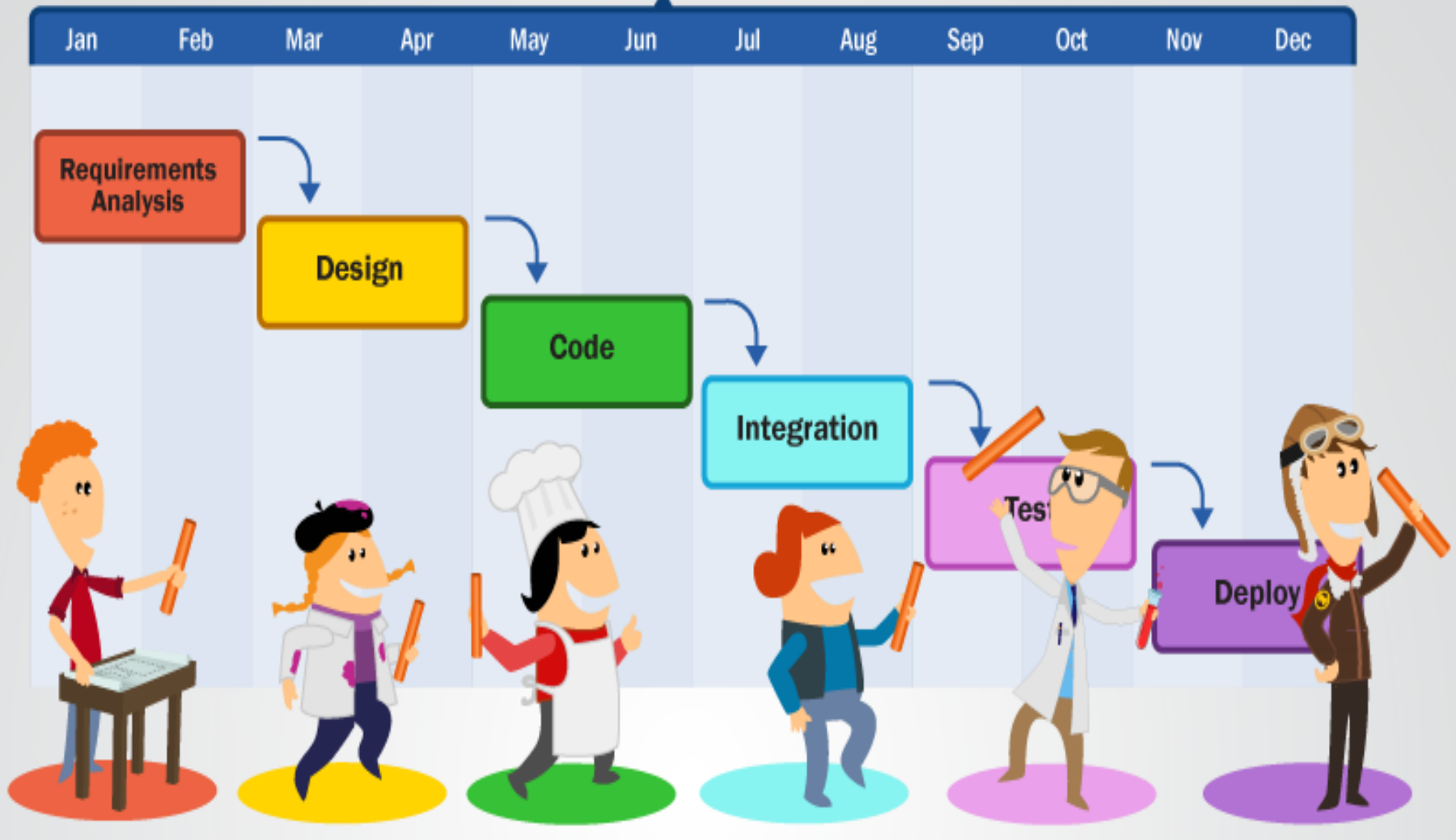
- Classical methods of software development have many disadvantages:
 - huge effort during the **planning** phase
 - **poor requirements conversion** in a rapid **changing** environment
 - treatment of **staff** as a factor of production
- New methods:
Agile Software Development

