



**PMP® EXAM PREP**  
PMI Authorized  
Training Partner  
**BOOTCAMP**  
**Session 8**

**Class times:**  
**1:00 pm - 5:00 pm EDT**  
**12:00 am - 4:00 pm CDT**  
**11:00 am - 3:00 pm MDT**  
**10:00 am - 2:00 pm PDT**

**Attendance Tracking Alert**  
**Please log into Zoom with your correct first and last name.**  
**Enter the same information for every session.**

This course will assist learners in preparing for PMI's PMP Exam  
(2021 Update)

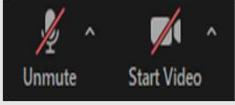
Instructor:  
**Susan Daniels,**  
MBA, PMP, DASSM, ATP-I

 This webinar will be recorded for quality purposes

Participant cameras and microphones are disabled

1

We are saving everyone's bandwidth usage by disabling cameras and microphones



- Ways to Participate in a Webinar

Find the Chat option in your Zoom command bar



Change the To: choice in the blue box to everyone.

To: 

Explore the Reactions option in your Zoom command bar



This is a fun way to provide quick and easy feedback

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## Q&A vs Chat Feature



### Use Q&A to ask for

- Technical assistance
- Guidance on how to access course material – Percipio Y or N?
- Clarification on lecture points, if not answered by instructor
  - Please avoid asking for consulting services that are aligned to a highly specific situation.



### Use Chat to

- Respond to instructor's questions
- Share examples of tools and techniques discussed
- Ask questions to clarify a concept, term or technique
- Instructor and Mentors will use \*\* NAME\*\* when responding

**Please be very patient,  
Mentors respond to hundreds of inquiries per session.**

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## IS Live ATTENDANCE REQUIRED?

- YES, if you are taking this training to register for the PMP exam live attendance is required. However, this is the exception rule for the 8 Day Bootcamp – You are allowed to miss up to two sessions if you make up the sessions by watching their replays.
- If you miss more than 15 mins at any time beyond the two sessions allowed, you will need to make it up by attending the live session in a different 8-day cohort\*.
- \*Please see the Bootcamp calendar at <http://calendar.skillsoft.com/> for information about upcoming sessions.



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## • IN CASE OF ABSENCE

You can request a replay for a previous session by asking in the Q&A or for a past/current session by emailing the Mentoring Team 48 hours after the session ends using the email address [mentoring@skillsoft.com](mailto:mentoring@skillsoft.com)

Please indicate the following in your request:

- The Bootcamp Cohort you are attending
- The Session Number
- The Date and Time Attended in New York Time Zone
- Example:

PMP ATP Bootcamp: 8 Day NA Cohort June/July/August 2022 Cohort  
Session 7 Recording  
Aug 2, 2022, 1:00 PM New York Time

## • REPLAY LIMIT:

• **There is no limit to request a replay for study purposes.**

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## Class Schedule

	Example for Eastern Time
1 <sup>st</sup> hour Presentation	1:00-2:00
1 <sup>st</sup> Break	2:00-2:10
2 <sup>nd</sup> hour Presentation	2:10-3:00
2 <sup>nd</sup> Break	3:00-3:10
3 <sup>rd</sup> hour Presentation	3:10-4:00
3 <sup>rd</sup> Break	4:00-4:10
4 <sup>th</sup> hour Presentation	4:10-5:00

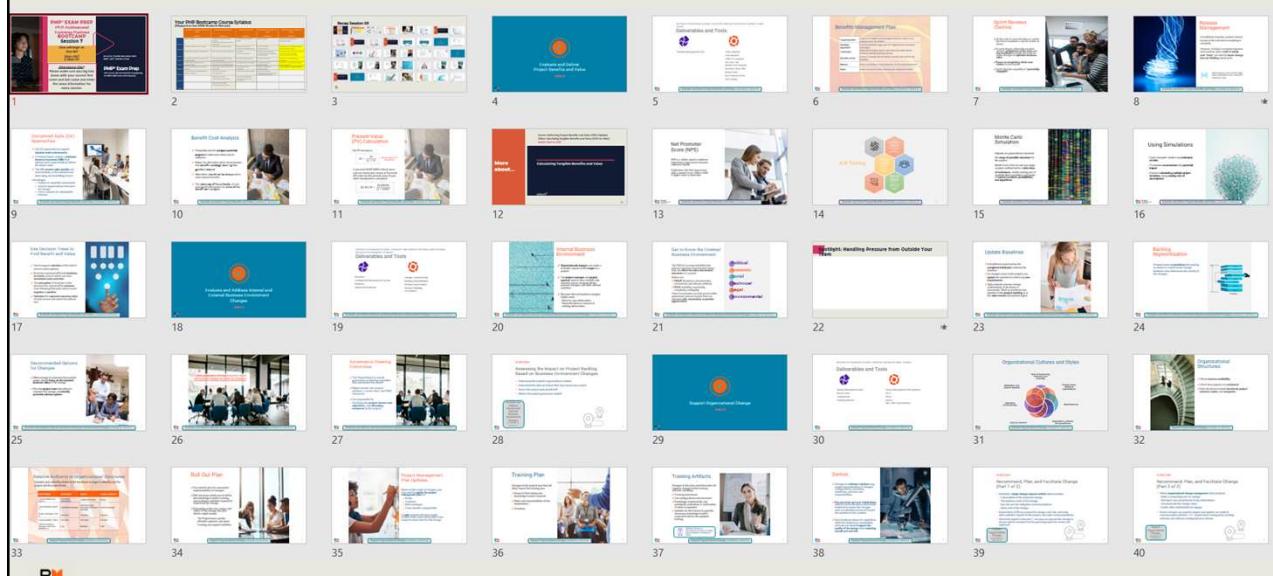
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## Your PMP Bootcamp Course Syllabus (Mapped to the PMP Student Manual)

