PSM 1 Certification Oriented Training(Day 2)

Sprint

Sprint 1(Day 1):

- **Sprint Planning**
- Definition of Scrum
- Uses of Scrum
- Scrum Theory
- Scrum Values
- Scrum Team
- **Sprint Review**
- **Sprint Retrospective**

Sprint 2 (Day 2):

- **Sprint Planning**
- Scrum Events
- Scrum Artifacts
- Artifact Transparency
- **Sprint Review**
- **Sprint Retrospective**

Scrum Events/Ceremonies

Sprint

Scrum Events

The Sprint *1 month max*

- Sprint Planning
- Daily Scrum
- Sprint Review
- Sprint Retrospective

A time-box during which a "Done" Increment is created.
Sprints follow each other immediately.
During the Sprint:

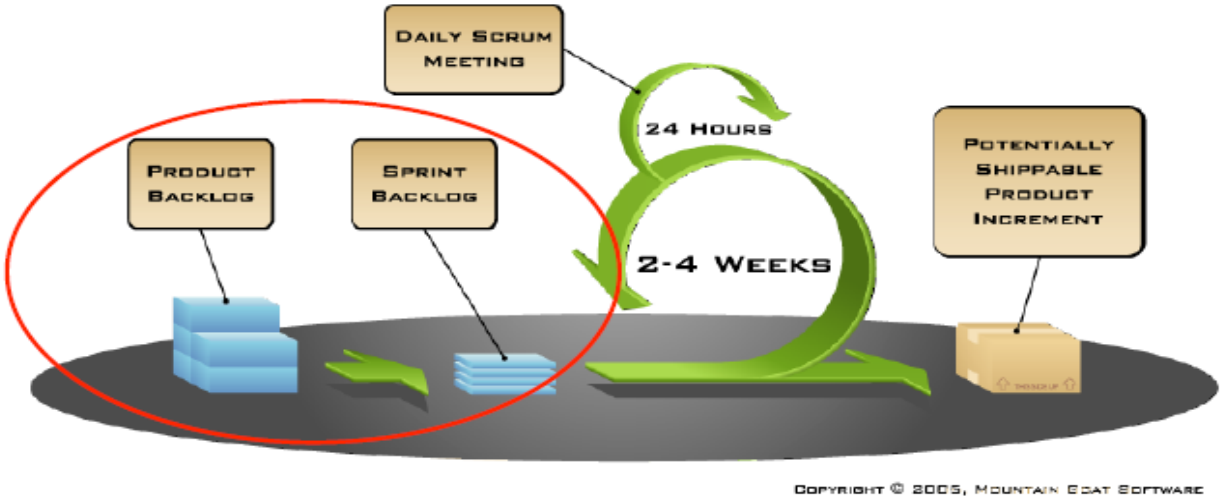
- No changes are made that would endanger the Sprint Goal;
- Quality goals do not decrease; and,
- Scope may be clarified and re-negotiated between the Product Owner and Development Team as more is learned.

A Sprint can be cancelled:

