



DesignNews

DAY 3 : A Deep Dive into Scrum

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THE SPEAKER



Jacob Beningo

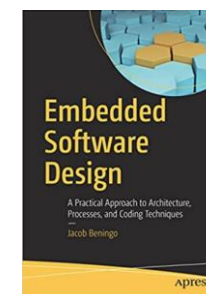
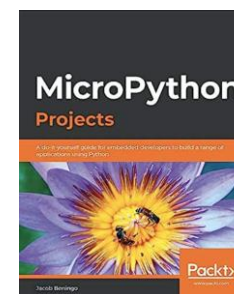
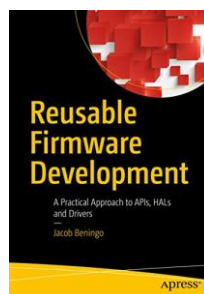
Lecturer Profile



Beningo Embedded Group - President

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01

Scrum Artifacts

It seems that perfection is reached not when there is nothing left to add, but when there is nothing left to take away.

- Antoine de Saint-Exupéry

SCRUM ARTIFACTS

Product Backlog

The **Product Backlog** is a prioritized list of work that needs to be done to meet the Product Goal(s).

- Commitment to the Product Goal
- Derived from the product roadmap and requirements
- Maintained by the product owner or product manager
- Includes features, requirements, improvements, and defects
- Feeds the sprint backlog
- Constantly evolves

Issue Title	Labels	Priority
Doxygen Man Page		B1B-114 = 3
Resolve CRC Module Compilation Issues	JS	B1B-108 = 2
Integrate Tracealyzer	Baseline Application B...	B1B-46 = 4
Telemetry - Task Updates	v0.7.0 Telemetry Updates	B1B-127 = 20
Heater Message Prioritization	v0.9.0 Heater Commands	B1B-134 = 2
Debug Stellar Compiler Process		B1B-90 = 2
Update Task Communication Architecture		B1B-113 = 3
ADS config is application dependent. Fix with a pump abstraction layer		B1B-121 = 3
Configure Assertions		B1B-116 = 3
VSC Arm Debug Plugin	JS	B1B-89 = 3
Update Ads7953_Transfer to not have hardcoded chip selects		B1B-120 = 3
Unit Test Cases for CRC Module	Comm Protocol Port (...)	B1B-18 = 1
Refactor RxMessaging Module to Improve Architecture		B1B-67 = 3
Command - Evacuate	v0.9.0 Command Protocol	B1B-80 = 3
CRC DMAC Option 3 Integrated and Tested	Comm Protocol Port (...)	B1B-11 = 1

SCRUM ARTIFACTS

Sprint Backlog

A **Sprint Backlog** is the list of user stories, defects, and items chosen for development in the sprint.

- Commitment to the Sprint Goal
- Planning meeting selects what will be done
- The product backlog fills the sprint
- Sprint backlog often evolves during a sprint

Beningo Sprint 19 12 issues

17/Oct/22 7:08 PM - 30/Oct/22 3:46 PM

JS ...