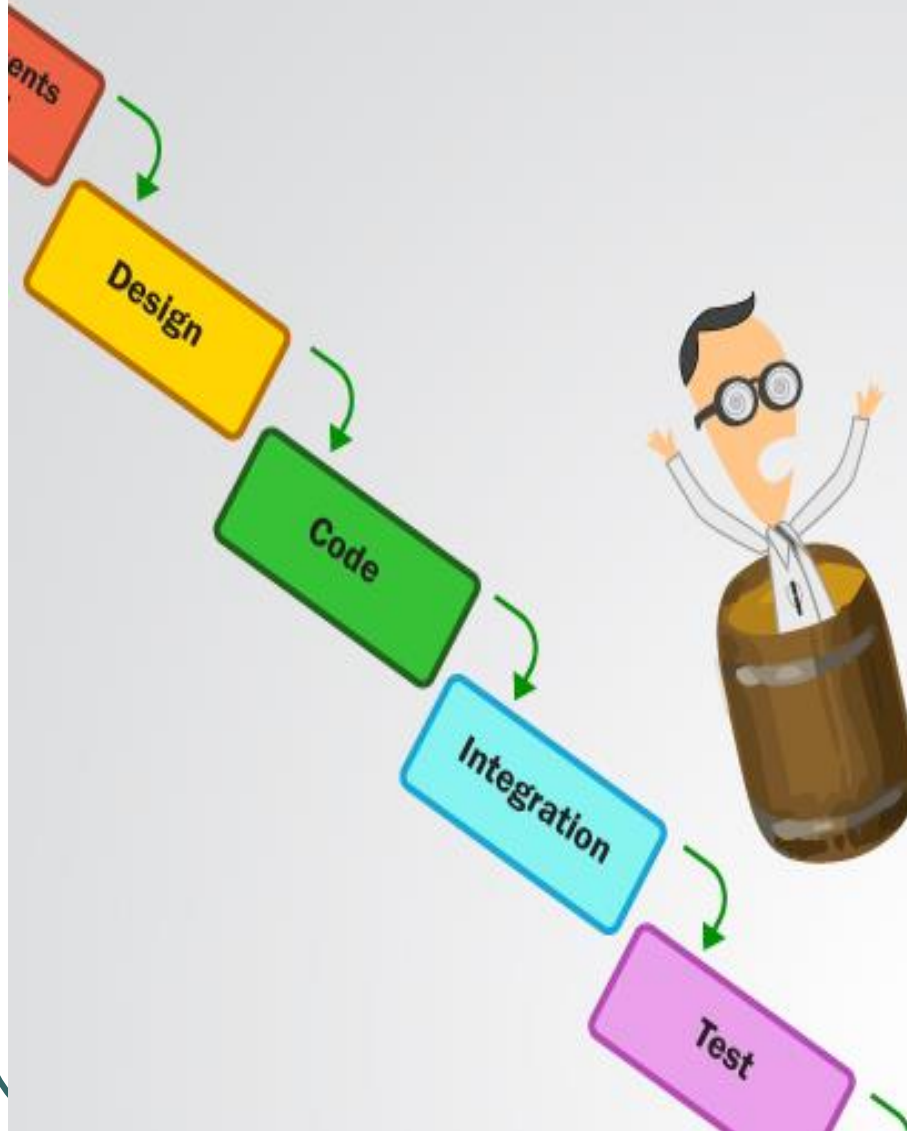
One year



*Dr. Winston W. Royce. Proceedings, IEEE WESCON, August 1970.
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One year