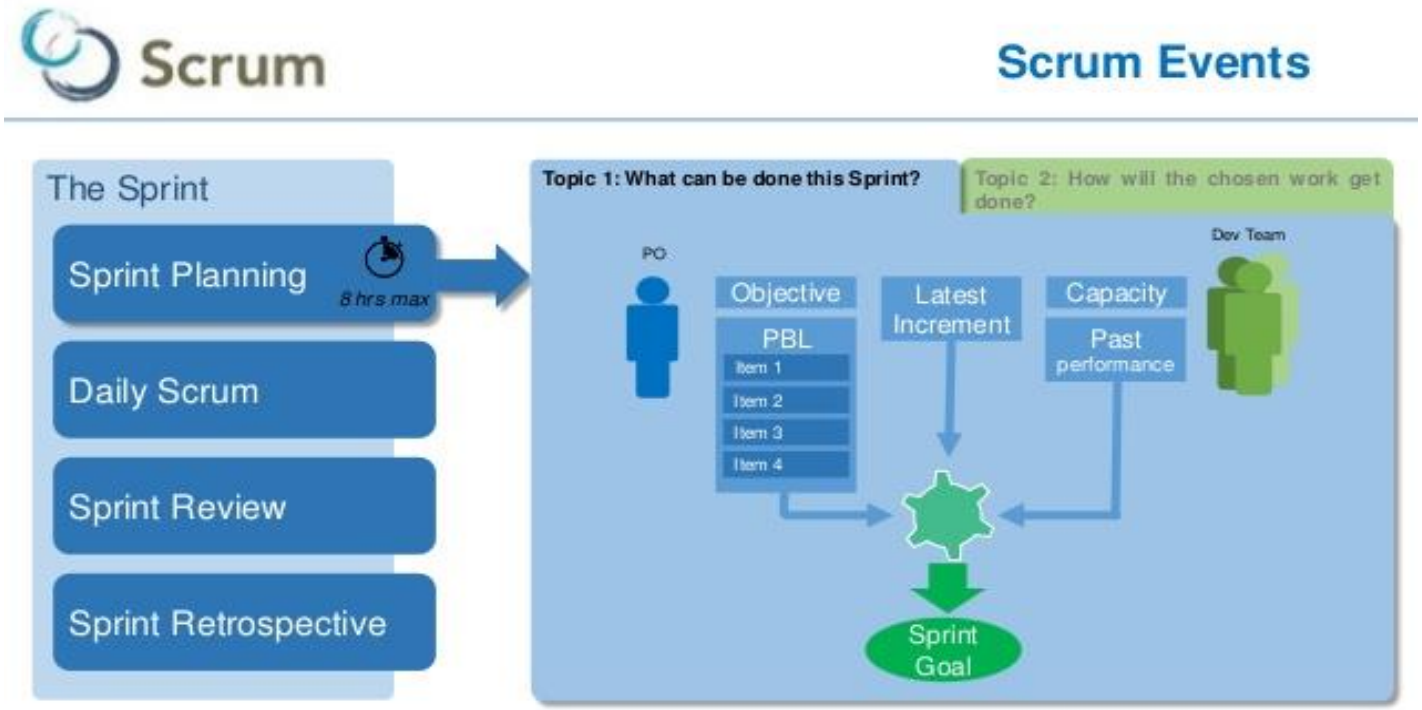
- Only by Product Owner, however only under influence of stakeholders, the Dev Team or Scrum Master.
- If the Sprint Goal becomes obsolete, if it no longer makes sense due to given circumstances.

Upon cancellation, any completed "Done" items are reviewed. If part of work is releasable, the PO accepts it. Incomplete items are re-estimated and put back on the PBL.