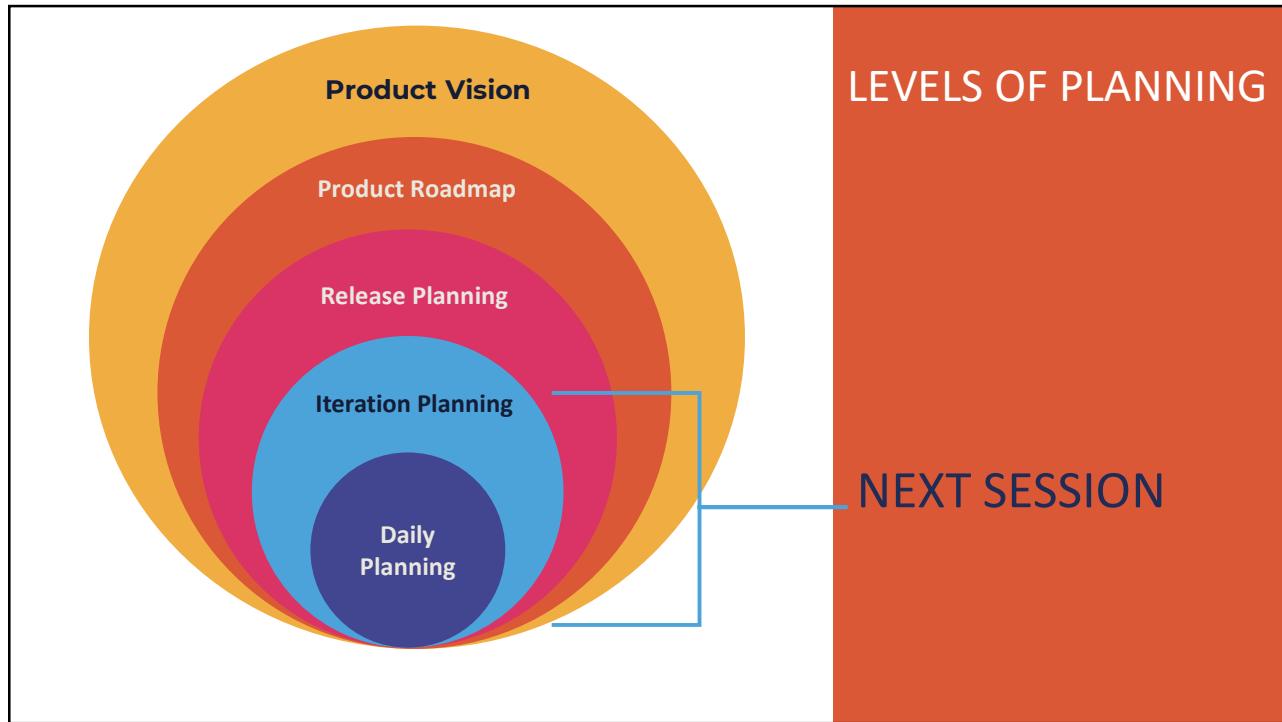
	<b>Creating a High-Performing Team</b> <b>Lesson 1</b>	<b>Starting the Project</b> <b>Lesson 2</b>	<b>Doing the Work</b> <b>Lesson 3</b>	<b>Keeping the Team on Track</b> <b>Lesson 4</b>	<b>Keeping the Business in Mind</b> <b>Lesson 5</b>
Topic A	Build a Team	Determine Appropriate Project Methodology/Methods and Practices	Assess and Manage Risks	Lead a Team	Manage Compliance Requirements
Topic B	Define Team Ground Rules	Plan and Manage Scope	Execute Project to Deliver Business Value	Support Team Performance	Evaluate and Deliver Project Benefits and Value
Topic C	Negotiate Project Agreements	Plan and Manage Schedule	Manage Communications	Address and Remove Impediments, Obstacles, and Blockers	Evaluate and Address Internal and External Business Environment Changes
Topic D	Empower Team Members and Stakeholders	Plan and Manage Budget and Resources	Engage Stakeholders	Manage Conflict	Support Organizational Change
Topic E	Train Team Members and Stakeholders	Plan and Manage Quality of Products and Deliverables	Create Project Artifacts	Collaborate with Stakeholders	Employ Continuous Process Improvement
Topic F	Engage and Support Virtual Teams	Integrate Project Planning Activities	Manage Project Changes	Mentor Relevant Stakeholders	<b>Plus, BONUS Agile Content!</b>
Topic G	Build Shared Understanding about a Project	Plan and Manage Procurement	Manage Project Issues	Apply Emotional Intelligence to Promote Team Performance	
Topic H		Establish Project Governance Structure	Ensure Knowledge Transfer for Project Continuity		
Topic I		Plan and Manage Project/Phase Closure			

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## Recap Session 07



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## Incremental Delivery

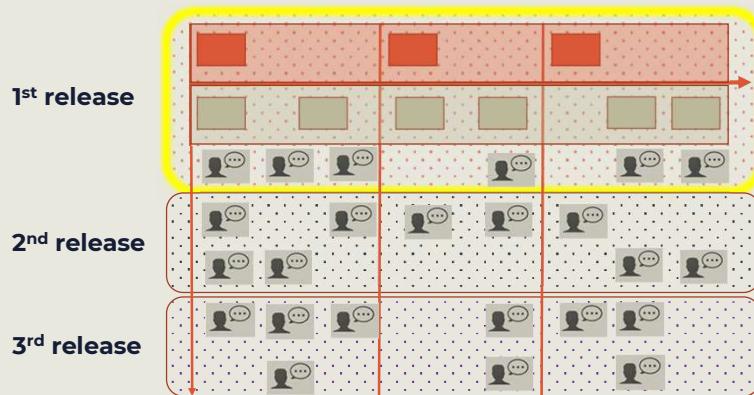
- ✓ Enables value delivery sooner.
- ✓ Get higher customer value and increased market share.
- ✓ Allows partial delivery (or previews) to customers.
- ✓ Enables early feedback for the project team allowing for adjustments to the direction, priorities, and quality of the product.

**PMI**

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## PRODUCT ROADMAP

- Story map with timing of deliverables
- Considers priorities against Developers velocity
- Subject to change as backlog is refined
- With each release the product becomes more robust



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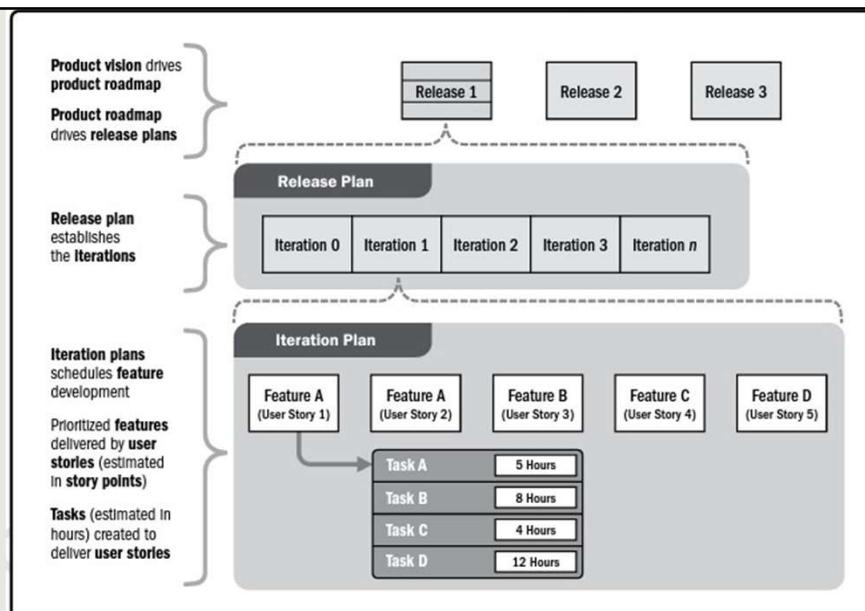


Figure 6-20. Relationship Between Product Vision, Release Planning, and Iteration Planning



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## User Stories

- ✓ Help teams focus on that value provided to the user.
- ✓ Suggest who will benefit from the work and how.
- ✓ Driven by description instead of technical specifications to give holistic view

The diagram illustrates the hierarchy of planning:

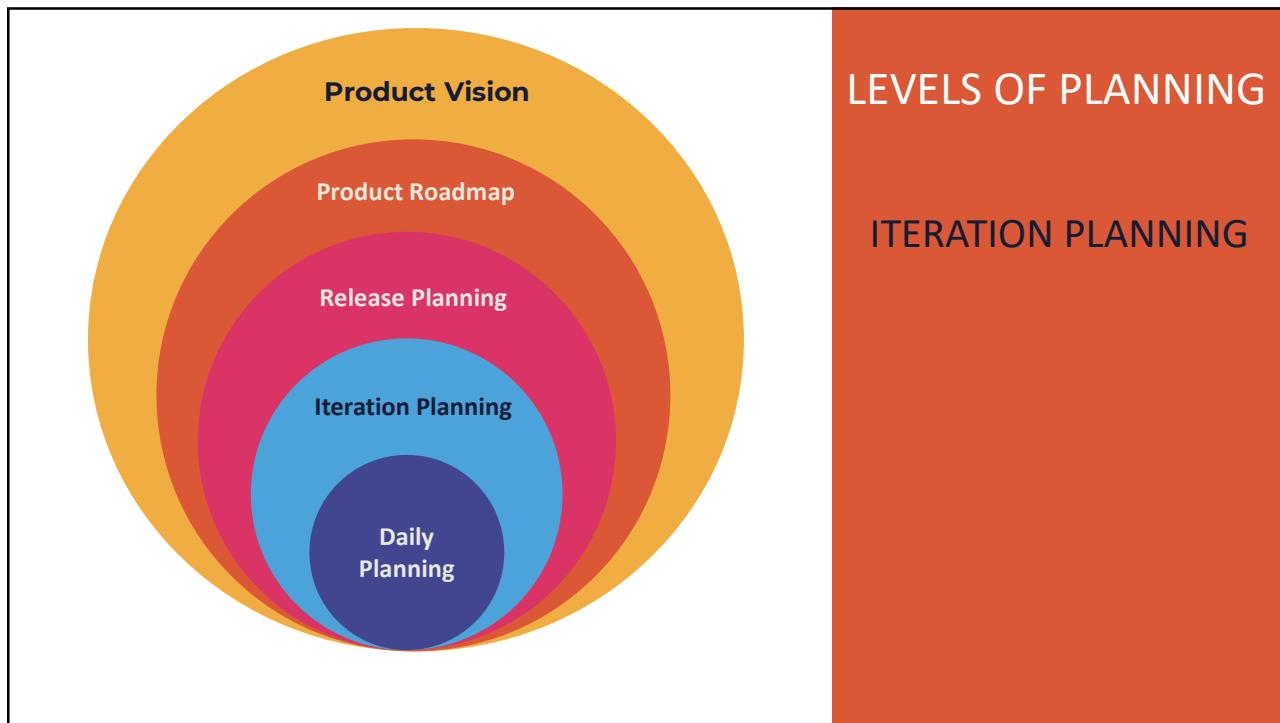
- Product Vision** (outermost circle)
- Product Roadmap**
- Release Planning**
- Iteration Planning**
- Daily Planning** (innermost circle)