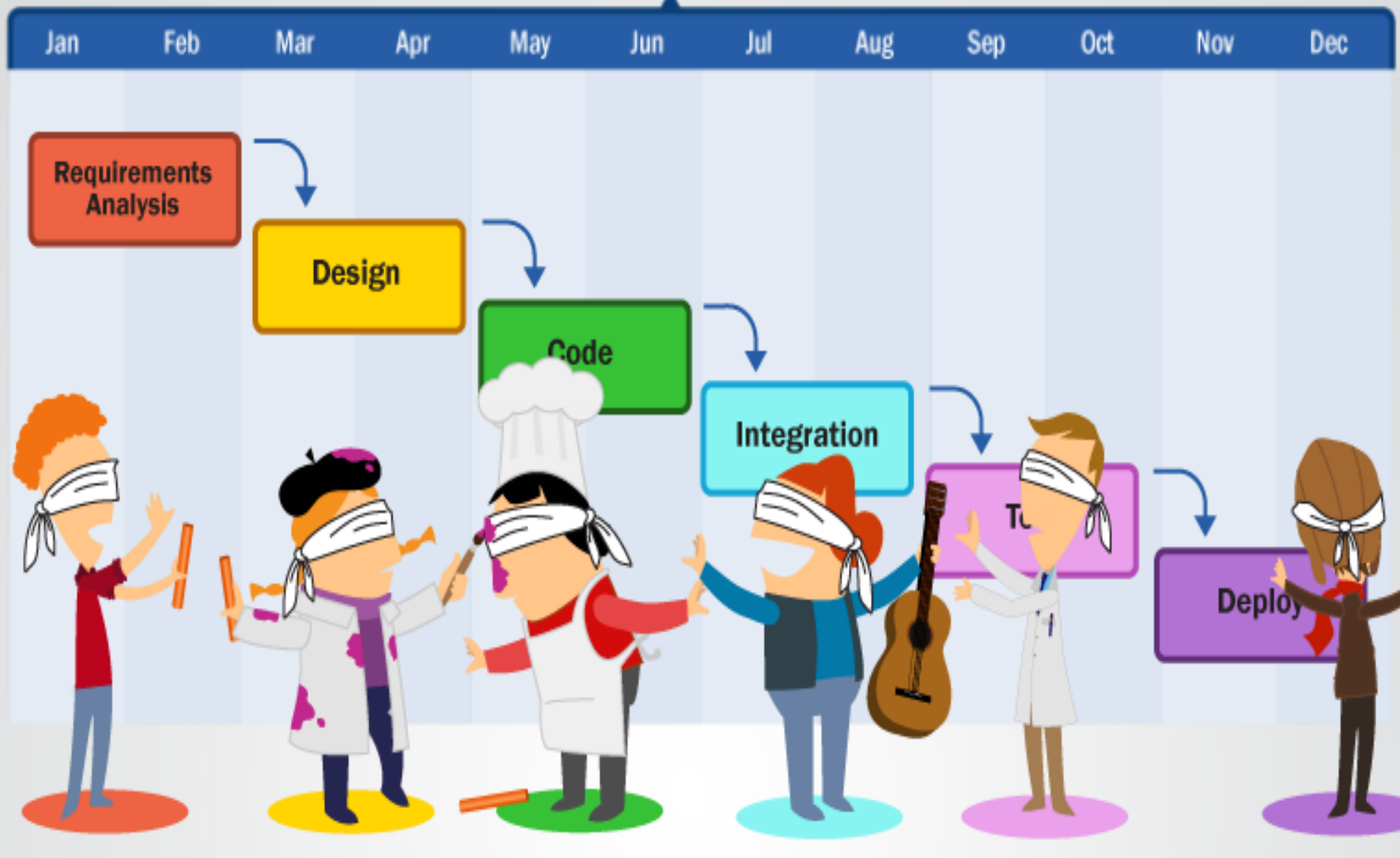




“I believe in this concept but, the implementation described above is **risky and invites failure.**”

*Dr. Winston W. Royce. Proceedings, IEEE WESCON, August 1970.
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One year







