

PROFESSIONAL SCRUM MASTER LEVEL 1 (PSM I) EXAM PREP

BOOTCAMP SESSION 2

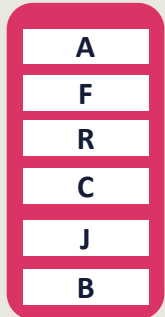
Instructor: Barb Waters, MBA, PMP
Class will begin at 11:00 am Eastern Time

DAILY SCRUM OR STAND-UP

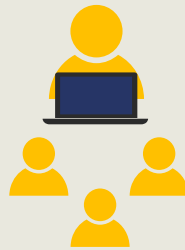
Inputs from Executives, Team,
Stakeholders, Customers, and Users



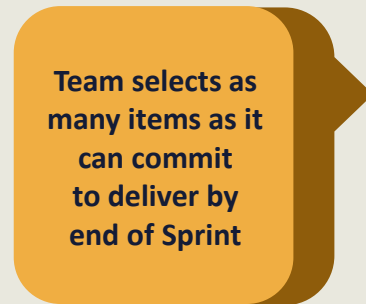
Product
Owner



Product
Backlog



Developers

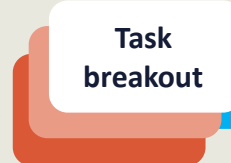


Sprint planning meeting

Team selects as
many items as it
can commit
to deliver by
end of Sprint



Scrum
Master



Sprint
Backlog

Task
breakout

1-4 week
Sprint

Sprint end date and
Team deliverable
do not change

Every
24 hours



Daily Scrum
meeting



Sprint Review



Finished work



Sprint Retrospective

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



ROLES DURING THE DAILY SCRUM

What about upper management outside of the Scrum Team?

Scrum Master

- Promotes Scrum best practices
 - Stick to the time box
 - Team values
- Removes impediments
- Coaches the team
 - Problem solving
 - Roles and responsibilities
- Serve as a buffer for the team
- Attendance not required



Product Owner

- Explains the value of each backlog item
- Must be easily accessible
- Answer questions
- Provide clarification
- Seek additional clarification from stakeholders
- Last minute reprioritization
- May cancel a Sprint
- Attendance not required



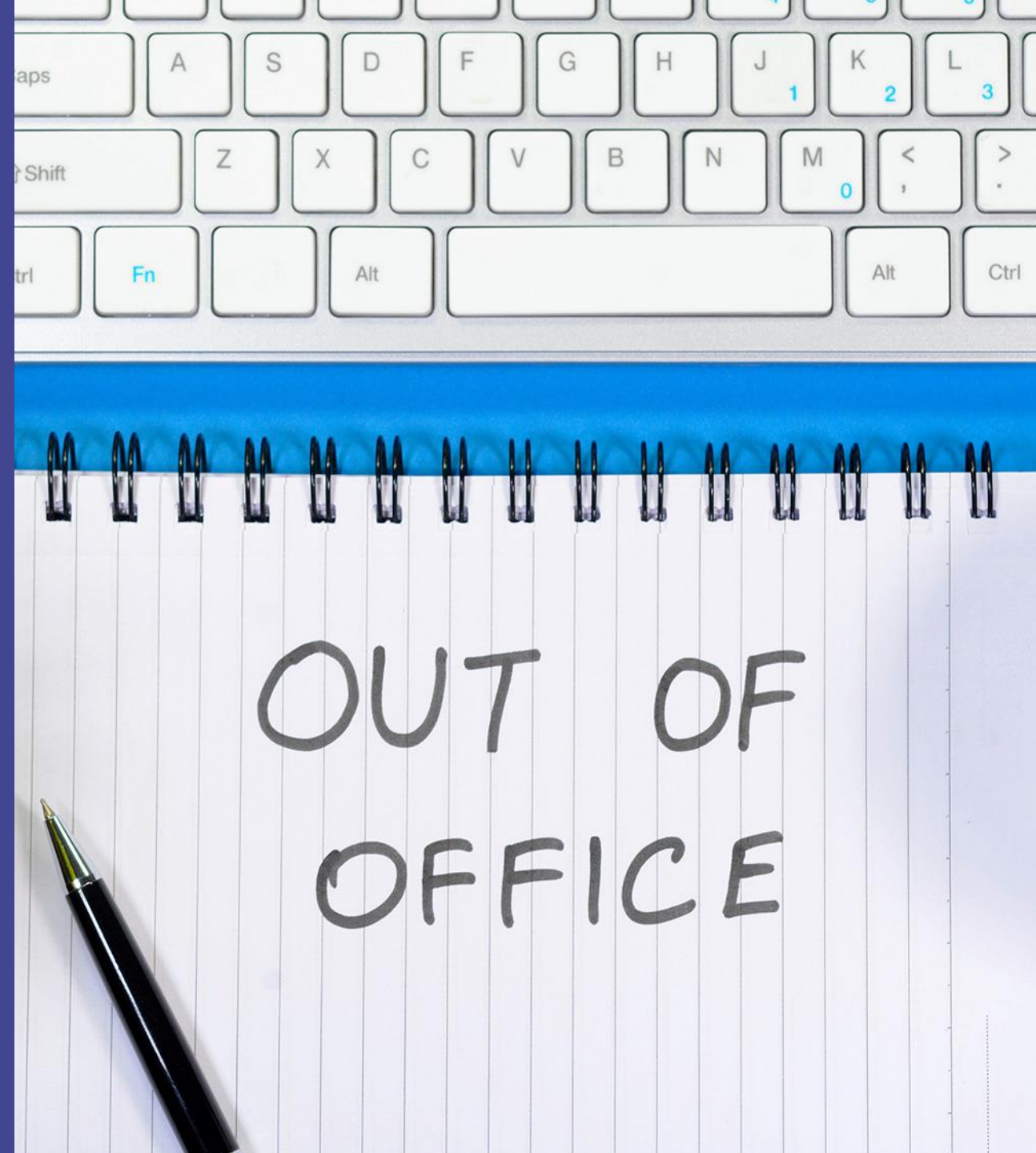
Developers

- Lead the conversation
- Answer three questions
 - What did I do yesterday?
 - What do I plan to do today?
 - Do I have any blockers?
- Inspect daily progress against the Sprint goal
- Ask clarifying questions about the user stories



IN CASE OF ABSENCE

- The Product Owner or Scrum Master will not be available to attend today's Daily Standup/Scrum.
- What should the team do? Should they meet, or should they cancel?