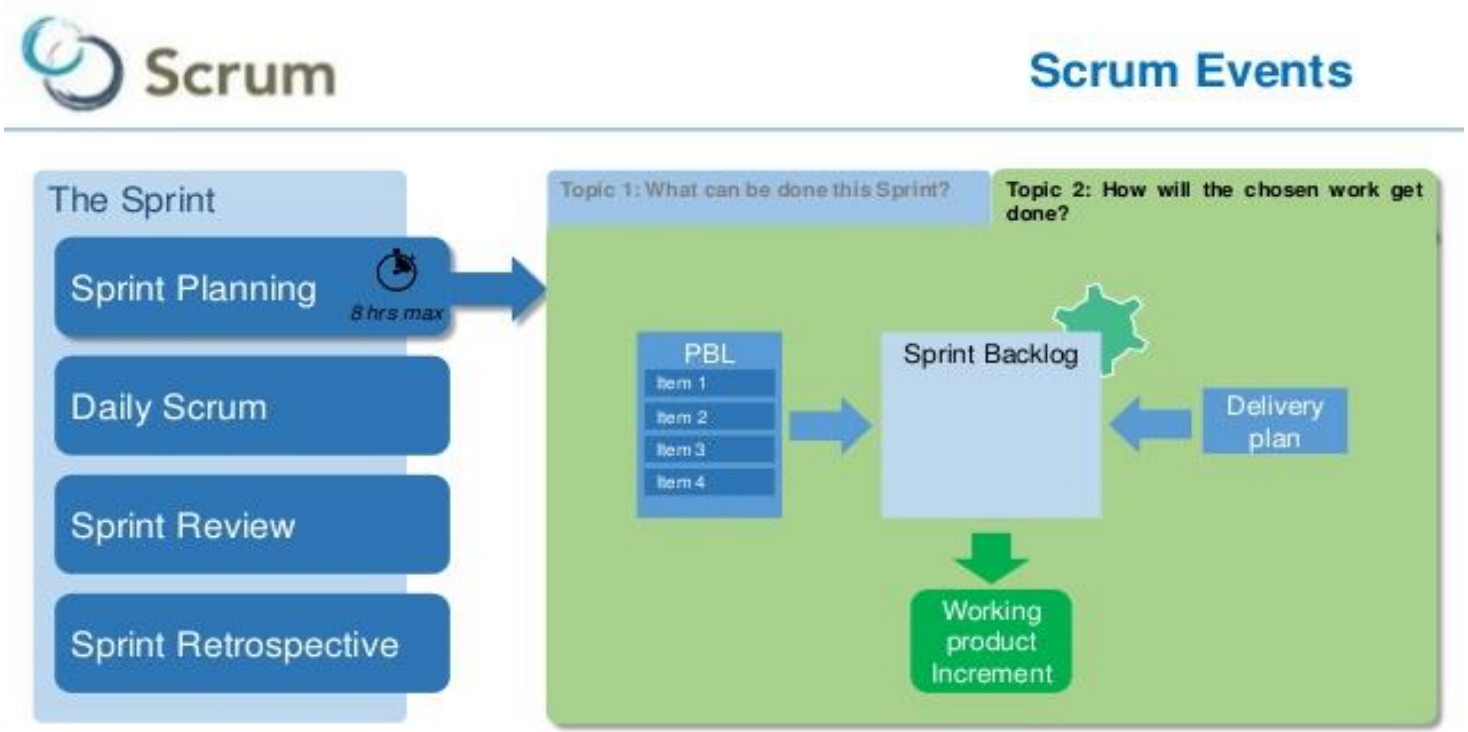
Ceremony 1: Sprint Planning Meeting



Sprint Planning



Sprint Planning



Sprint Preparation

- Product Owner prepares the Product Backlog
  - Updated (stakeholdes)
  - Estimated (team)
  - Validated (team)
  - Prioritized (PO)

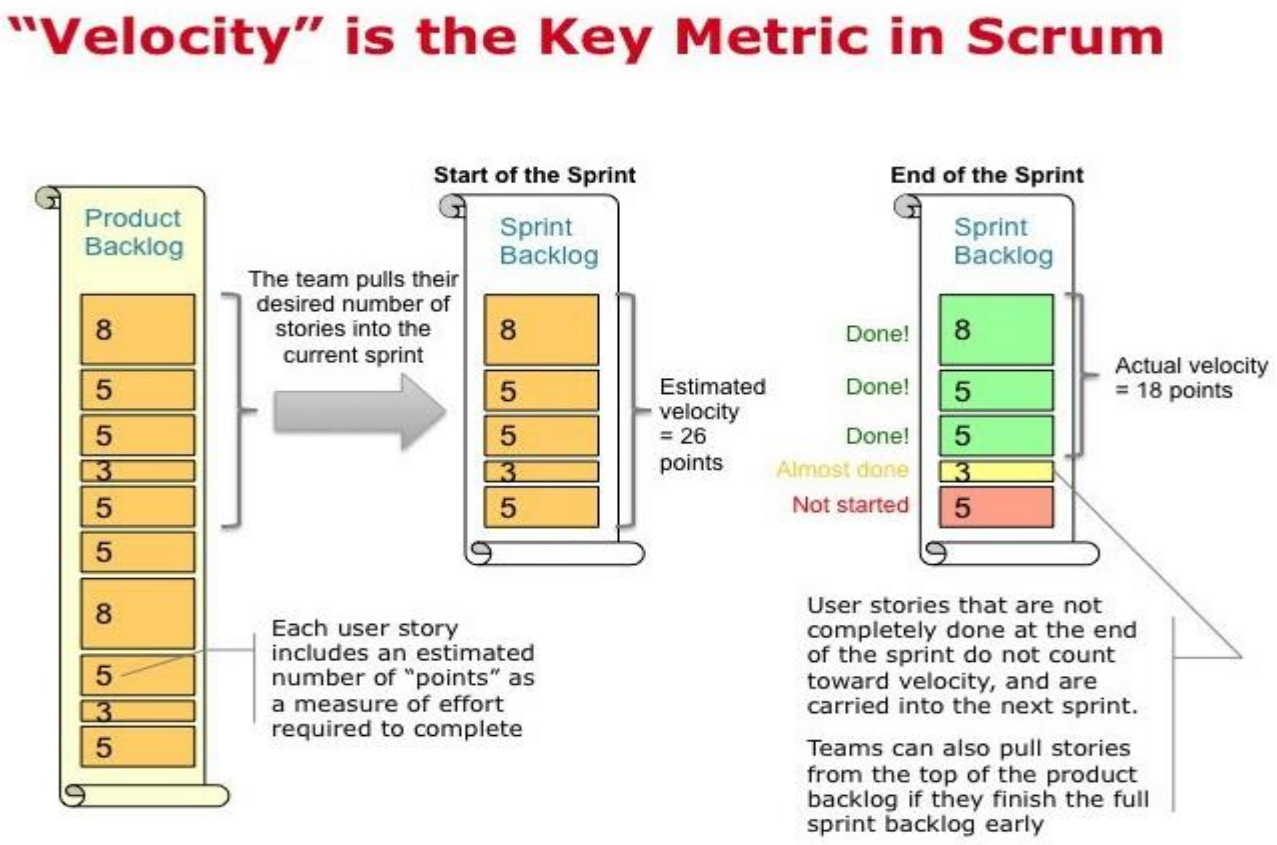
Team :