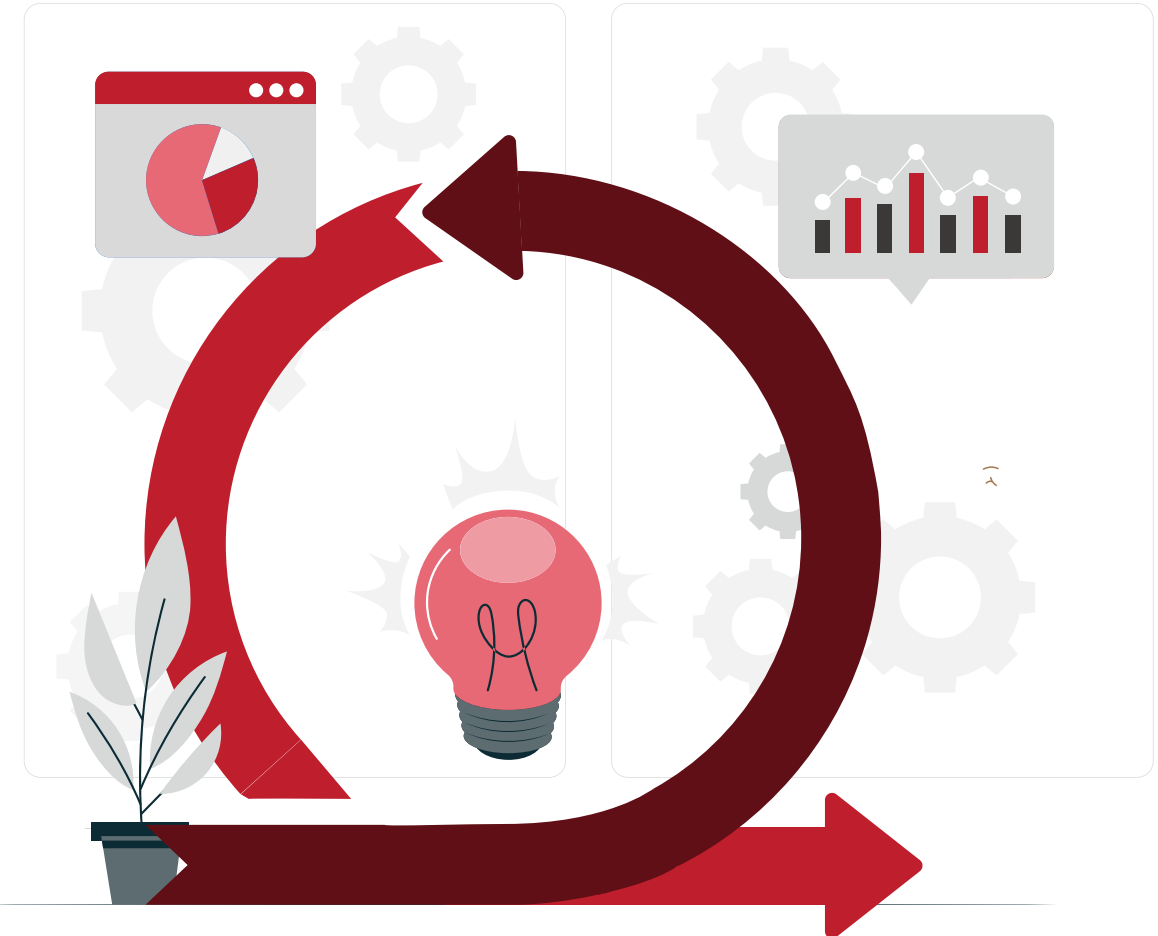
Pump Module Cleanup		B1B-168	1
Hardware Setup		B1B-169	2
Valve Application Updates	v0.4.0 Task Valve Software S...	B1B-153	5
AutoGen Valve Testing	Task Valve Software S... JS	B1B-138	2
Command - Fire	v0.6.0 Command Protocol	B1B-78	3
Heater SystemTimer Overflow Test	v0.3.0 Heater Commands	B1B-148	2
Command - Prime	v0.5.0 Command Protocol	B1B-76	3
Command - Pressurize	v0.5.0 Command Protocol	B1B-77	3
Controller Task RTOS Architecture Updates	v0.5.0 Controller Task Softw...	B1B-155	3
Controller Application Updates	v0.5.0 Controller Task Softw...	B1B-156	5
Unit Test Cases for Valves Module	v0.6.0 Valve Command Soft...	B1B-19	5
Fire Command Software Modifications	v0.6.0 Valve Command Soft...	B1B-158	5