SCRUM OF SCRUMS

Used to scale Agile

- When teams are >12 members
- Each team selects an ambassador

Report on

- Completions
- Next steps
- Impediments

Resolve coordination challenges between teams

Scrum of Scrums has its own backlog of these items

May meet a few times per week



Team A



Team B



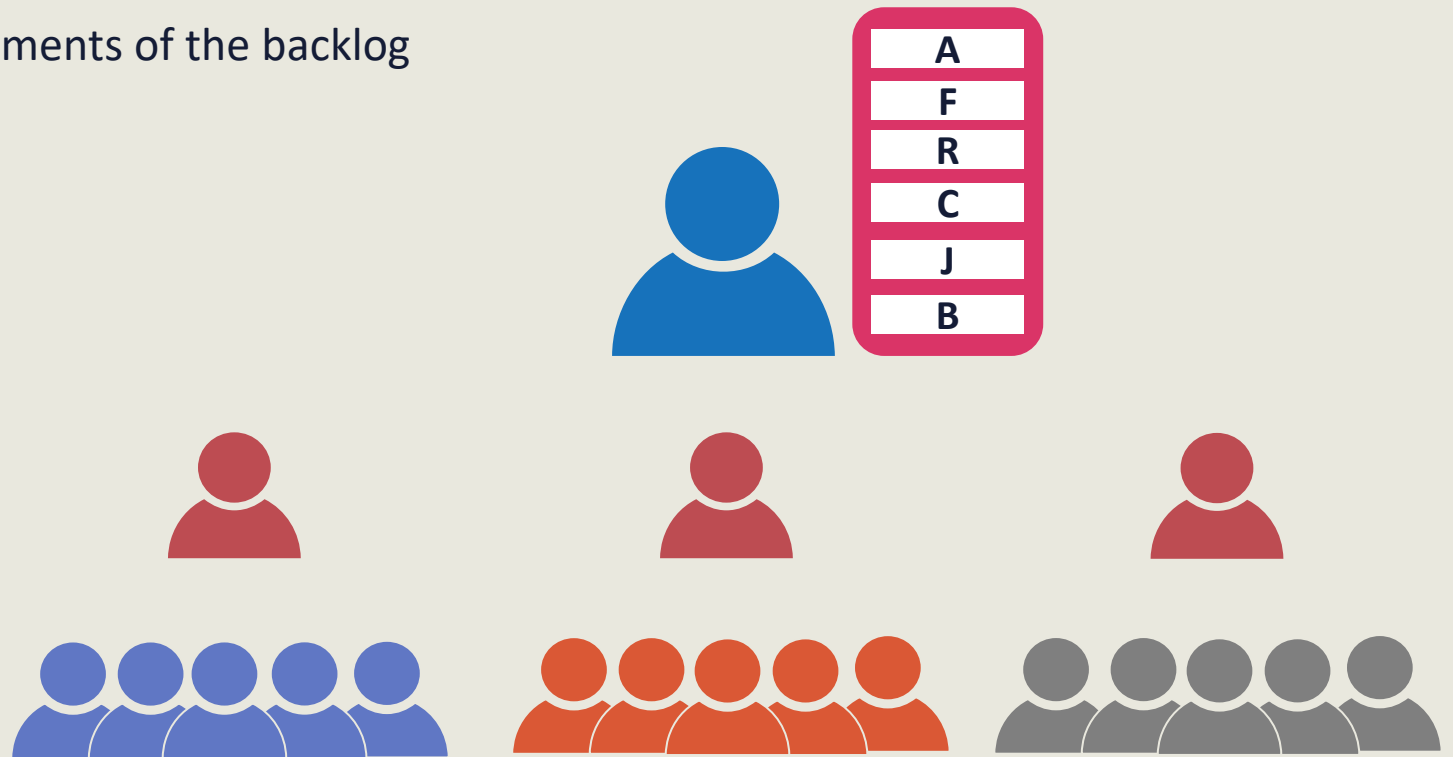
Team C



Scrum of Scrums

MULTIPLE DEVELOPER TEAMS

- One Product Owner
- One Product Backlog
- Multiple Developer teams working on increments of the backlog
- Each Developer team has a Scrum Master





SELF-ORGANIZED AND SELF-MANAGING

- 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



FEATURE TEAM



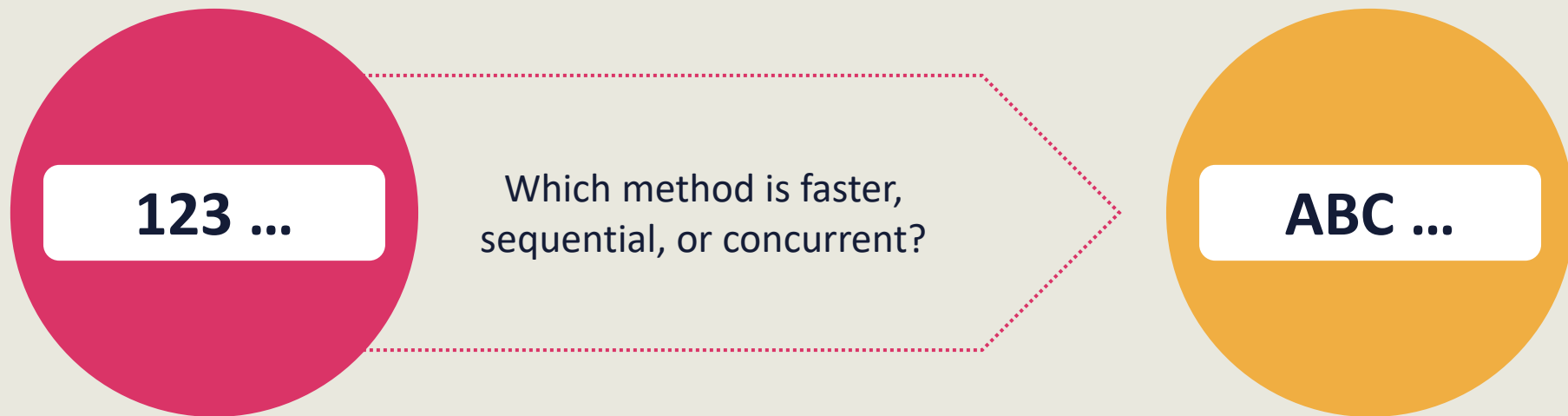
- More modern
- Focuses on customer view
- Requires cross-functionality
- Whole team ownership of tasks
- Reduces bottlenecks
- Requires strong team collaboration
- Communication centered around the user story

COMPONENT TEAM



- Older approach
- Focuses on developer view and a specific technical layer (UI, database, etc..)
- Team members are specialized
- Tasks are divided and assigned
- Can create dependencies
- Tasks are more sequential/waterfall
- Communication centered around tasks