- Determines sprint goal (objective of the sprint)
- Team: Determines capacity
  - Availability (holidays, overhead etc)
- Scrum Master: Organizes and facilitates the meeting

During Sprint Planning...

- Discuss the Sprint Goal
- Starting at top of the Sprint Candidates -
  - pick an item:
  - Discuss the item
  - Add details
  - (Split items into tasks)
- Consider capacity and capability
- Establish team commitment when capacity and capability is consumed

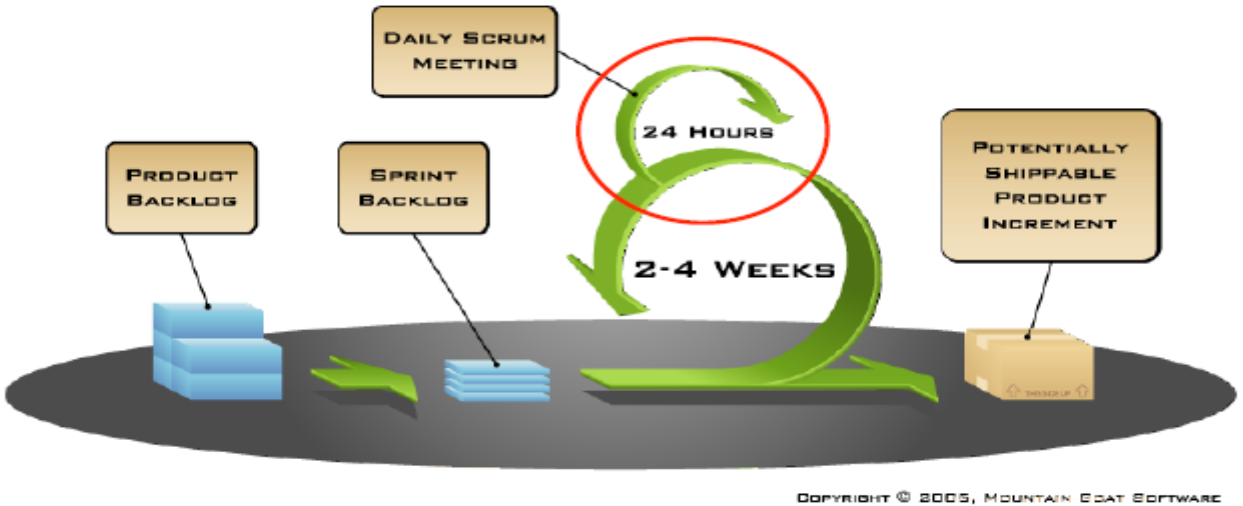
Sprint Velocity



Velocity is a measure of the amount of work a Team can tackle during a single **Sprint**

Velocity is calculated at the end of the **Sprint** by totaling the Points for all fully completed user stories

Ceremony 2: Daily Scrum Meeting



Daily Scrum Meeting

- Standup meeting
- All participants answer 3 questions:
  - What have I done since last meeting?
  - Which impediments do I have?
  - What will I accomplish until next meeting?
- Time-boxed max. 10-15 min.
- NOT just a status meeting!