SCRUM ARTIFACTS

Increment

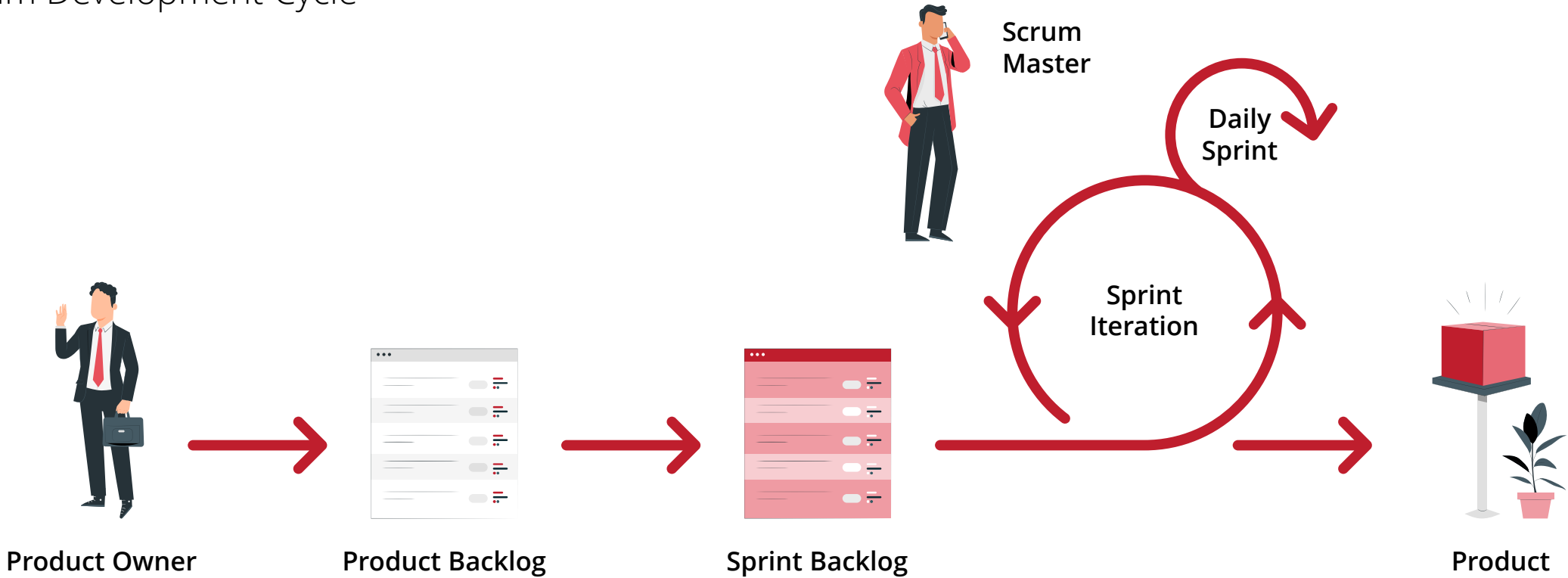
An **Increment** is a usable end-product completed at the end of a sprint.

- Commitment to the Definition of Done
- A step toward the product goal
- All the product backlog items that have been completed during a sprint.
- The value of the increments
- The definition of done (DoD)
- Can have multiple increments in a Sprint



SCRUM ARTIFACTS

Scrum Development Cycle



02

Scrum Events (Ceremonies)

“The goal of going Agile is to hedge risk by doing incremental-iterative development, increasing overall process efficiency, and the quality of the final output.”