Sprints



Jan

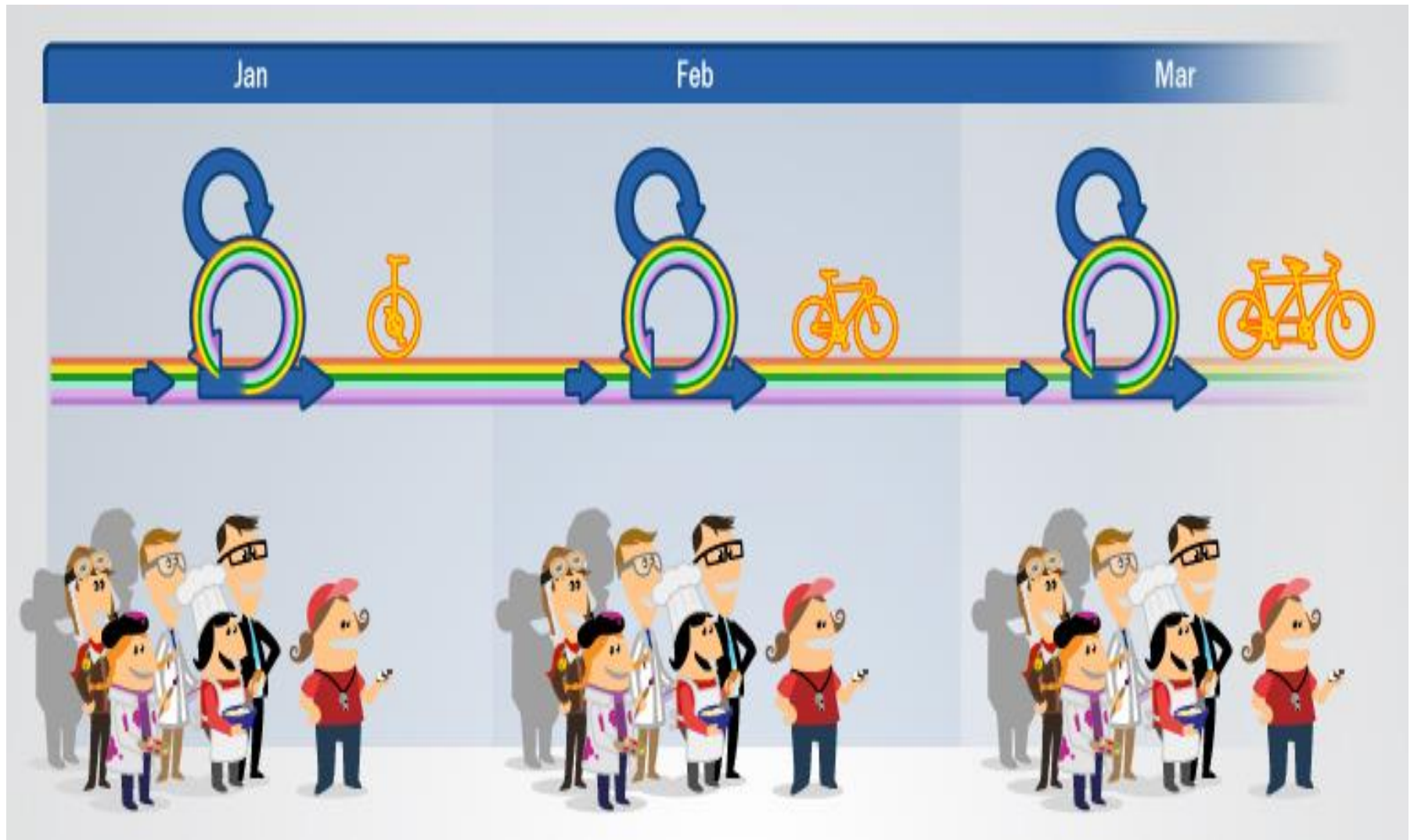


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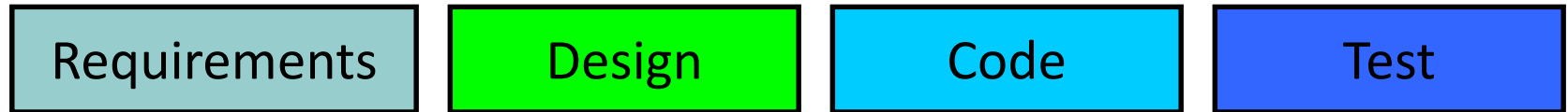


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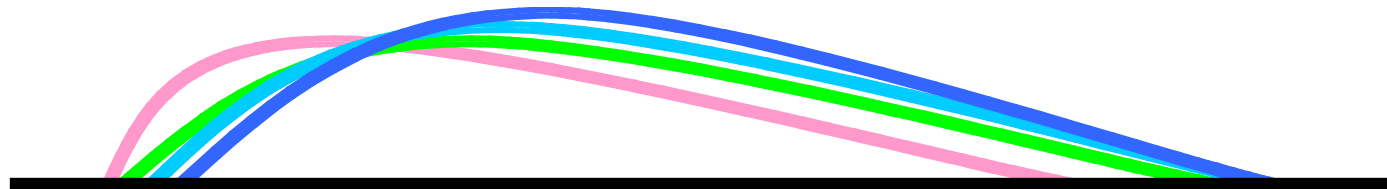


Sequential vs. Overlap



Rather than doing **all** of **one**
thing at a time...

...Scrum teams **do a little** of
everything all the time



What is Scrum?

Definition from rugby football:

a scrum is a way to restart the game after an interruption, where the forwards of each side come together in a tight formation and struggle to gain possession of the ball when it is tossed in among them



Scrum - an agile process

- SCRUM is an agile, lightweight process for **managing** and **controlling** software and product development in **rapidly changing environments**.
 - Iterative, incremental process
 - Team-based approach
 - developing systems/ products with rapidly changing requirements
 - A way to maximize productivity

What is Scrum?