On the right, a detailed view of Iteration Planning shows:

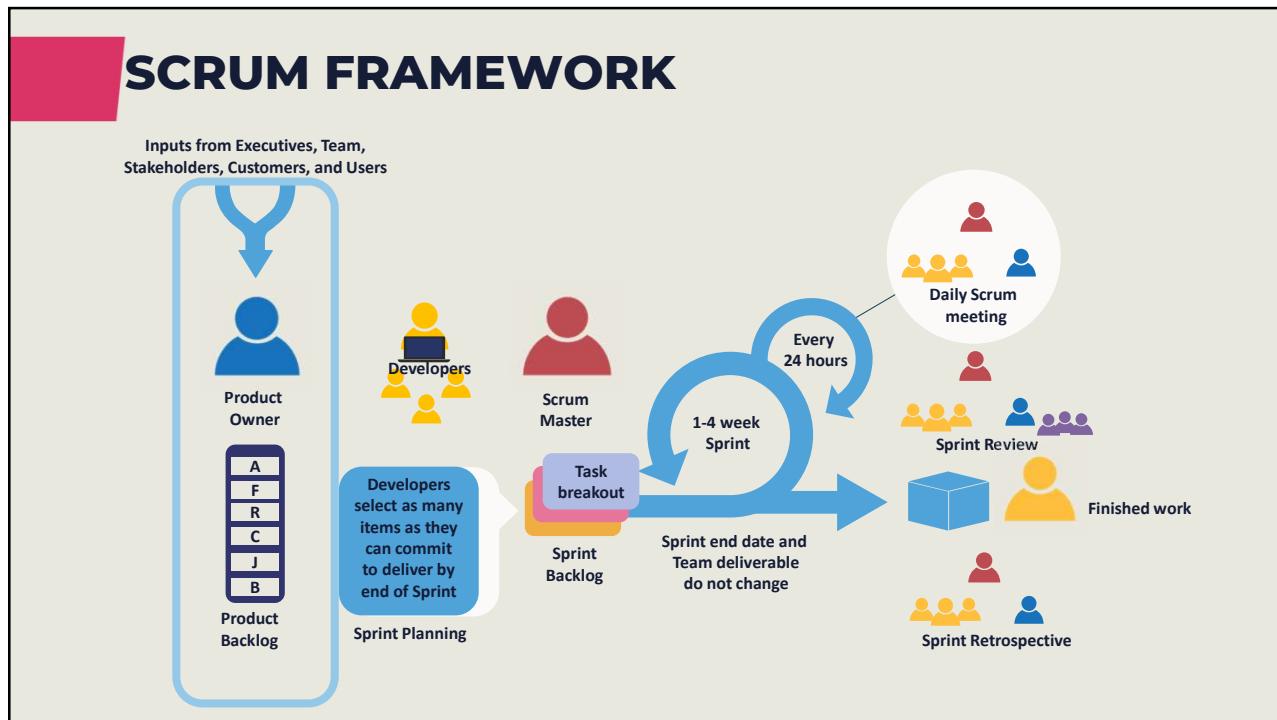
- Release Plan**: Iterations 0, 1, 2, 3, n
- Iteration Plan**: Features A, B, C, D (User Stories 1-5) and their tasks (Task A-D).

Annotations point to "User Story" and "Story Points" from the left side.