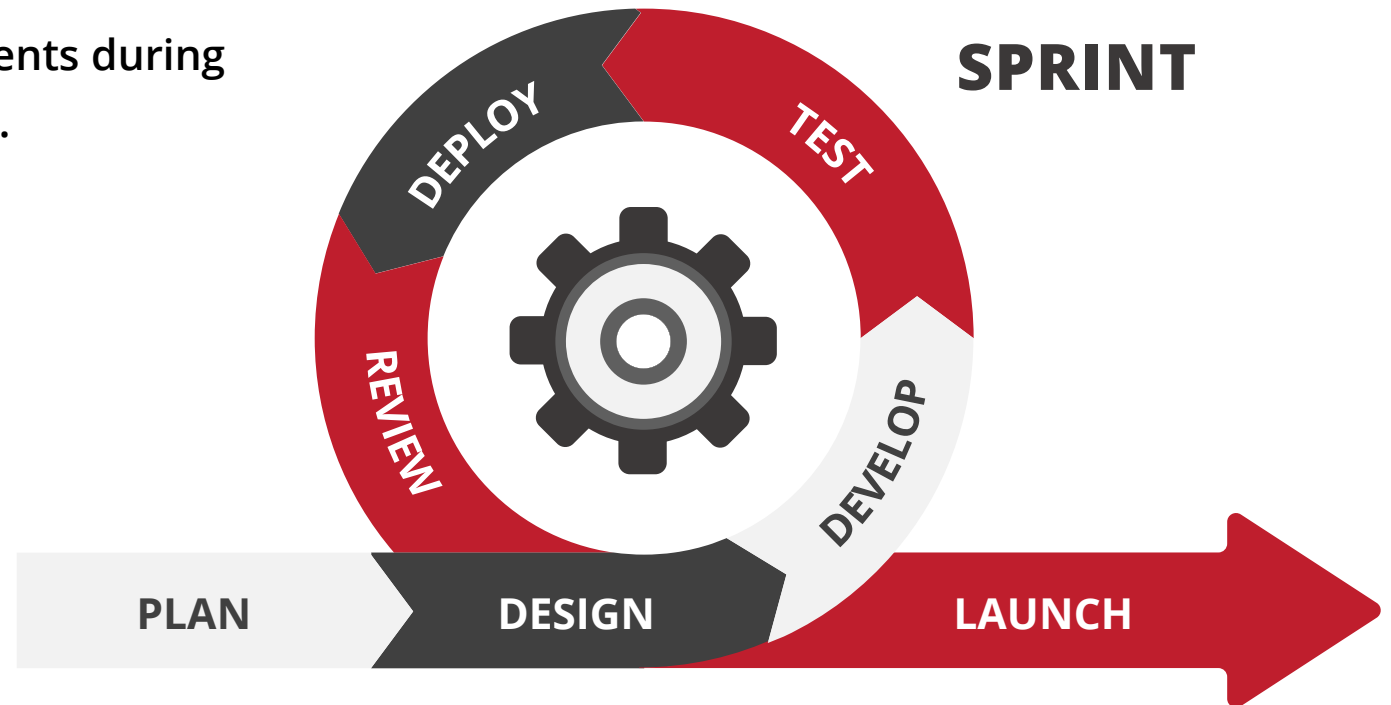
- Salil Jha

SCRUM EVENTS (CEREMONIES)

Sprint

A **Sprint** is a repeating time frame of scrum events during which a team works to complete an increment.

- Where ideas are turned into value
- Typically, 2 or 4 weeks
- All scrum events occur within a sprint
- Are often thought of as mini design cycles

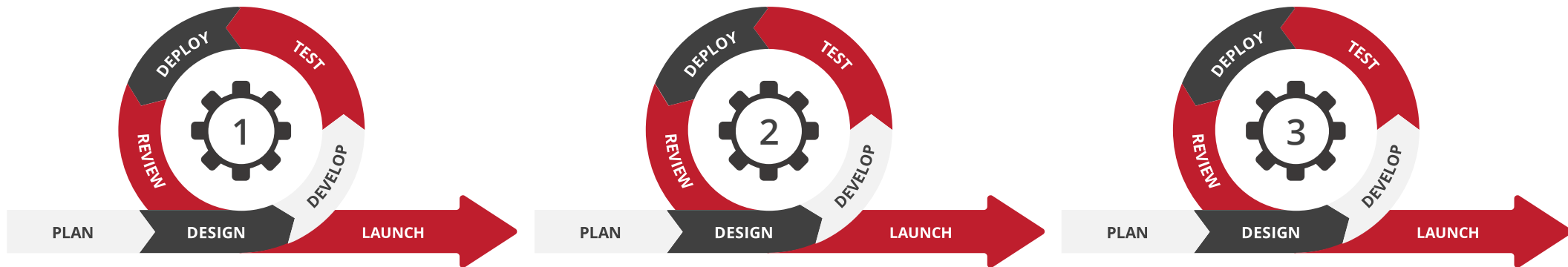


SCRUM EVENTS (CEREMONIES)

Sprint

Sprints are often numbered. Several different methods:

- Increment forever
- Increment and restart at 1 each year
- <TeamName>Sprint
- <TeamName>Yxx_Qy_Sz