- A common agile methodology
- Roles
 - Product Owner
 - ScrumMaster
 - Team
- Artifacts
 - Product Backlog
 - Sprint Backlog

Scrum Roles



Product Owner

PRODUCT OWNER

Responsible for Return On Investment (ROI)

Final arbiter of requirements questions

Focused more on the *what* than on the *how*



The Scrum Team



SCRUM DEVELOPMENT TEAM

Cross-functional group

Attempts to build a "potentially shippable product increment" every Sprint

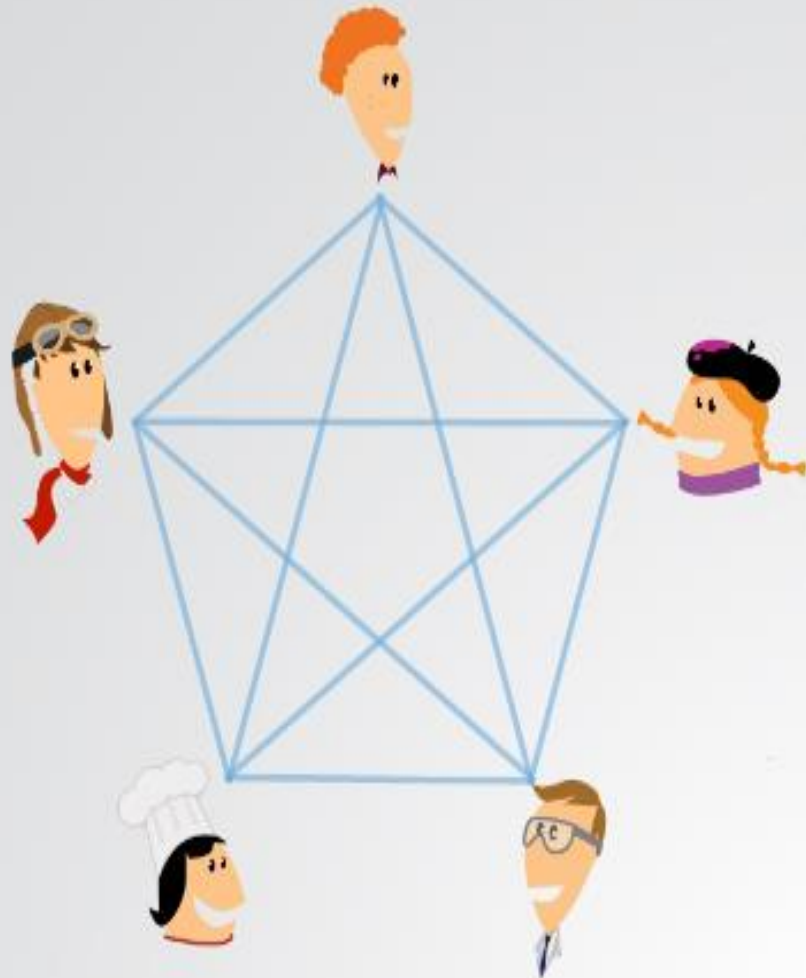
Collaborates

Self-organizing

The Scrum Team

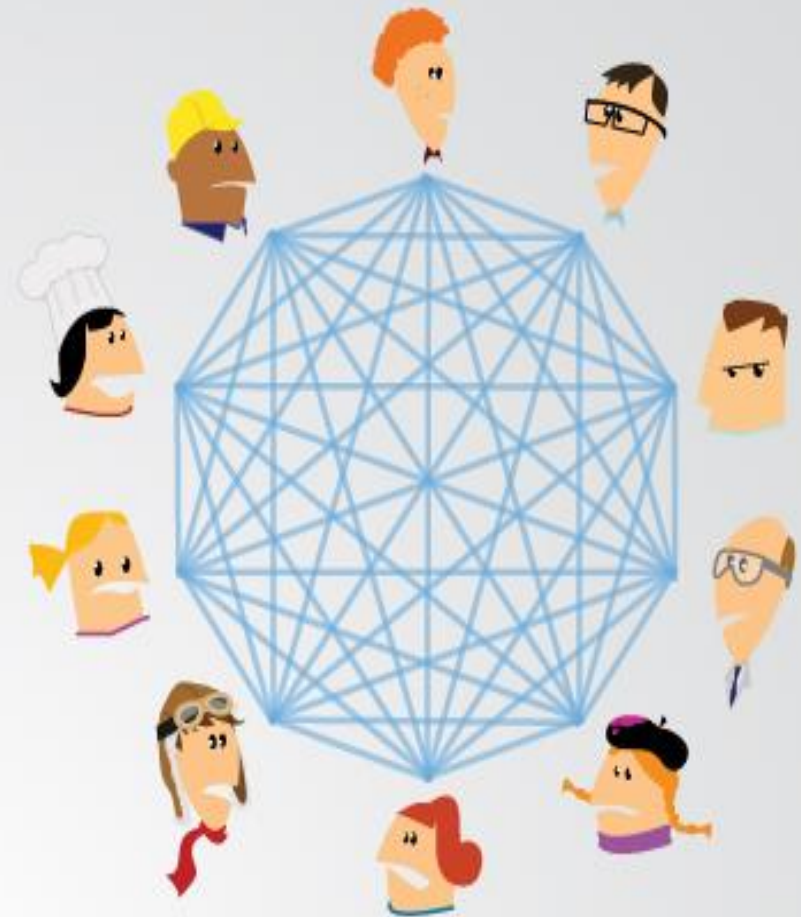


- Cross-functional (QA, Programmers, UI Designers, etc.)