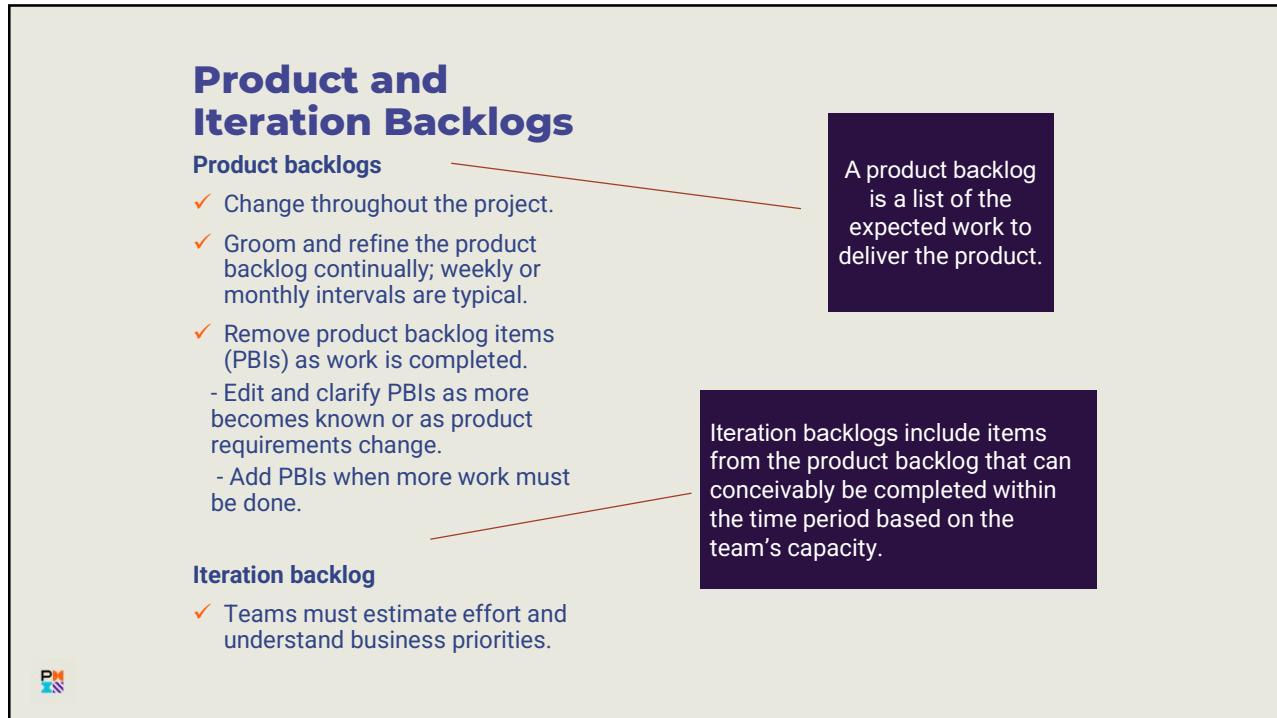
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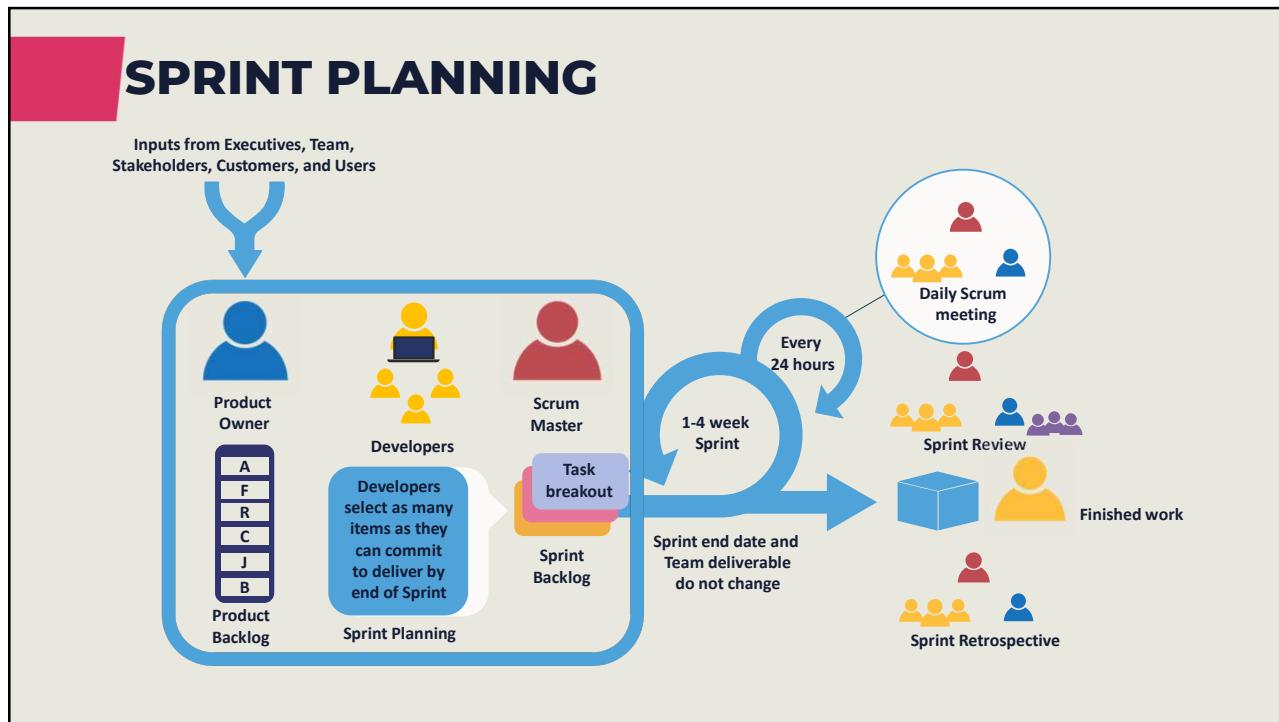
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## Cycles and Timeboxes

**Benefits:**

- ✓ Timeboxes allow for **better telemetry** over time.
- ✓ Timeboxes create a **sense of urgency**.
- ✓ Cycling the project through similar timeboxes provides **progress measurements** from one timebox to the next.
- ✓ Teams gain more **predictable measurements** that can communicate expectations of cycle times, throughput, and velocity.
- ✓ Organize work into **release cycles** and working **time blocks**.

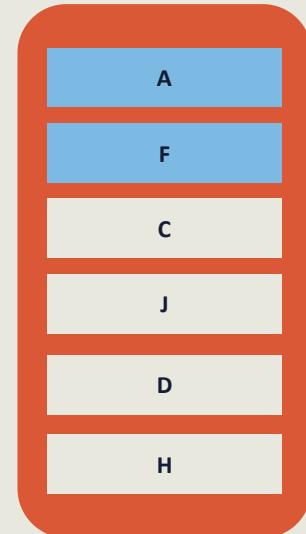
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## SPRINT PLANNING

- Includes all Scrum Team members
- Product Owner presents the updated backlog
- Developers estimate the work
- Work is selected from the product backlog to create the Sprint backlog.
- Developers commit to a set of deliverables for the Sprint
- Establish a “Definition of Done”
- Typically 2 hours per week of Sprint

Product Backlog



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## SELF-ORGANIZED AND SELF-MANAGING TEAM



- Developers decide how they will be organized
- The Developers play a strong role in the selection of new team members
- This is also true for multiple teams working together
- Self-organization benefits:
  - Personal accountability
  - Commitment
  - Innovation and creativity



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## CROSS-FUNCTIONAL DEVELOPMENT TEAM

- There is a balance of skills among the developers
- Every necessary skill and competency is represented
- “Developer” is a generic term. It includes every person who contributes to the “Done” product increment
- Borrowing team members can be disruptive
- Teams are organized around the project
- Team members may change
  - Consider the impact on productivity
  - More of an exception



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## T-Shaped Skills

Agile teams invest in becoming more cross-functional.

Leveraging all team members to help accomplish the team goals improves:

- ✓ The team’s efficiency
- ✓ The likelihood of achieving objectives

**Breadth of knowledge**

**Depth of knowledge**



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Course: Engaging Team Members and Stakeholders (2021 Update)  
 Video: Team Member Skill Sets (3:54 run time)

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## Team Member Skill Sets

skillsoft®

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## ROLES DURING SPRINT PLANNING

<b>Product Owner</b>	<b>Developers</b>
<ul style="list-style-type: none"> <li>• Presents the updated product backlog</li> <li>• Answer questions about the backlog items</li> <li>• Provide clarification on user stories</li> <li>• Reprioritize backlog as appropriate</li> <li>• Assist with defining Done</li> </ul> 	<ul style="list-style-type: none"> <li>• Ask clarifying questions about backlog items</li> <li>• Select items from the backlog</li> <li>• Estimate the work</li> <li>• Negotiate with the Product Owner</li> <li>• Commit to a set of deliverables</li> <li>• Assist with defining Done</li> </ul> 
<b>Scrum Master</b>	
<ul style="list-style-type: none"> <li>• Maintain Scrum best practices</li> <li>• Adhere to the meeting time block</li> <li>• Understand capacity of the Developers</li> <li>• Assist with defining Done</li> </ul> 	

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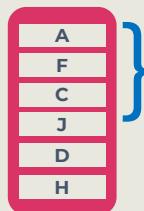
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## DECOMPOSING THE WORK

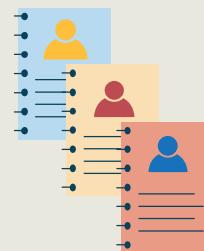
- Decompose the work for no more than 2 Sprints
- The Developers will decide how to approach the work
- User stories with uncertainty may not be decomposed into tasks right away

Prioritized Features  
"User Story Backlog"

**Product backlog**



**User stories**



**Tasks**

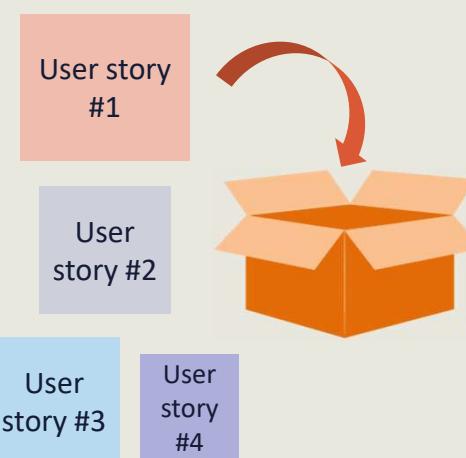


*One feature may equal one or more user stories.*

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## TIME BOXING

- Each Scrum event has maximum time allotted
  - Ex: 2-week Sprint
- User stories are estimated
  - Planned into the iteration
  - If it doesn't fit it has to wait
- Tool for completing work



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## FACTORS IN ESTIMATING



**Volume of work**  
How much effort?

**Uncertainty**  
How risky is the work?

**Complexity**  
How complex is the work?

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## Estimation Techniques

**Planning poker** estimates effort or relative size of development effort. Use a deck of cards with modified Fibonacci numbers to vote on user stories. Also called **Scrum poker**.