TASK SWITCHING

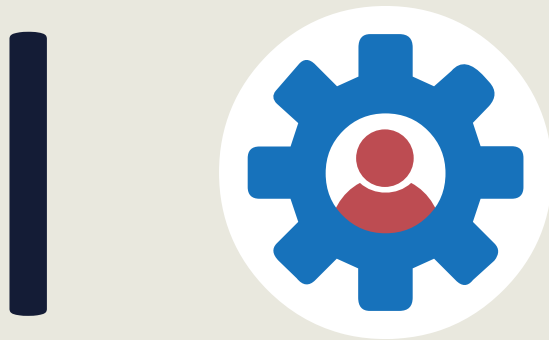


SPECIALISTS VS. GENERALISTS

I-shaped

- Specialist
- Narrow skillset
- More hand-offs required

“I have one main skill”



T-shaped

- Generalizing specialist
- Not multi-tasking!
- Allows teams to “swarm” on a task

“I have many skills”



SPECIALISTS (I-SHAPED)

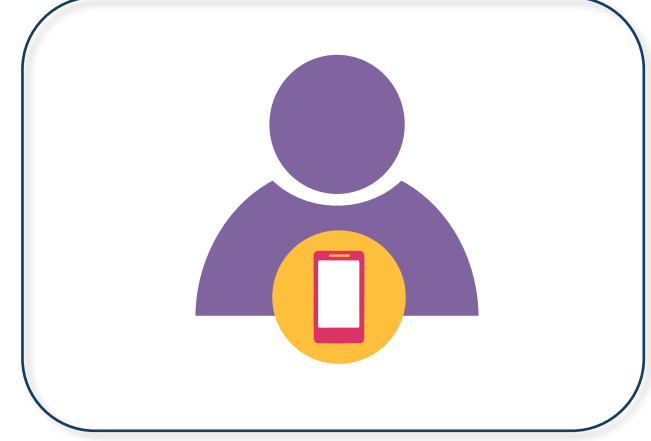
"We only design"



"We only code"



"I only test"



GENERALIZED SPECIALISTS (T-SHAPED)

"We only design"



"We can code
and test"



"I can code
and test"

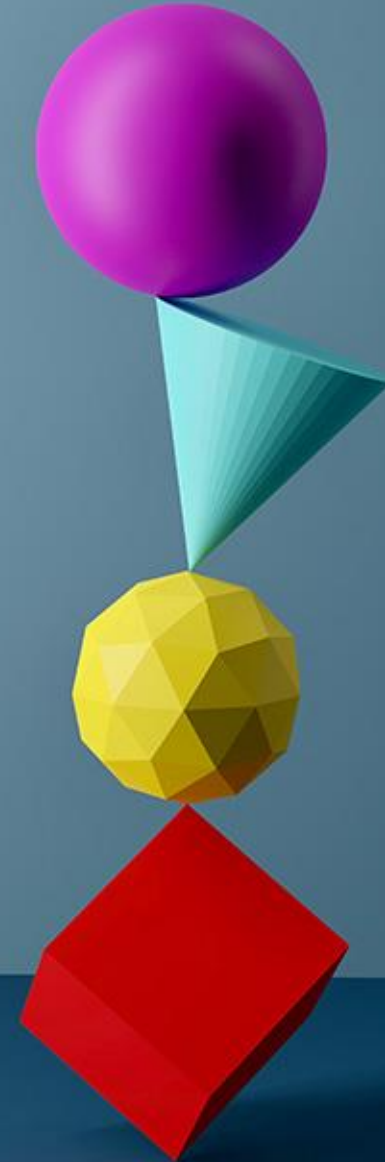


Ready
for
release



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



COACHING AND FACILITATING

The Scrum Master will challenge Scrum Team members to work through problems and collaborate to reach solutions.

Scrum Master coaches the team and teaches techniques for:

- problem solving
- decision making
- adhering to Scrum best practices

The Scrum Master does not:

- solve the team's problems
- make decisions for the team
- dictate how work will be done





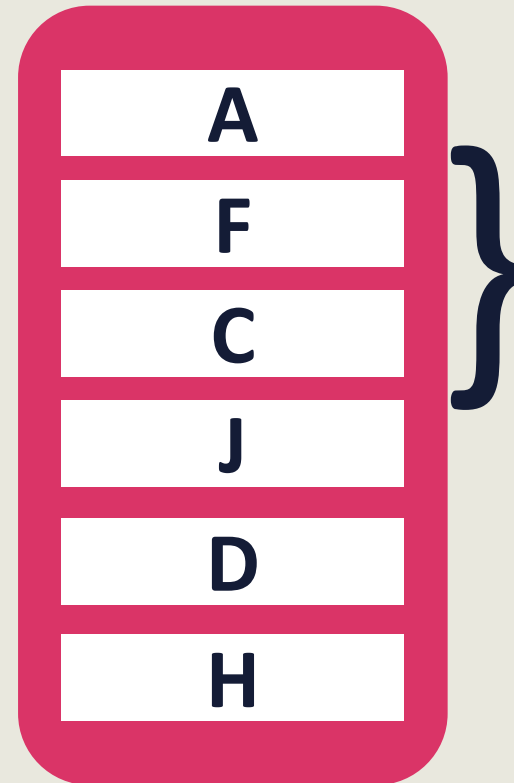
PROBLEM WITH MULTIPLE PRODUCT OWNERS

- “The Product Owner is one person, not a committee” - Scrum Guide
- One Product Backlog = One Product Owner
- Promotes personal accountability
- Reduces complexity
- Exceptions may include large-scale Scrum framework that split the backlog (outside of the PSM-1 scope)