- Typically 5-10 people
- Members should be full-time
- Membership can **change only** between sprints



SMALL TEAM

vs.



BIG TEAM

Scrum Master



ScrumMaster

Has no management authority

Doesn't have a project manager role

Facilitator

Scrum Master



Scrum Master



Scrum Master



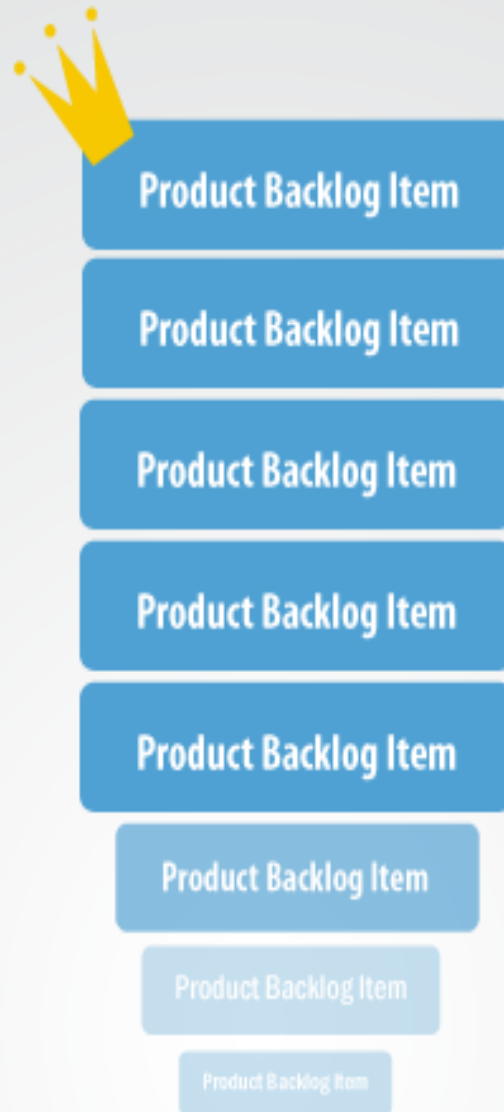
Scrum Artifacts

- Product Backlog
- Sprint Backlog

Product Backlog

- Requirements for a system, expressed as a prioritized list of Backlog Items
- Is managed and owned by a Product Owner
- Usually is created during the Sprint Planning Meeting
- Can be changed and re-prioritized before each PM