**Story Pointing**  
Use a relative measure e.g. numbers in the Fibonacci sequence—for the level of difficulty or complexity of a feature. Individuals assign story points.




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## RELATIVE SIZING

Quick and easy technique

Absolute value not considered

T-shirt sizing

- Sizes instead of numbers



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## AGILE ESTIMATING TECHNIQUES

### Story points

- Relative estimation
- Arbitrary measure
- Usually used by scrum teams
- Express effort required to implement a story
- 3 items taken into consideration: level of complexity, level of unknowns, effort to implement.

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## STORY POINTS

### Relative sizing

- We aren't good at absolute estimate
- We are better at relative estimates

### Not tied to days, hours, or dates

- Removes pressure or emotion

### Based on quantity of work, not speed - Unique to a team

- Not comparable to the work of other teams
- Removes competition between teams

Reference for future estimates

Reserves and buffers are not necessary



*While story points is the most commonly used metric, teams may choose any unit to represent work.*

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## PLANNING POKER

- Uses Fibonacci sequence
- Each player receives a deck of cards
- Facilitator reads a user story
- On the count of 3, everyone shows their estimate
- Purpose is to build consensus
- Close to consensus, move on and round to higher number
- Scattered estimates, discuss and estimate again
- Estimates are approximates

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## Spotlight Video: Planning Poker

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## TEAM VELOCITY

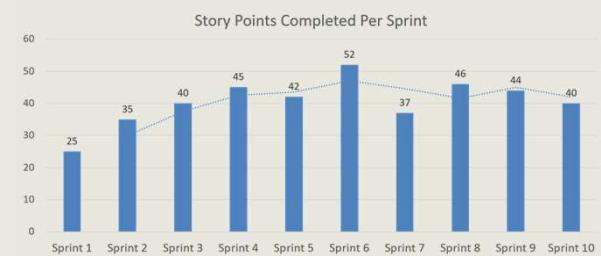
### Velocity:

- Actual amount of development work completed per a certain amount of time or time-box
- Usually measured using a sprint as the time-box
- Used to estimate how quickly a certain amount of work can be completed
- Expressed as points (typically)
- Useful for forecasting

Use historical velocity data and take an average

### If first time:

- Historical value from other projects
- Run a few iterations for a baseline



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# VELOCITY VS CAPACITY

Velocity is based on story points achieved historically

Capacity is based on team's availability to do the work

Sprint	Story Points Completed
Sprint 1	25
Sprint 2	35
Sprint 3	40
Sprint 4	45
Sprint 5	42
Sprint 6	52
Sprint 7	37
Sprint 8	46
Sprint 9	44
Sprint 10	40

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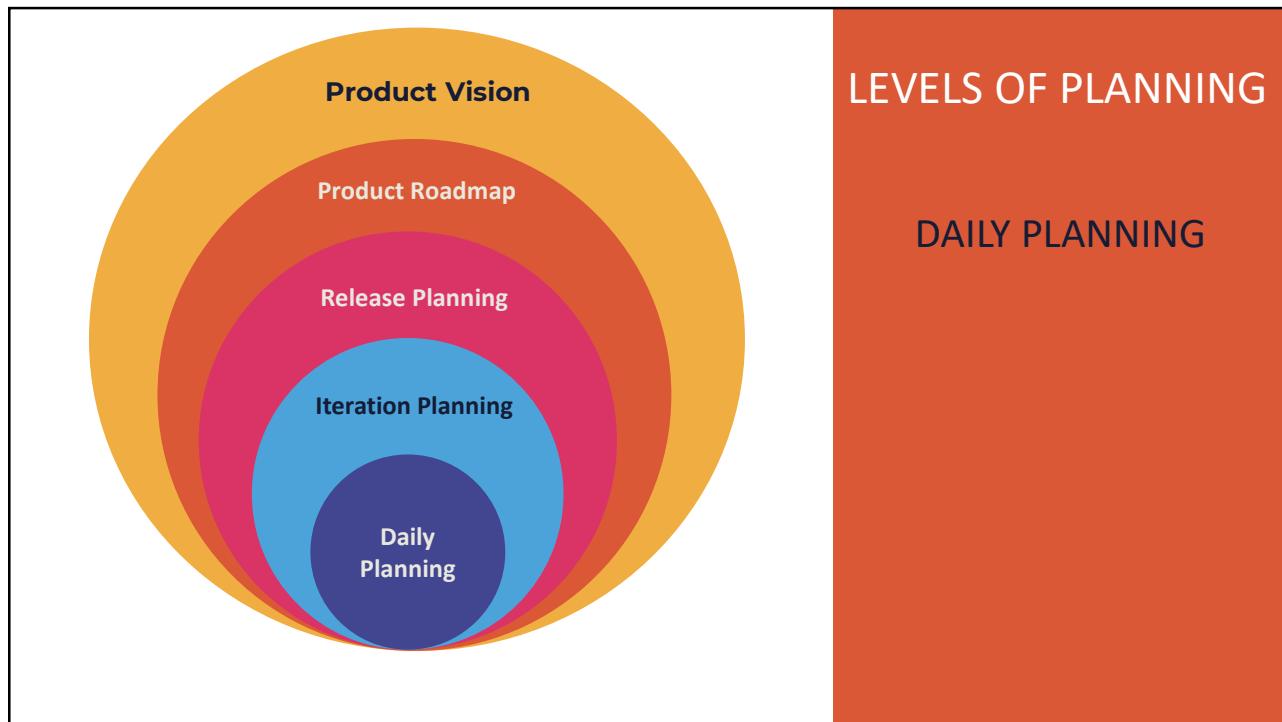
## SPRINT BACKLOG

- Belongs to the Developers
- Subset of the product backlog
- Used to achieve the goal for the current Sprint
- Highly detailed and visible
- The Developers decide how to approach and select the work
- Developers hold themselves and each other accountable
- Although tasks are divided, each Sprint backlog item is owned by the entire group
- May need to be renegotiated with Product Owner in order to meet the Sprint Goal