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



Developers



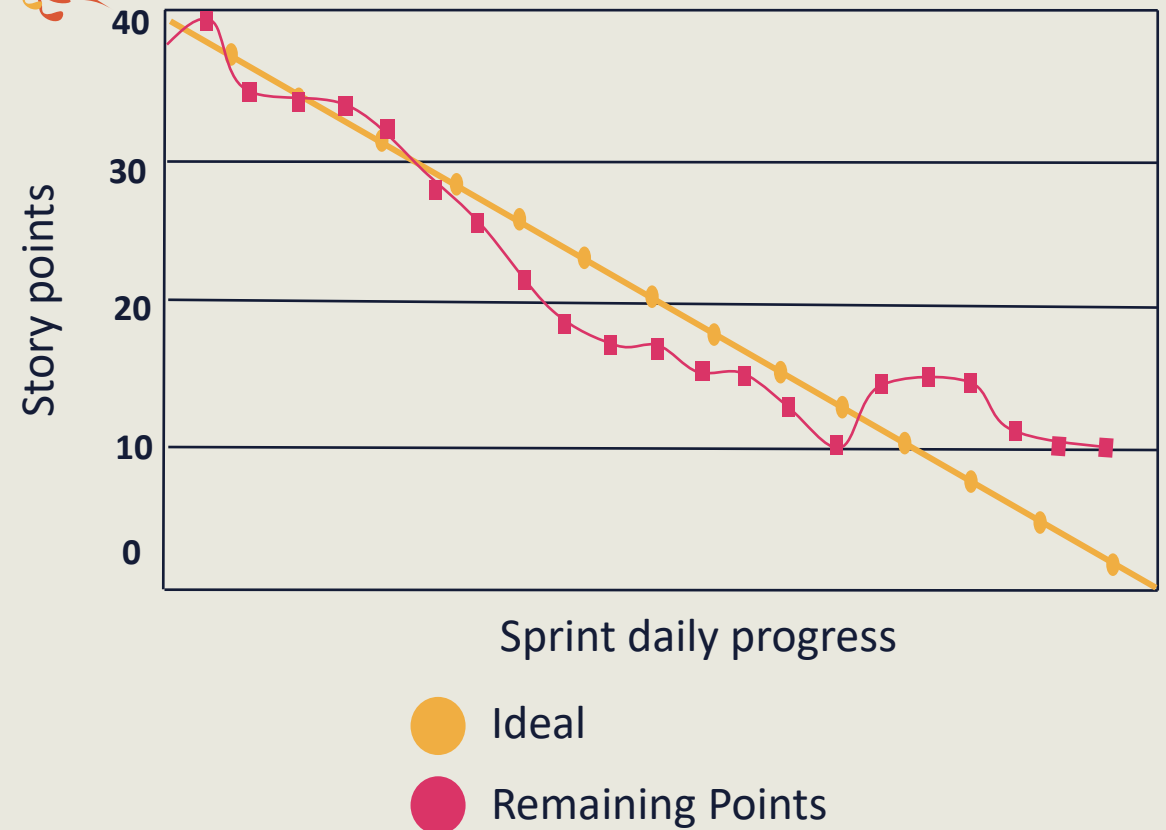
PERFORMANCE TRACKING: BURN CHARTS



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



**THE SPRINT GOAL
IS UNREALISTIC.**

What should the Developers do?



STAGES OF TEAM DEVELOPMENT

Also known as the Tuckman Ladder

1

Forming

2

Storming

3

Norming

4

Performing

5

Adjourning

Not typical in Scrum



Team members may change, and productivity may be temporarily impacted

INVESTING IN TEAM MEMBERS

A team member doesn't have adequate skills. What should I do?

?



Scrum Master



Employee

REMOVING TEAM MEMBERS

- Disruptive team members can be considered an impediment
- Who has the authority to remove a team member?
- Suggestions are presented by the Scrum Master to management outside of the team

I have tried to coach a team member but nothing I do helps. They are so disruptive, and it is hurting the team's performance. What should I do?



Scrum Master



Developer

%*#&!



HIRING TEAM MEMBERS

- Who decides if the Scrum Team can hire more developers?
- Who conducts the interviews?
- Who decides how the development team will be organized?