PRODUCT BACKLOG: Everything we might ever do



SPRINT BACKLOG: What we have agreed to do during the current Sprint

COMMITTED BACKLOG ITEMS

Product Backlog Item

Product Backlog Item

Product Backlog Item

Product Backlog Item

What

NOT STARTED



IN PROGRESS

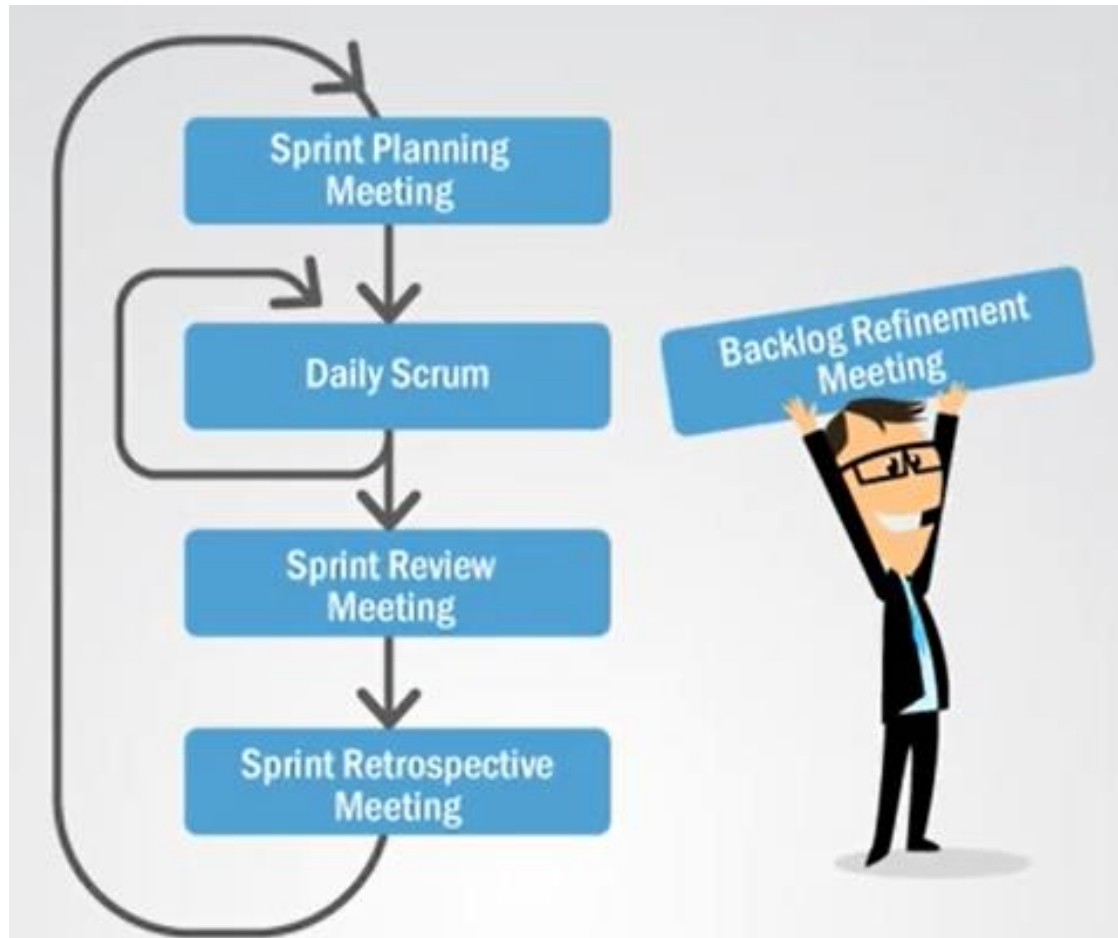


COMPLETED



How

Meeting



Parts of Sprint Planning Meeting

- 1st Part:
 - Creating Product Backlog
 - Determining the Sprint Goal.
 - Participants: Product Owner, Scrum Master, Scrum Team
- 2nd Part:
 - Participants: Scrum Master, Scrum Team
 - Creating Sprint Backlog

Sprint Planning Meeting



Sprint Planning Meeting



Daily Scrum

- Is a **short** (15 minutes long) meeting, which is **held** every day **before** the Team starts working
- Participants: Scrum **Master** (which is the chairman), Scrum **Team**
- Every Team member should answer on **3 questions ???**

Questions

- 1) What **did you do** since the **last** Scrum?
- 2) What are you **doing** until the **next Scrum**?
- 3) What is **stopping** you **getting** on with the work?

Is a good way for a Scrum Master to **track the progress** of the Team

Daily Scrum



Sprint Review Meeting

- Is held at the end of each Sprint
- Business functionality which was created during the Sprint is demonstrated to the Product Owner
- Informal, should not distract Team members of doing their work

Sprint Review Meeting



Retrospective Meeting



Thanks

Any questions contact with me via e-mail : tamer.a.yassen@gmail.com
Agile website : <https://www.targetprocess.com>