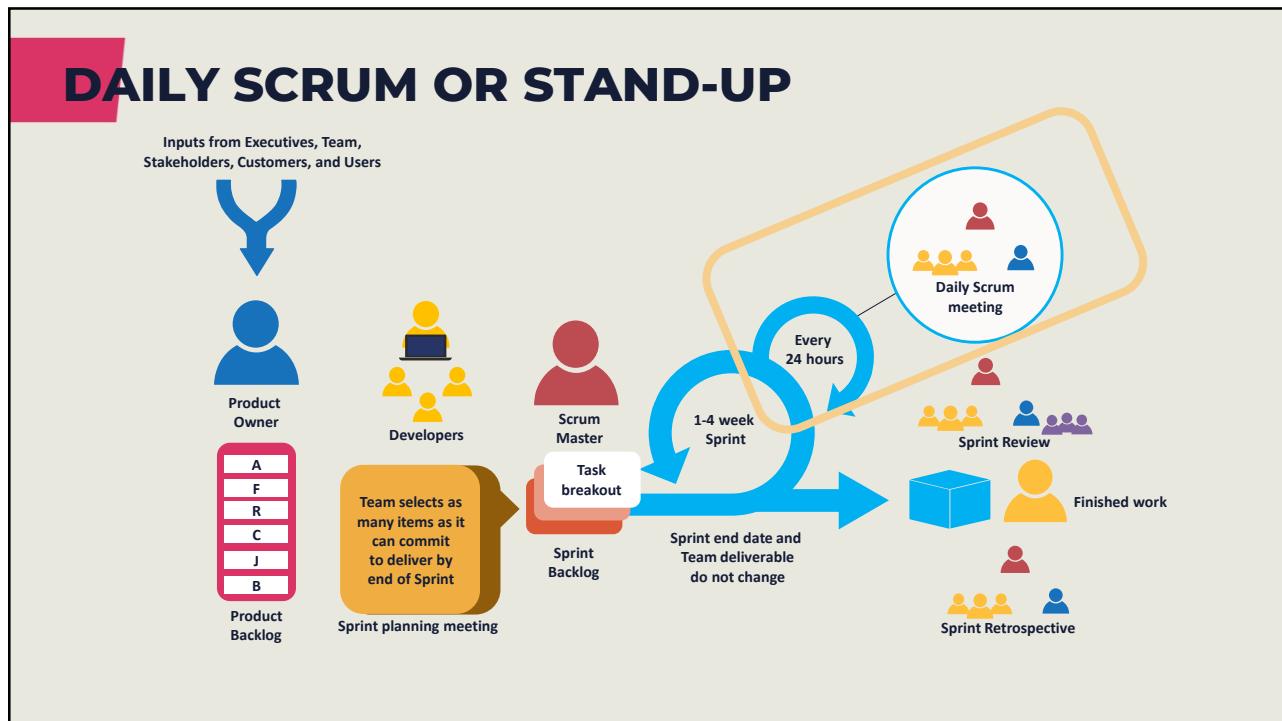
**Sprint Backlog**

**Development Team**

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**Daily Standup**

- ✓ Conducted at a designated time (in the team “ground rules”).
- ✓ Mandatory attendance of everyone in the Sprint.
- ✓ During the meeting, answer:
  - What's been done since the last meeting?
  - What needs to be done before the next meeting?
  - What does anyone need help with?

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## DAILY SCRUM

“What did I do yesterday?”  
 “What will I do today?”  
 “What are my roadblocks?”

- The Daily Scrum is held at the same time and same place each day
- The routine keeps things simple
- Although it is also known as the “Daily Standup”, team members are not required to stand
- Inspect and adapt Sprint backlog
- Identify progress and remaining work against the Sprint goal
- Typically 15 minutes or less
- Reserve off-topic subjects for a separate discussion
- Developers own this event
- Scrum Master and Product Owner presence is helpful but not required



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## ROLES DURING THE DAILY SCRUM

What about upper management outside of the Scrum Team?

Scrum Master	Product Owner	Developers
<ul style="list-style-type: none"> <li>Promotes Scrum best practices <ul style="list-style-type: none"> <li>Stick to the time box</li> <li>Team values</li> </ul> </li> <li>Removes impediments</li> <li>Coaches the team <ul style="list-style-type: none"> <li>Problem solving</li> <li>Roles and responsibilities</li> </ul> </li> <li>Serve as a buffer for the team</li> <li>Attendance not required</li> </ul> 	<ul style="list-style-type: none"> <li>Explains the value of each backlog item</li> <li>Must be easily accessible</li> <li>Answer questions</li> <li>Provide clarification</li> <li>Seek additional clarification from stakeholders</li> <li>Last minute reprioritization</li> <li>May cancel a Sprint</li> <li>Attendance not required</li> </ul> 	<ul style="list-style-type: none"> <li>Lead the conversation</li> <li>Answer three questions <ul style="list-style-type: none"> <li>What did I do yesterday?</li> <li>What do I plan to do today?</li> <li>Do I have any blockers?</li> </ul> </li> <li>Inspect daily progress against the Sprint goal</li> <li>Ask clarifying questions about the user stories</li> </ul> 

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## Task Boards

- ✓ Visualize work and enable the team and stakeholders to track progress as work is performed.
- ✓ Promote visibility and maximize efficiency and accountability.
- ✓ Examples: Kanban boards, to-do lists, procedure checklists, and Scrum boards.

To Do	Work in Progress (WIP)	Done
Item A Estimate: 4  Item D Estimate: 2  Item E Estimate: 8  Item G Estimate: 20	Item C Estimate: 6  Item F Estimate: 18  Item J Estimate: 1 Unplanned	Item B Estimate: 8 Actual: 8



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## PERFORMANCE TRACKING: BURN CHARTS

Burndown and burnup charts

“Information Radiators”

- Generic term for a highly visible information display
- Graphs, charts, data dashboard
- Communication tool
- Shows remaining work for the Sprint
- Trend line shows the running average, and what will likely happen if progress continues at this rate



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## Performance Report Types

Type	Description
Information Radiators	Big visual boards to display in high traffic public locations about the project and the advancement of the project. The aim is to radiate information to all about the project work.
Burndown Chart	A graph to show the progress by plotting the burning down of work during an iteration or other time period.
Burnup Chart	A graph to show the progress and gains made by the project team over time.
Earned Value Management Reports	Graphs and values based on the earned value management (EVM) equations.
Variance Analysis Reports	Graphs and their analysis comparing actual results to expected results.
Work Performance Reports	The physical or electronic representation of work performance information compiled in project documents, intended to generate decisions, actions, or awareness.
Quality Reports	Charts and reports based on the quality metrics collected.
Dashboards	Physical or electronic summaries of the progress, usually with visuals or graphics to represent the larger data set
Task Boards	Physical or electronic depictions of the work that must be done and their current state.



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**“POTENTIALLY”  
RELEASABLE  
PRODUCT INCREMENT**

**Complete and Meets:**

- Acceptance Criteria
- Definition of Done
- No partial credit seeking

**Integration Tested**

- Avoids escaped defects

**Deliverable Now**

- No remaining work, including user instructions, etc.

**Reasons the Product Owner might delay release**

**Costs associated with release:**

- Marketing expenses
- Additional customer support
- Customer’s willingness to adapt
- Inadequate Definition of Done

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## CANCELING A SPRINT

**Only the Product Owner can make the decision**

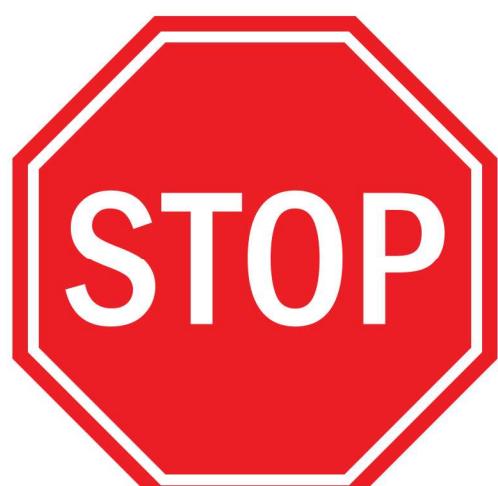
- Sprint goal becomes obsolete
- New constraint in the project environment
- Decision is based on value
- Something else is more urgent