Sprint Review (Demo)

- **Informal meeting**
  - Conducted at the end of Sprint
  - Development team demostrates the work that it has ”Done”
  - Review increment and adapt product backlog if needed
  - PO discuss product backlog as it stands and prodicts likely completion date
  - Review of timeline marketplace, budget, capabilities
- **Particiapnts**
  - Scrum team
  - Customer
  - Stakeholders

Sprint Retrospective

- **What is retrospective**
  - Formal opportunity to inspect and adapt process, system and tools
  - Scrum team Inspect itself and create plan for improvement
- **Frequency**
  - Conducted after sprint review and before Sprint planning
- **Attendees**
  - The Scrum team and potentially everyone working on the team (Customer, product team etc)

Scrum events durations*

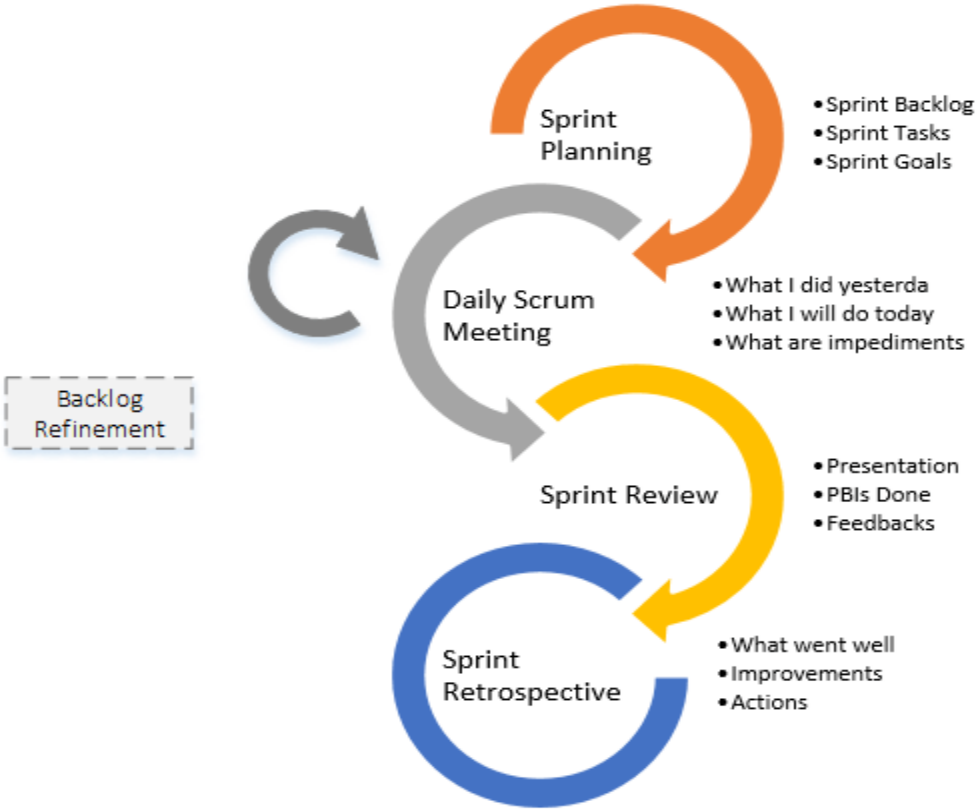
Event	4 Week	3 Week	2 Week	1 Week
Sprint Planning	8 hr	6 hr	4 hr	2 hr
Daily Scrums	15 min daily	15 min daily	15 min daily	15 min daily
Sprint Review	4 hr	3 hr	2 hr	1 hr
Sprint Retrospective	3 hr	2.25 hr	1.5 hr	.75 hr

* Duration for 1 month/4 week sprint is defined in scrum guide and duration for shorter sprint than 1 month is shorter and relatively defined