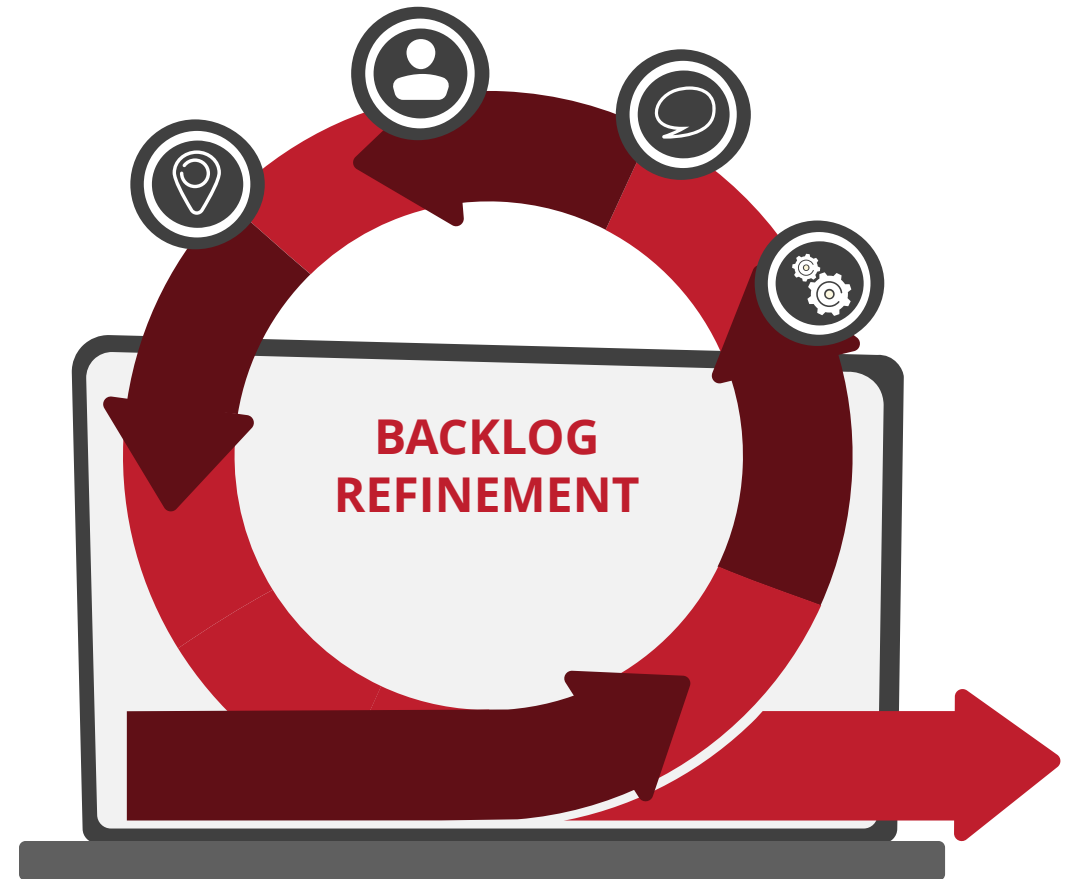


SCRUM EVENTS (CEREMONIES)

Backlog Grooming

Backlog Grooming is when the product backlog is updated during the sprint.

- Product owners' responsibility
- Interactions with customer
 - Feedback
 - Changing requirements / needs
- Prioritize product backlog
- Clean the list



SCRUM EVENTS (CEREMONIES)

Sprint Planning

Sprint Planning is when a team identifies the work to be performed in the sprint.

- Fills the sprint backlog with user stories
- Stories align with the sprint goal(s)
- Stories are also feasible to complete

Topics to consider when Planning:

- Why is this Sprint valuable?
- What can be Done this Sprint?
- How will the chosen work get done?



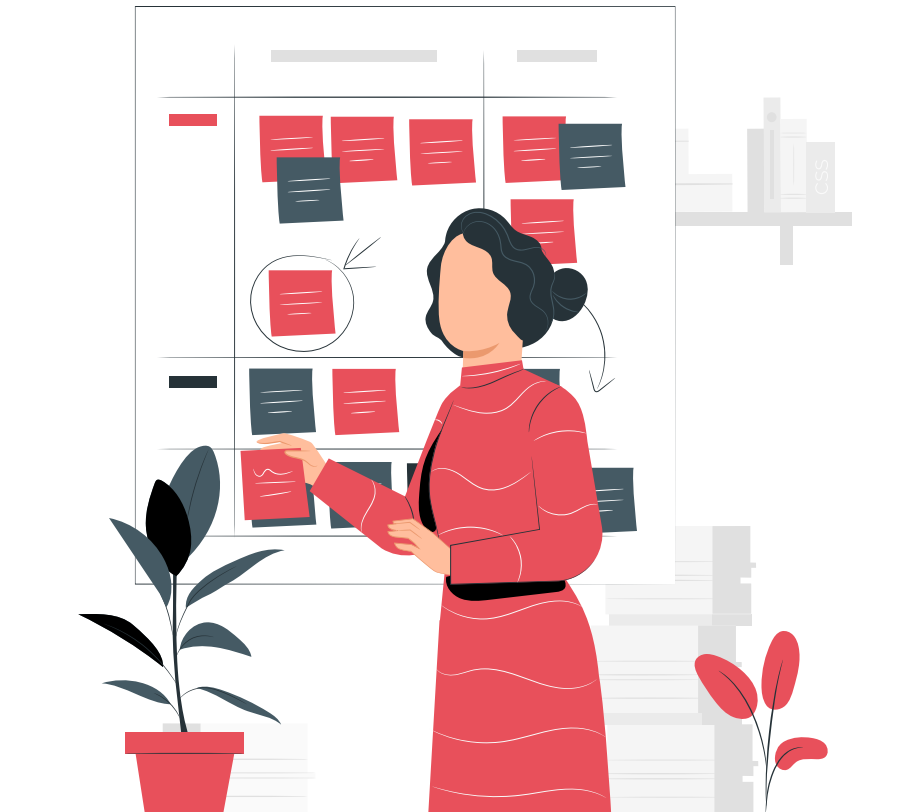
SCRUM EVENTS (CEREMONIES)