**Done Work**

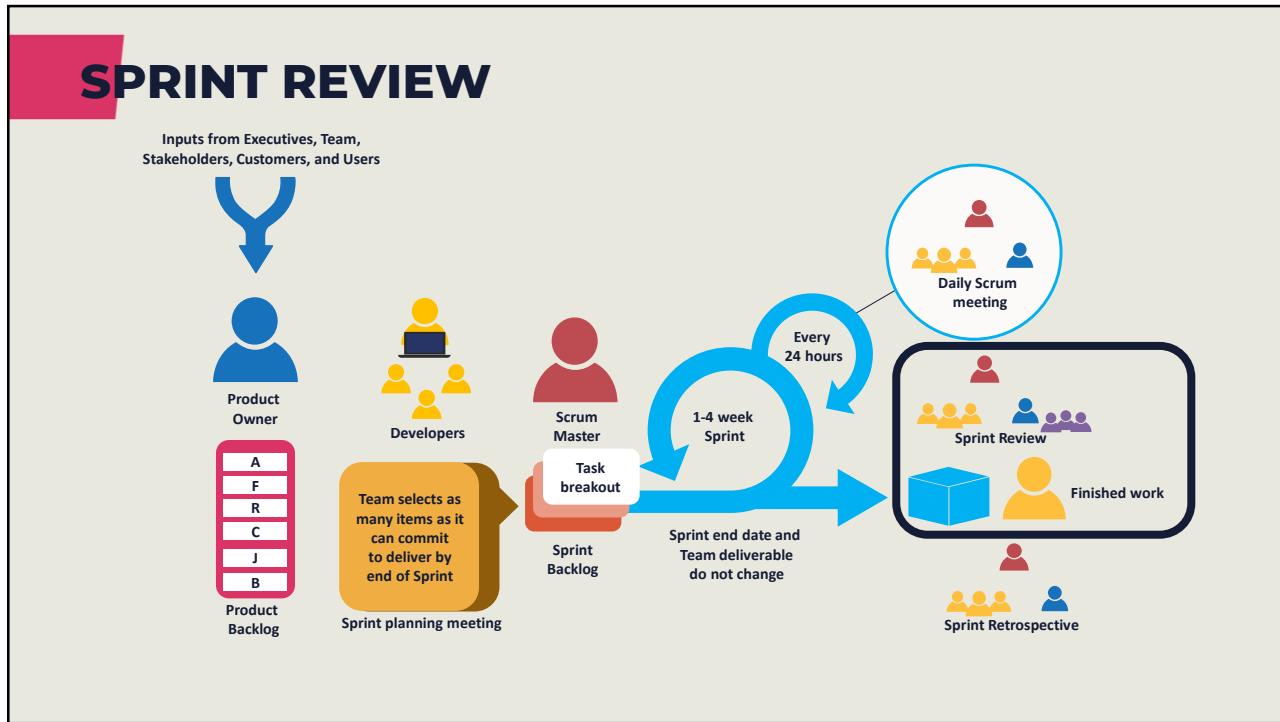
- Determine if there is enough for a Sprint Review

**Work in Progress (WIP)**

- Re-estimate incomplete work and return it to the product backlog



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## ROLES DURING SPRINT REVIEW

### Product Owner

- Presents the product backlog
- Explains progress
  - What was completed
  - Planned items that were not done
- Lead discussion of what to work on next



### Developers

- Demonstrates new product increment
- Answers questions about the product
- Discuss challenges



### Scrum Master

- Facilitates the event
- Promotes adherence to the time box
- Clarify roles and responsibilities



### Stakeholders

- Invited by Product Owner
- Try the new product increment
- Provide feedback



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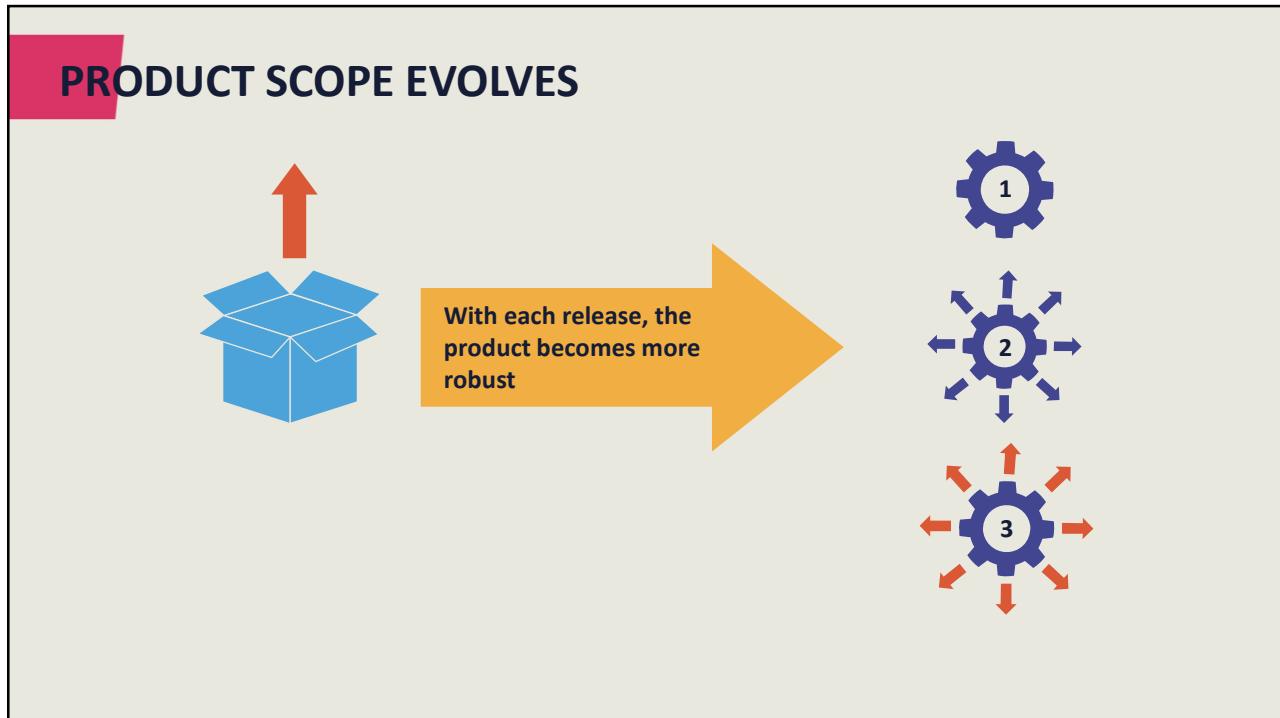
## Tools and Techniques for Verifying Scope

Tool and Technique	Description
Definition of Done	Checklist of required criteria for a deliverable to be considered ready for customer use.
Definition of Ready	Checklist for a user-centric requirement with all required information to begin work.
Acceptance Criteria	A set of conditions to meet before acceptance of deliverables.
Iteration Reviews	Interval at or near the conclusion of a timeboxed iteration when the project team shares and demonstrates the work produced during the iteration with stakeholders.
Variance Analysis	A technique for determining the cause and degree of difference between the baseline and actual performance.
Trend Analysis	An analytical technique that uses mathematical models to forecast future outcomes based on historical results.



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### Re-Assess Product Backlog

- ✓ Work to be done is also called a product backlog.
- ✓ Use backlog assessments and refinements to explore alternatives to overcome or avoid risks, such as removing work items or blockages.

Continually assess the backlog for potential impediments, obstacles, and blockers.