Scrum events durations

Event	Inspection	Adaptation
Sprint Planning	• Product Backlog • (Commitments Retrospective) • (Definition of Done)	• Sprint Goal • Forecast • Sprint Backlog
Daily Scrum	• Progress toward Sprint Goal	• Sprint Backlog • Daily Plan
Sprint Review	• Product Increment • Product Backlog (Release) • Market-business conditions	• Product Backlog
Sprint Retrospective	• Team & collaboration • Technology & engineering • Definition of Done	• Actionable improvements

Scrum events summary



Scrum Artifacts

Scrum Artifacts

- **Product Backlog:** An ordered list of everything (aka stories) that might be needed in the final product
- **Sprint Backlog:** Selected items (stories) from the Product Backlog to be delivered through a Sprint, along with the Sprint Goal and plans for delivering the items and realizing the Sprint Goal
- **Increment:** The set of all the Product Backlog items completed so far in the project (up to the end of a certain Sprint)
- **Definition of "Done":** The shared understanding of what it means for a piece of work to be considered complete
- **Monitoring Progress towards a Goal:** The performance measurement and forecast for the whole project
- **Monitoring Sprint Progress:** The performance measurement and forecasts for a single Sprint

Note: Items 5 and 6 might look more like activities, but they are considered artifacts in the Scrum Guide, and therefore we will explain them as so. You can imagine their output (tracking information, burn-down charts, etc.) as the real artifacts and these two items as ongoing activities (like Product Backlog grooming) or part of the Scrum events (part of Sprint Review and Daily Scrum).

Product Backlog

- Derived from vision
- A list of all desired work on the project.
- Ideally expressed such that each item have value to the users or customers of the product
- Emergent
- Visible
- Prioritized/Ordered according to cost and business value by the product owner

Sprint Backlog

- The output from the sprint planning is the Sprint Backlog
- Is often visualized on a “Scrum Board”
- Defined tasks that are planned to be completed in the current sprint

User Story

- Basic unit of scope for an Agile project

As an x, I want y so that z.

- X is the role of the end user of the system
  - i.e. “As an order entry operator” you would do different things with a system than “As a shipping clerk”
- Y is the statement of the problem (Opportunity) to be solved, (not the solution), and why they want to do it
- Z is the business value gained (for the business) if this problem is solved
  - Preferably in the form of actual cash value but may be business benefit
  - It is invaluable to keep everyone focused on and aware of the business value/benefit of this story!

User Story

- Anyone can write a User Story. The Product Owner decides which of them should go onto the Product Backlog, and what the priority should be.

- User Stories start big, with only the highest-level detail
  - We call these “Epics”

- Over time, the Product Owner and Dev Team slice these Epics into smaller and more detailed stories, as they get closer to being implemented
  - This slicing/detailing happens during Product Backlog Refinement
  - Goal is for a User Story to be small enough that 1-2 people could finish in 3-4 days (“1-2-3-4”)

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A Good User Story

As: A Financial Advisor
I want: to have the ability to analyse the amount of cash a client is currently holding
So that: I can increase my add-on sales by 15% (~ £12,000pa) 25

Acceptance Criteria

- Can I see when they have too little?
- Can I see when they have too much?
- Am I flagged when they have just enough?
- (depends on lifestyle cost and attitude to risk)

Notes:
- need to check if these calc's already exist

A good user story:

I	Independent	✓
N	Negotiable	✓
V	Valuable / Vertical	✓
E	Estimable	✓
S	Small	✓
T	Testable	✓

Example of PBL

Priority	Story	Estimated Size	Theme
1	As a Clockazon user, I want to be able to type the Clockazon URL in my browser and load the homepage	3	Homepage
2	As a Clockazon user, I want to click the "buy" button to put a clock in my shopping cart	5	Buy a clock
3	As a Clockazon user, I want to complete the purchase of the items in my shopping cart	8	Buy a clock
4	As the shipping manager, I want to log onto the system and see the orders that need to be shipped	3	Shipping
5	As the shipping manager, As the shipping manager, I want to print a shipping label and packing list	13	Shipping
6	As the promotions manager, I want to be able to show a list of all the clocks on our inventory and be able to set a sales price on any or all of them	13	Promos
7	Upgrade all IDEs to latest version	5	NA
8	As a Clockazon user, I want to click the shopping cart	3	Buy a clock