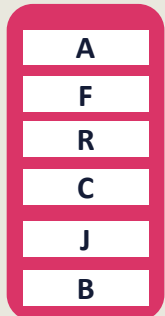


SPRINT REVIEW

Inputs from Executives, Team,
Stakeholders, Customers, and Users



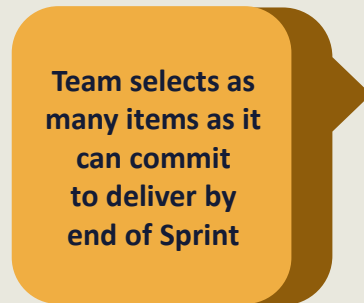
Product
Owner



Product
Backlog



Developers



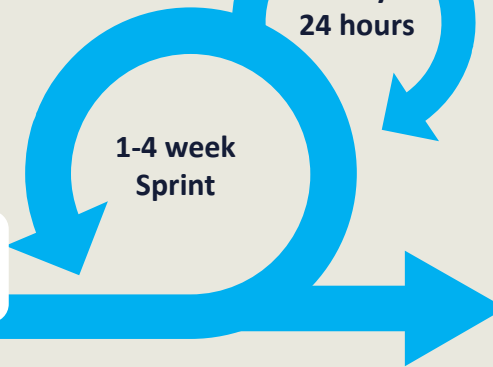
Sprint planning meeting



Scrum
Master



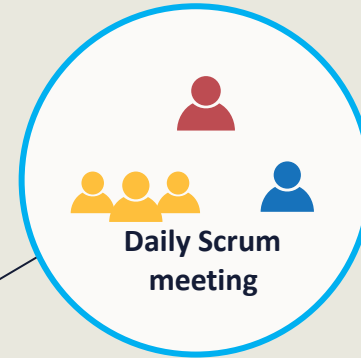
Sprint
Backlog



1-4 week
Sprint

Sprint end date and
Team deliverable
do not change

Every
24 hours



Daily Scrum
meeting



Sprint Review

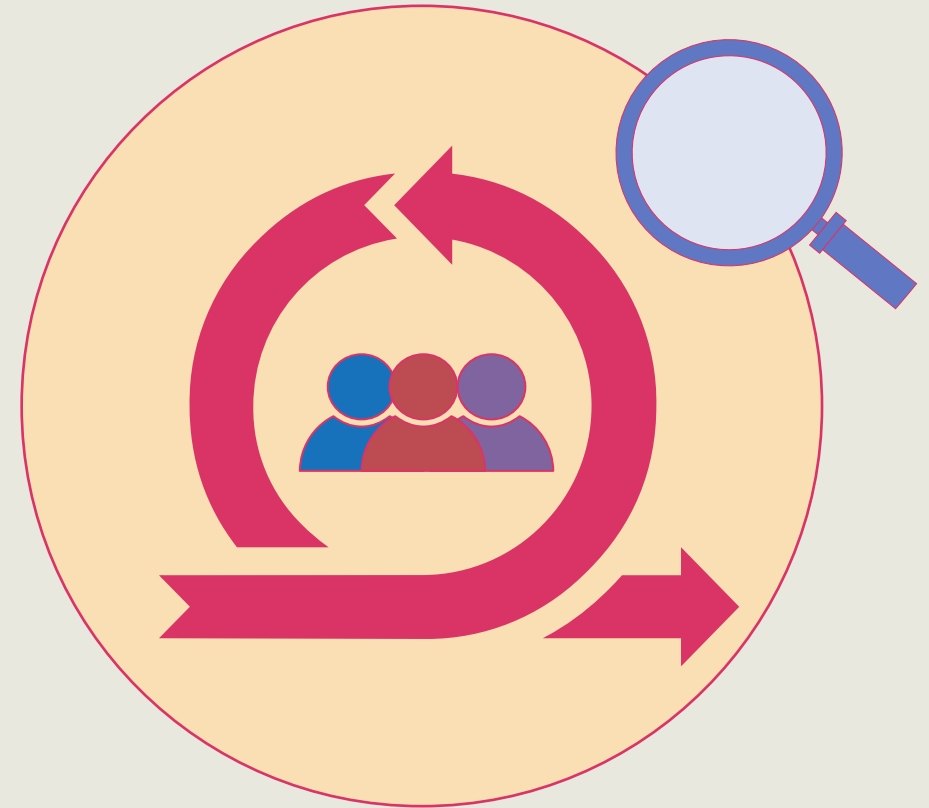
Finished work



Sprint Retrospective

SPRINT REVIEW

- Occurs at the end of a Sprint
- Participants
 - Developers
 - Scrum Master
 - Product Owner
 - Stakeholders (invited by Product Owner)
- Developers demos the product to product owner and possibly stakeholders
- Scrum Team and stakeholders inspect deliverables
- Elicit feedback and foster collaboration
- Team and product owner adapt product backlog if necessary
- Typically 1 hour per week of Sprint



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



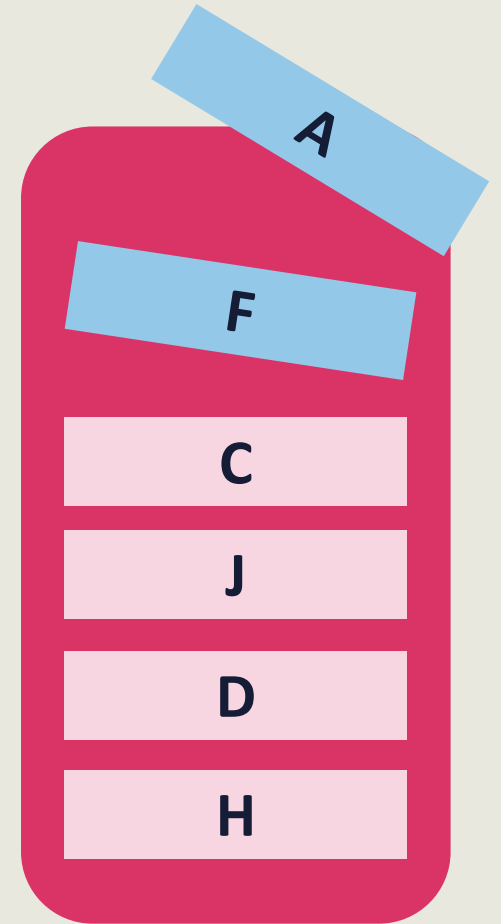


SPRINT REVIEW BEST PRACTICES

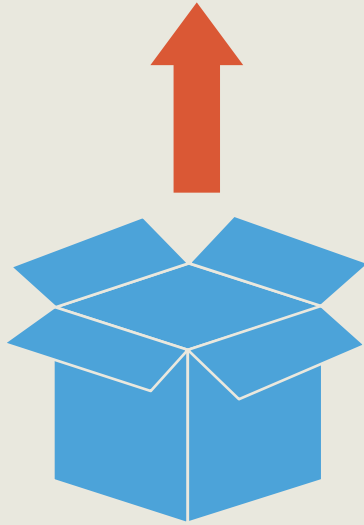
- Put the item in the hands of the customers
- Observe their interaction with the product
- Ask probing questions
- Maintain a friendly and informal environment
- Thank the stakeholders for their time and feedback

PRODUCT INCREMENT

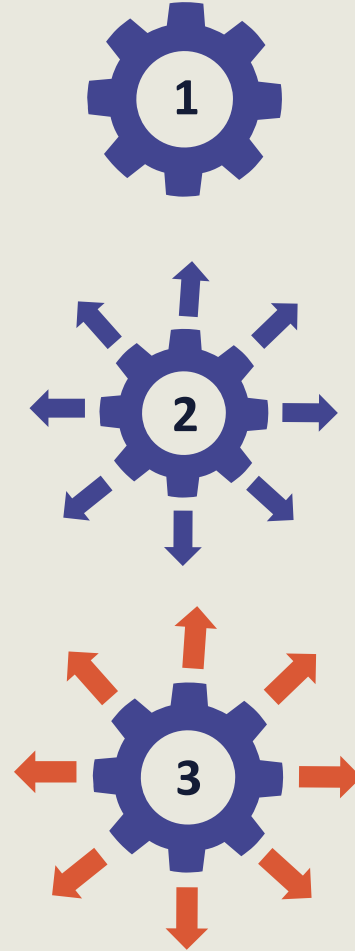
- The result of the latest Sprint
- Demo during Sprint Review
- Must meet the “Definition of Done” established during planning



PRODUCT SCOPE EVOLVES



With each release, the product becomes more robust



SPRINT REVIEW

- Informal gathering
- Elicit feedback
- Does it solve a problem?
- Does it serve a purpose?
- Is it user friendly?





“POTENTIALLY” RELEASABLE PRODUCT INCREMENT

Complete

Acceptance Criteria

Definition of Done

Tested

Avoid 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**

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





SPRINT CADENCE

Maintain consistency

- Cadence is like a regular heartbeat
- Sprint durations should be equal
- Sprints shouldn't exceed one month
- Determines frequency of stakeholder interaction

Considerations for a canceled Sprint

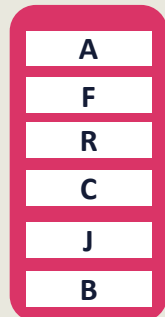
- Changing the cadence can disrupt the rhythm
- Shorten the Sprint by moving up the Sprint Review (if any) and the Retrospective
- Easier with shorter Sprints
- Product Owner will decide how cancelation impacts the cadence