The Daily Standup

The **Daily Stand-up** is a short daily meeting (1 minute per person) that plans the next 24 hours.

- Opportunity to understand **how** the project is going, not just give an update and discuss challenges
- Opportunity to **learn** how to work more effectively together
- Daily stand up helps the team **plan** the next day's worth of work
- Help us make **course corrections** in the project as needed and more often

The stand up is the time to voice any concerns you have with meeting the sprint goal and/or any blockers.



SCRUM EVENTS (CEREMONIES)

Sprint Review

The purpose of the **Sprint Review** is to inspect the outcome of the Sprint and determine future adaptations.

- Present results to the stakeholders
- Discuss progress toward the Product Goal
- Identify if anything has changed
- Collaborate on what needs to be next
- Adjustments to Product Backlog
- It's a working session, avoid just making it a presentation!
- Maximum 1 hour per week in the sprint

Sprint Goals Review

Status Review

Live Demo

Sprint Statistics

Blocker / Risk Discussion

Feedback

SCRUM EVENTS (CEREMONIES)

Sprint Retrospective

A **retrospective** is a meeting in which everyone talks about how the last part of the project went and talks about what lessons can be learned.

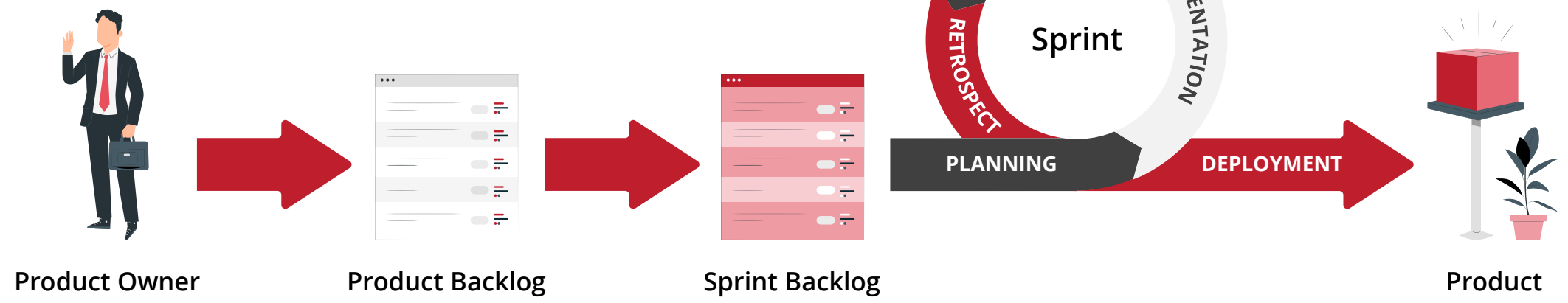
- The team inspects how the last sprint went by examining:
 - Individuals
 - Processes
 - The Definition of Done
 - Interactions
 - Tools
- Identify the changes that will improve effectiveness
- Concludes the Sprint
- Maximum time is $\frac{3}{4}$ hour per week in Sprint



SCRUM EVENTS (CEREMONIES)

Scrum Development Cycle

SCRUM AGILE





QUESTIONS



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