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Artifacts Transparency

Artifacts Transparency

- Decisions to optimize value and control risk are made based on the perceived state of the artifacts.
- To the extent that transparency is complete, these decisions have a sound basis. To the extent that the artifacts are incompletely transparent, these decisions can be flawed, value may diminish and risk may increase.
- The Scrum Master must work with the Product Owner, Development Team, and other involved parties to understand if the artifacts are completely transparent.
- A Scrum Master can detect incomplete transparency by inspecting the artifacts, sensing patterns, listening closely to what is being said, and detecting differences between expected and real results.
- The Scrum Master's job is to work with the Scrum Team and the organization to increase the transparency of the artifacts.
- This work usually involves learning, convincing, and change. Transparency doesn't occur overnight, but is a path.

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Definition of Done

- When a Product Backlog item or an Increment is described as *"*Done", everyone must understand what "Done*"* means. Although this may vary significantly per Scrum Team, members must have a shared understanding of what it means for work to be complete, to ensure transparency. This is the definition of "Done" for the Scrum Team and is used to assess when work is complete on the product Increment.
- The same definition guides the Development Team in knowing how many Product Backlog items it can select during a Sprint Planning. The purpose of each Sprint is to deliver Increments of potentially releasable functionality that adhere to the Scrum Team's current definition of "Done."
- Development Teams deliver an Increment of product functionality every Sprint. This Increment is useable, so a Product Owner may choose to immediately release it. If the definition of "Done" for an increment **is** part of the conventions, standards or guidelines of the development organization, all Scrum Teams must follow it as a minimum.
- If "Done" for an increment is **not** a convention of the development organization, the Development Team of the Scrum Team must define a definition of "Done" appropriate for the product. If there are multiple Scrum Teams working on the system or product release, the Development Teams on all the Scrum Teams must mutually define the definition of "Done."
- Each Increment is additive to all prior Increments and thoroughly tested, ensuring that all Increments work together.
- As Scrum Teams mature, it is expected that their definitions of "Done" will expand to include more stringent criteria for higher quality. New definitions, as used, may uncover work to be done in previously "Done" increments. Any one product or system should have a definition of "Done" that is a standard for any work done on it.

Sprint Review(1)

1. One of the Scrum events is the Daily Scrum. What are the intended outcomes of the daily scrum?

   Choose two answers

A) A shared understanding of the most important work to be undertaken next to achieve the best possible progress toward the sprint goal
B) A status report for the upper management indicating what each individual has done, will be doing, and what is impeding him/her
C) New impediments for the Scrum Master to take care of
D) An update of completed tasks and of the remaining work so the Scrum Master can plan the next day
E) An updated Scrum board to make Sprint progress transparent for the stakeholders

2. Which of the following might the Scrum Team discuss during a sprint retrospective?

A) The way the scrum team does sprint planning
B) Methods of communication
C) Skills needed to improve the development teams ability to deliver
D) Its Definition of “done”
E) All of the above

3. Which are NOT appropriate topics for discussion in a Sprint Retrospective?

A) How the team does its work
B) The value of work currently represented in the product backlog
C) Sprint backlog for the next sprint
D) Team relations
E) Definition of “Done”

Sprint Review(1)

4. Which of these may a Development Team deliver at the end of a Sprint?

A) An increment of software with minor known bugs in it
B) A single document, if that is what the Scrum Master asked for
C) An increment of working software that is “done”
D) Failing unit tests, to identify acceptance tests for the next Sprint

5. How much work must a Development team do to a product backlog item and selects for a sprint?

A) As much as it can fit into the sprint, any remaining work will be transferred to a subsequent sprint
B) A proportional amount of time on analysis, design, programming, testing and documentation
C) As much as it has told the Product Owner will be done for every Product Backlog item it selects in conformance with the definition of “Done”
D) All development work and at least some testing

6. How should Product Backlog items be chosen when multiple Scrum Teams work from the same Product Backlog?

A) The scrum team with the highest velocity pulls product backlog items first
B) The product owner decides
C) The product owner should provide each team with its own product backlog
D) The development teams pull in work in agreement with the product owner

Sprint Retrospective

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Thank You