SPRINT RETROSPECTIVE

Inputs from Executives, Team,
Stakeholders, Customers, and Users



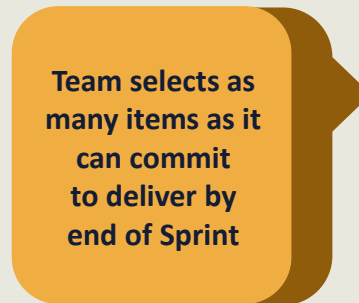
Product
Owner



Product
Backlog



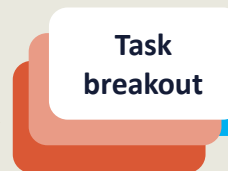
Developers



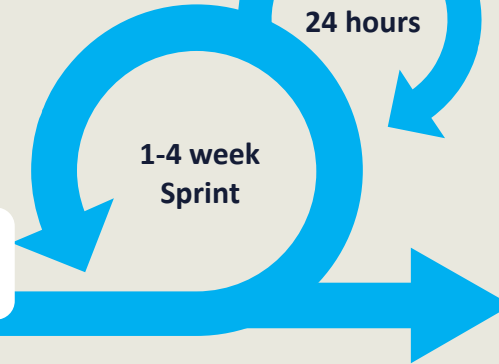
Sprint planning meeting



Scrum
Master



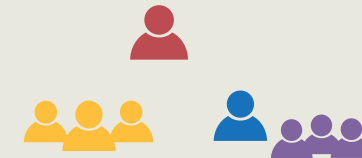
Sprint
Backlog



Sprint end date and
Team deliverable
do not change



Daily Scrum
meeting



Sprint Review



Finished work



Sprint Retrospective

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



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

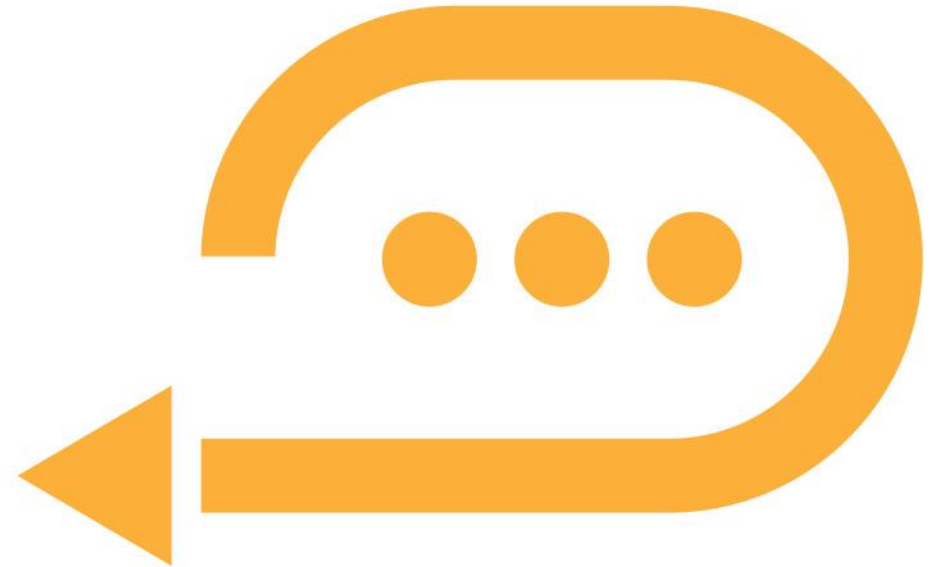
- Attend as a members of the Scrum Team
- Participates in the discussion
- Commits to continuous improvements



FEEDBACK LOOPS

A feedback loop is an opportunity to Inspect and Adapt, two of the three Scrum Pillars

- Daily Scrum
- Sprint Review
- Sprint Retrospective





DO WE REALLY NEED THE RETROSPECTIVE?

- The Scrum Team is high-performing
- Everyone is getting along well
- The Retrospective takes time
- Can we skip it?

MAINTAINING THE SCRUM FRAMEWORK

- Meeting is already on the calendar
- There is an appropriate time for discussion
- Allows the Developers to focus on work
- Retrospective is part of inspecting and adapting