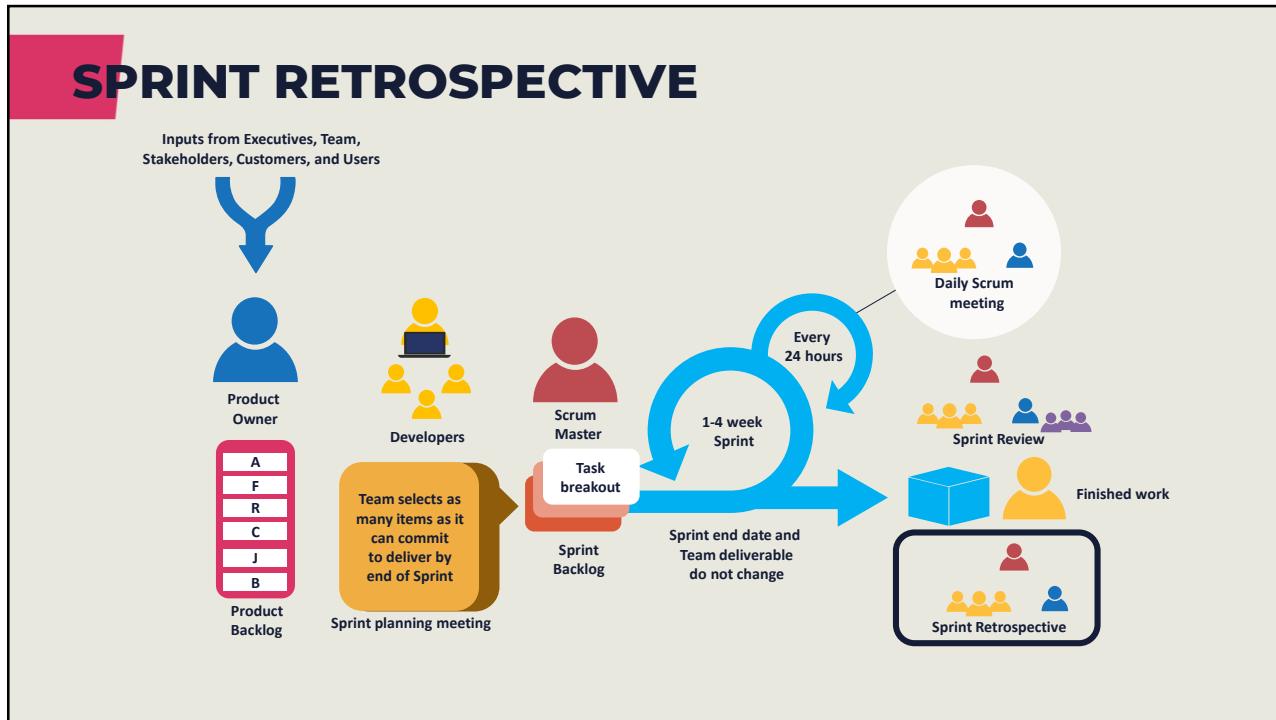
Evaluate impediments against pending work.

Also assess scheduled activities and other lists of work items.

The team and business stakeholders must assess the work backlog work in terms of value and priority.



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## Retrospective

- ✓ A regular check on the effectiveness of quality processes
- ✓ Look for the root cause of issues then suggest trials of new approaches to improve quality.
- ✓ Evaluate any trial processes to determine if they are working and should be continued, need adjusting or discontinued.

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## SPRINT RETROSPECTIVE

### Participants

- The Scrum Team
  - Developers
  - Scrum Master
  - Product Owner

### Evaluate the last Sprint

- People
- Processes
- Tools

### Plan improvements for next iteration

#### Examples:

Do we need to change our Definition of Done?

Are we communicating well?

Do we need to build any of our skills?

Typically .75 hours per week of Sprint



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## ROLES DURING THE RETROSPECTIVE

What about upper management and stakeholders outside of the Scrum Team?

### Scrum Master

- Promotes Scrum best practices
  - Stick to the time box
  - Reminder of team values
- Facilitates the meeting
- Introduces team-building exercises
- Guides problem solving and goal setting
- Participates in the discussion
- Commits to continuous improvements



### Product Owner

- Attends as a member of the Scrum Team
- Participates in the discussion
- Commits to continuous improvements



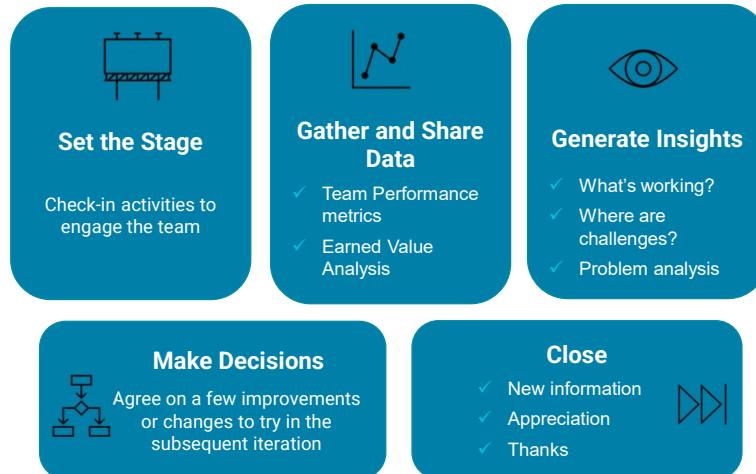
### Developers

- Attend as members of the Scrum Team
- Participates in the discussion
- Commits to continuous improvements



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## How To Conduct a Retrospective



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## Implement Results of Retrospectives/Lessons Learned

- ✓ **Rank** the opportunities by importance and urgency.
- ✓ **Incorporate tasks necessary** to realize the improvements.
- ✓ **Apply ideas** to the team environment.



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## Your PMP ATP Bootcamp Course Syllabus

	<b>Creating a High-Performing Team</b> <b>Lesson 1</b>	<b>Starting the Project</b> <b>Lesson 2</b>	<b>Doing the Work</b> <b>Lesson 3</b>	<b>Keeping the Team on Track</b> <b>Lesson 4</b>	<b>Keeping the Business in Mind</b> <b>Lesson 5</b>
Topic A	Build a Team	Determine Appropriate Project Methodology/Methods and Practices	Assess and Manage Risks	Lead a Team	Manage Compliance Requirements
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Topic G	Build Shared Understanding about a Project	Plan and Manage Procurement	Manage Project Issues	Apply Emotional Intelligence to Promote Team Performance	
Topic H		Establish Project Governance Structure	Ensure Knowledge Transfer for Project Continuity		
Topic I		Plan and Manage Project/Phase Closure			

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## BOOTCAMP DAILY SURVEY



LOOK FOR THE SURVEY LINK IN THE CHAT

Our goal is to provide the best possible Bootcamp experience for a live streaming webinar, with hundreds of participants.

For each Bootcamp session,

- Let us know **what you liked** about the experience – your comments really matter.
- Please include a thank you **to the mentor(s)** working off camera.
- If you have **recommendations**, share those too!

**We sincerely value your opinion!**

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## Additional Resources

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A composite image featuring a red rectangular box on the left and a white background on the right. Inside the red box, the words "VOCABULARY" and "FROM TODAY'S SESSION" are printed in white, bold, sans-serif font. To the right, an open book is shown from a top-down perspective, with its pages filled with text. A small speaker icon is located in the bottom right corner of the white area.

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## Product Roadmap



### DEFINITION

A strategic document and plan which guides why the product will be delivered and how the product will meet objectives and the product vision.



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## Minimum Viable Product (MVP)



### DEFINITION

The smallest collection of features that can be included in a product for customers to consider it functional ("bare bones" or "no frills" functionality in Lean).



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## Minimum Business Increment (MBI)



DEFINITION

In Disciplined Agile - the smallest amount of value that can be added to a product or service that benefits the business.



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## Value Stream Map



DEFINITION

A lean enterprise technique used to document, analyze, and improve the flow of information or materials required to produce a product or service for a customer.



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## Daily Standup (Daily Scrum)



### DEFINITION

A brief, daily collaboration meeting in which the team reviews progress from the previous day, declares intentions for the current day, and highlights any obstacles encountered or anticipated.



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## Overview - Agile Ceremonies

In a **sprint planning meeting**, the team collaborates to plan work for the current sprint.

**A sprint** is a timeboxed iteration in **Scrum**.

Scrum is an **agile framework** for developing and sustaining complex products, with specific roles, events, and artifacts.



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## More Agile Ceremonies

Hold **daily standups**—short (10-15 minute) daily meetings—for the team to reaffirm commitment to objectives for the iteration, identify potential blockers, and coordinate the day's work.

In a **Sprint Review** at the end of each iteration, the Product Owner and other customer stakeholders review progress and receive feedback for that iteration.

A Scrum Master facilitates a **Sprint Retrospective** for the team to identify improvements. They review the team's processes and practices and identify ways to improve performance and collaboration.

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