SPRINT RETROSPECTIVE TOPICS



What went well

Best practices



What could be better

Areas of opportunity



Next sprint

Team commitments

LESSONS LEARNED



Small steps for incremental
improvements



MAD, SAD, GLAD EXERCISE



Mad

Fix for the future

Sad

It's in the past

Glad

Keep doing this

FORCE FIELD ANALYSIS





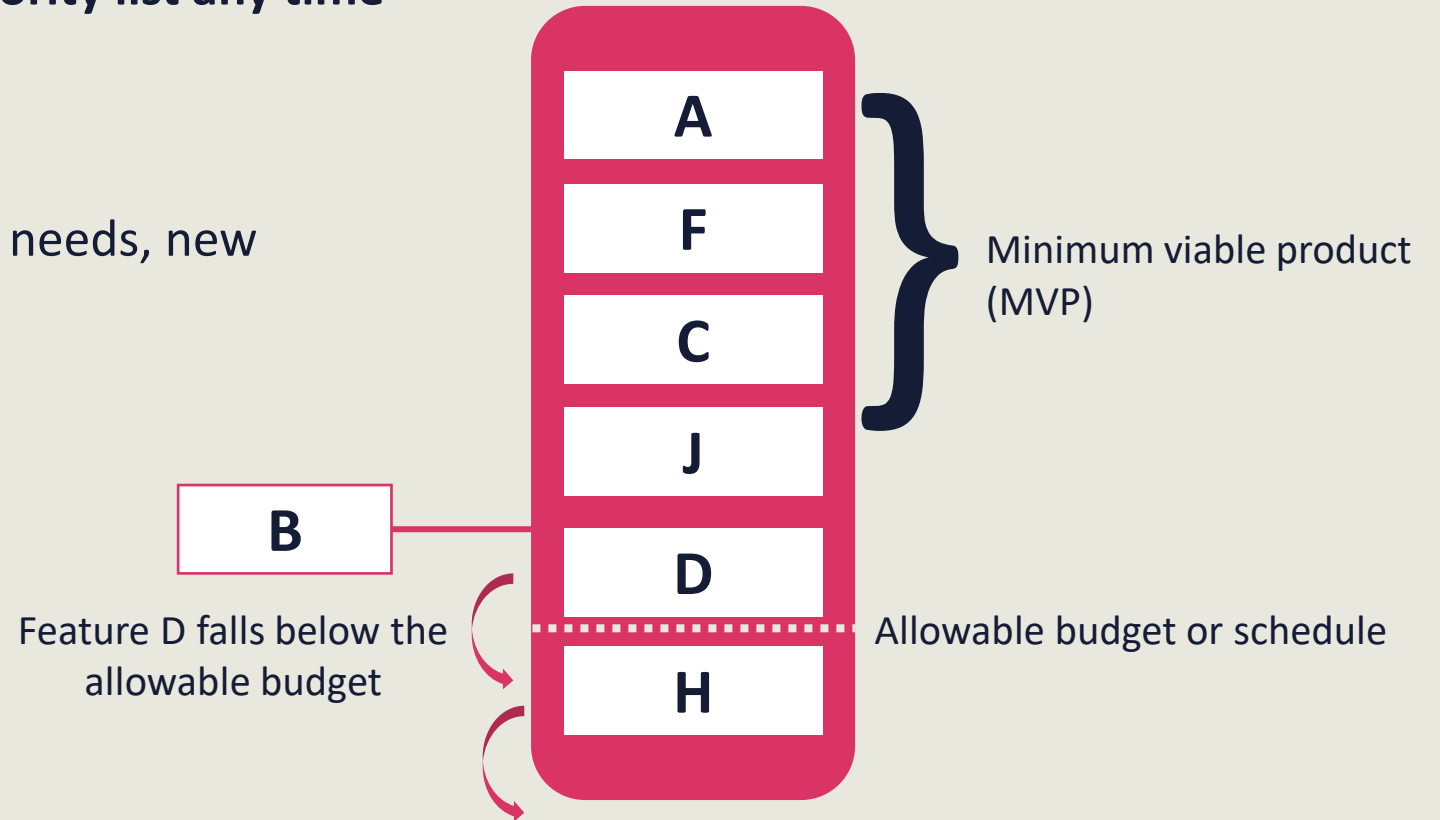
SAFE ENVIRONMENT

- Ask for help
- Share problems
- Admit mistakes
- Understand barriers to lessons learned
- Kaizen
 - Small, achievable steps
 - Identify and remove impediments
 - SMART goals

BACKLOG REFINEMENT

New features can be inserted into the priority list any time

- Not a Scrum meeting
- Product owner decides priority
- Constantly changes based on customer needs, new learning, and value



TECHNICAL DEBT

- “We’ll deal with that later”
- Intentional decision
- Tool for getting ahead
- Choose speed over perfection
- Must be repaid or productivity will decrease
- Should be part of regular communication with product owner
- Prioritize maintenance in the product backlog, along with new development

Ward Cunningham coined the term “Technical Debt” and likened it to a bank loan.



SPRINT TO SPRINT

- There is no gap in between Sprints
- Start the next Sprint Planning immediately after the Sprint Retrospective
- This continues indefinitely



TIPS FOR A REALISTIC PRODUCT BACKLOG

- Set a target of 100 items
- Drop bottom-dwellers
- Consider a separate archive

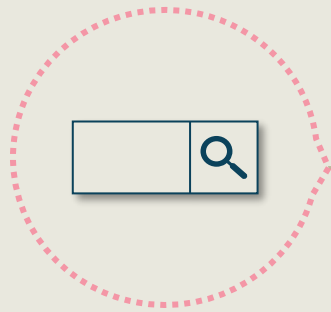


MINIMUM VIABLE PRODUCT

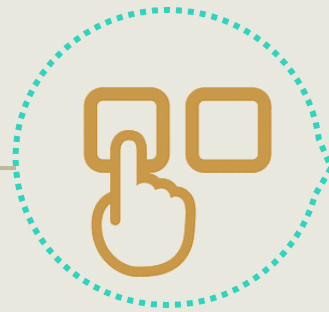
- Customer Journey
- Story Map
- End-to-end functionality
- Example: video streaming service



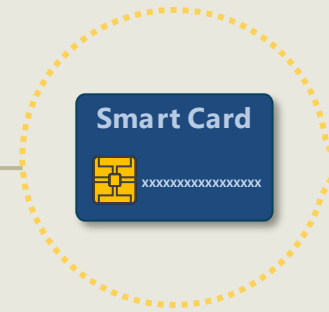
Log in



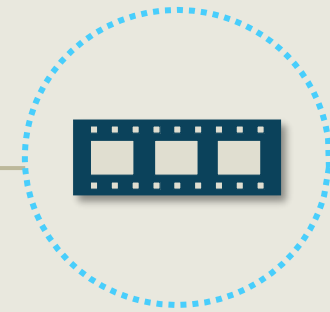
Perform search



Select a movie



Make payment

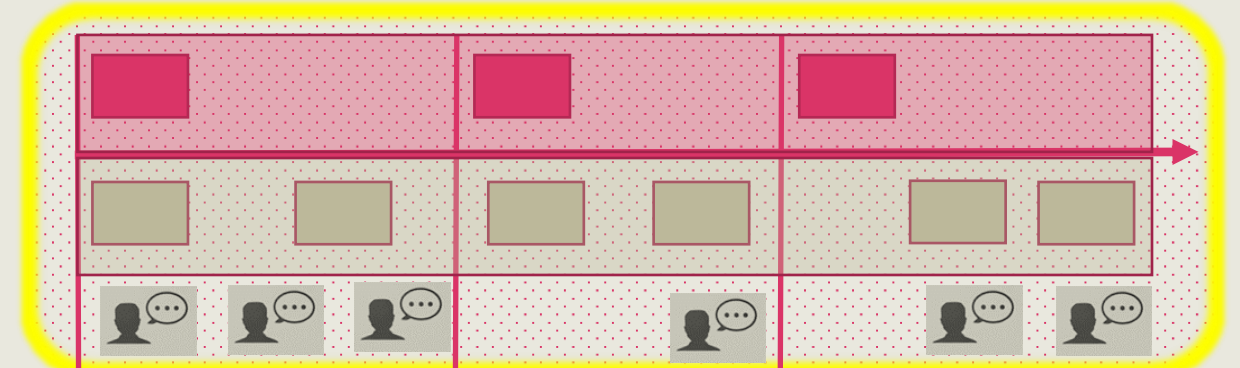


Watch movie

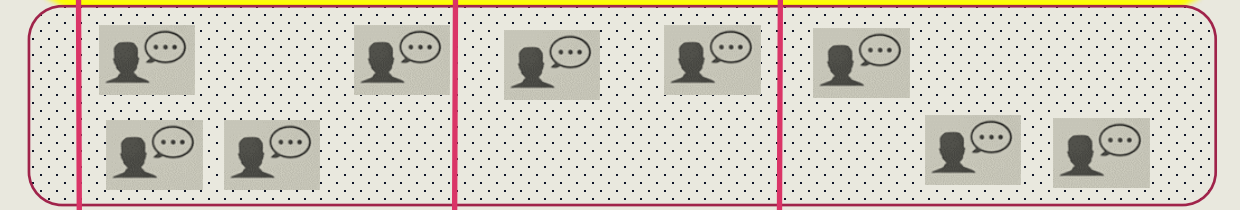
PRODUCT ROADMAP

- 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

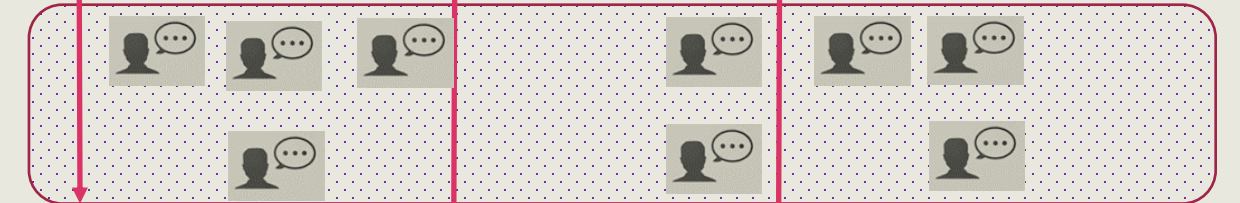
1st release



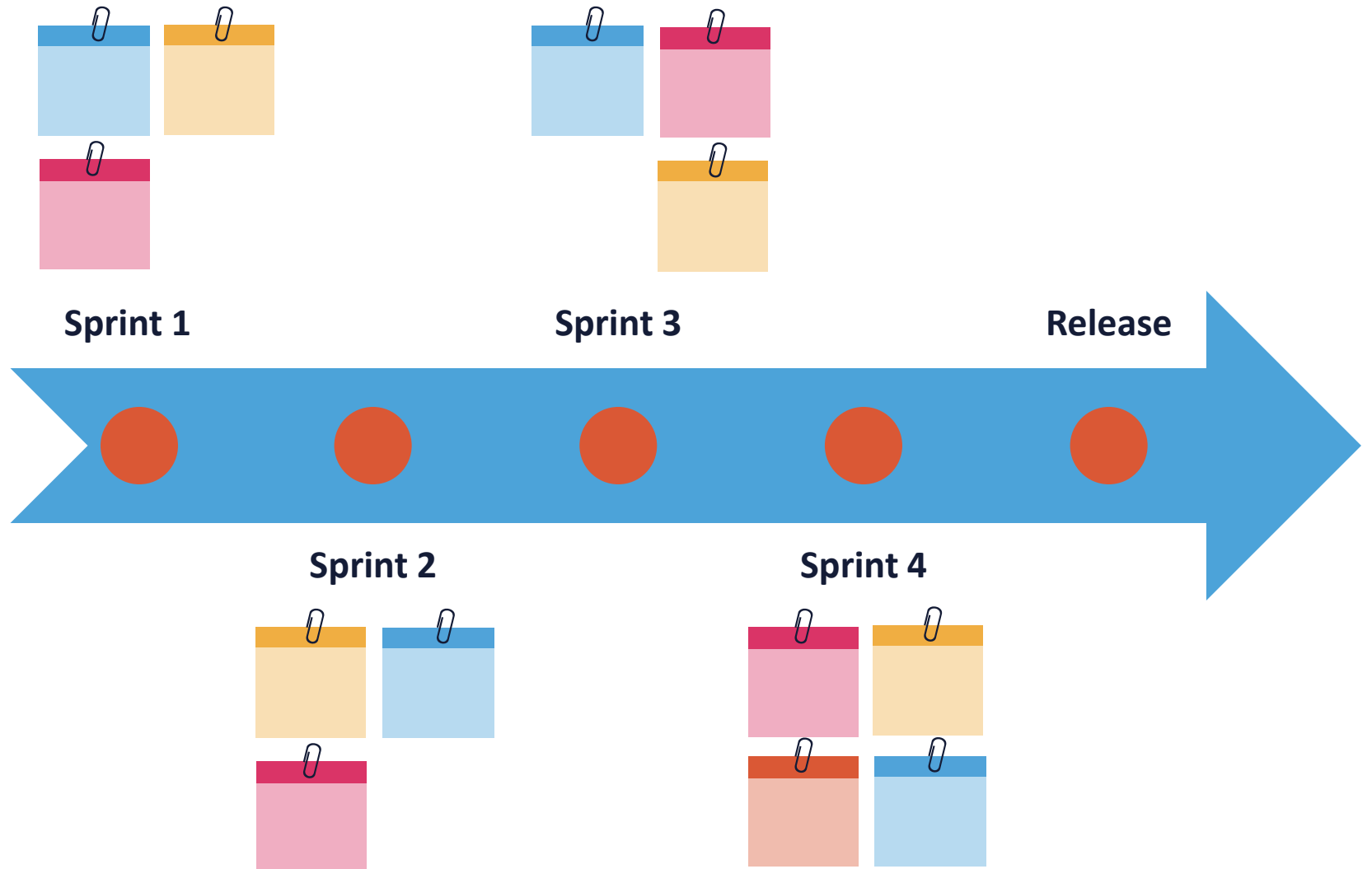
2nd release



3rd release



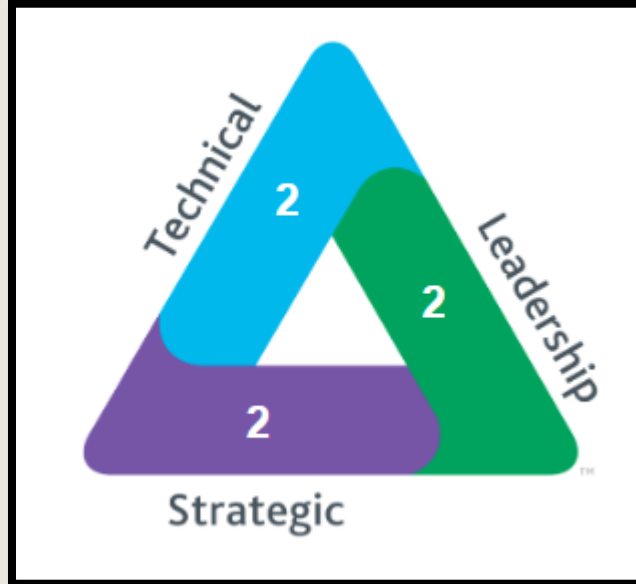
SAMPLE RELEASE PLAN



PMI RECERTIFICATION (PDUs)

If you have a PMI certification, you may use the PDU claim code below to claim six (6) Professional Development Units (PDUs) for this course.

PDU Claim Code 1008WJX7ZA





DAILY BOOTCAMP SURVEY

At the end of each Bootcamp session please let us know how we are doing. Your feedback helps us to offer the best possible Bootcamp experience.

Please share your thoughts