



Agile - 2



CLARUSWAY[©]
WAY TO REINVENT YOURSELF

Did you finish
the Agile (Scrum & Kanban)
pre-class activity?



Students choose an option

Pear Deck Interactive Slide
Do not remove this bar

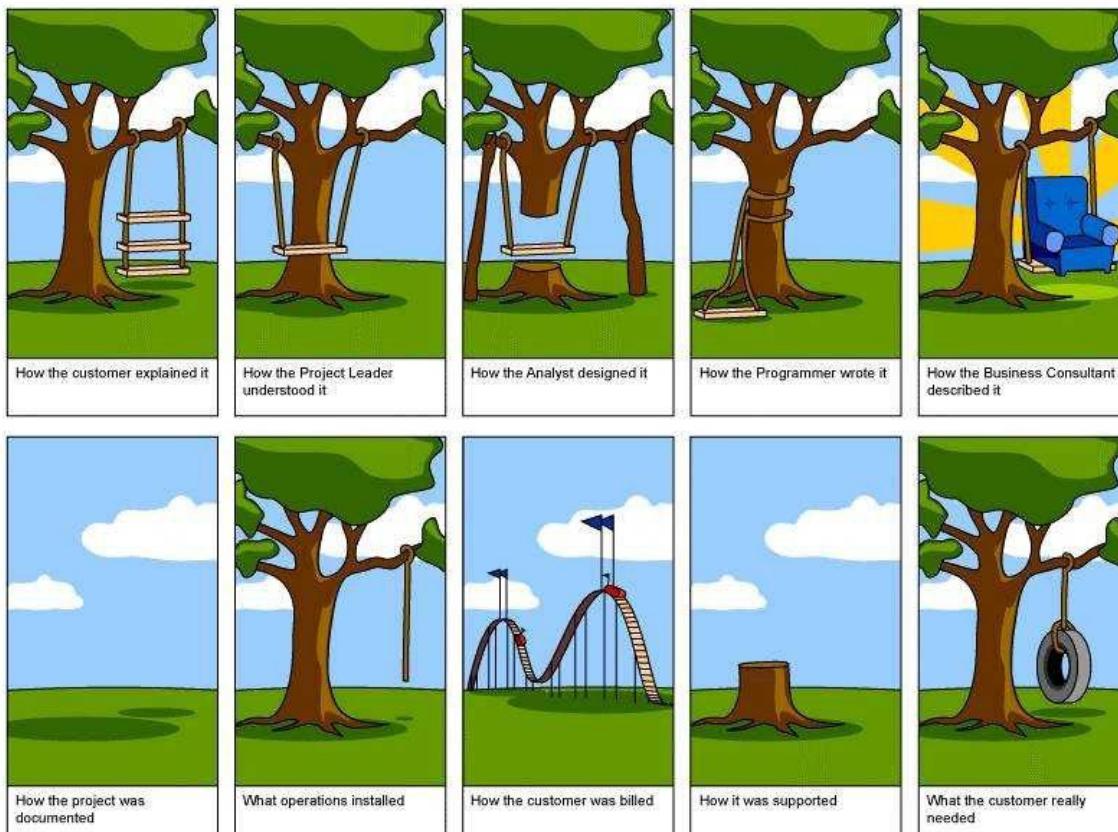
Table of Contents

► SCRUM

- ▷ Scrum Overview 
- ▷ Scrum Roles 
- ▷ Epic, User Story and Task
- ▷ Scrum Artifacts
- ▷ Scrum Ceremonies

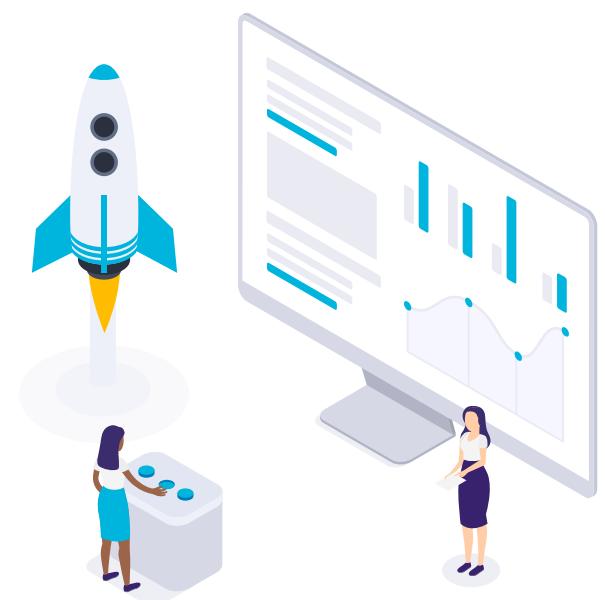
► KANBAN

- ▷ Kanban Overview
- ▷ Kanban Board
- ▷ Principles of Kanban
- ▷ Practices of Kanban
- ▷ Kanban vs Scrum





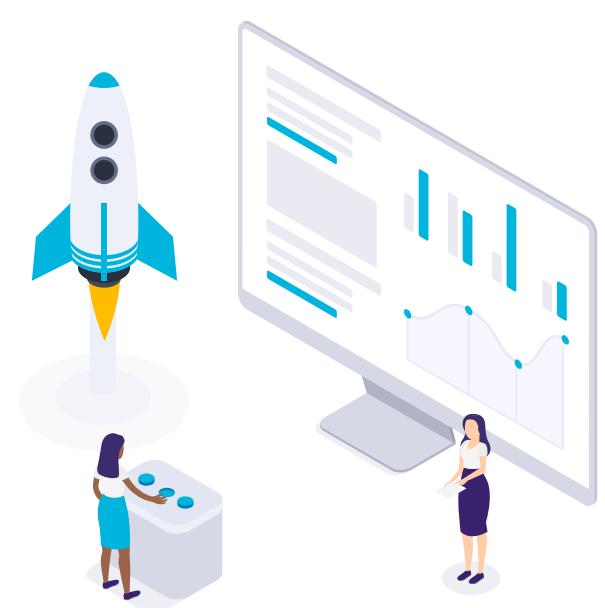
SCRUM



CLARUSWAY[©]
WAY TO REINVENT YOURSELF

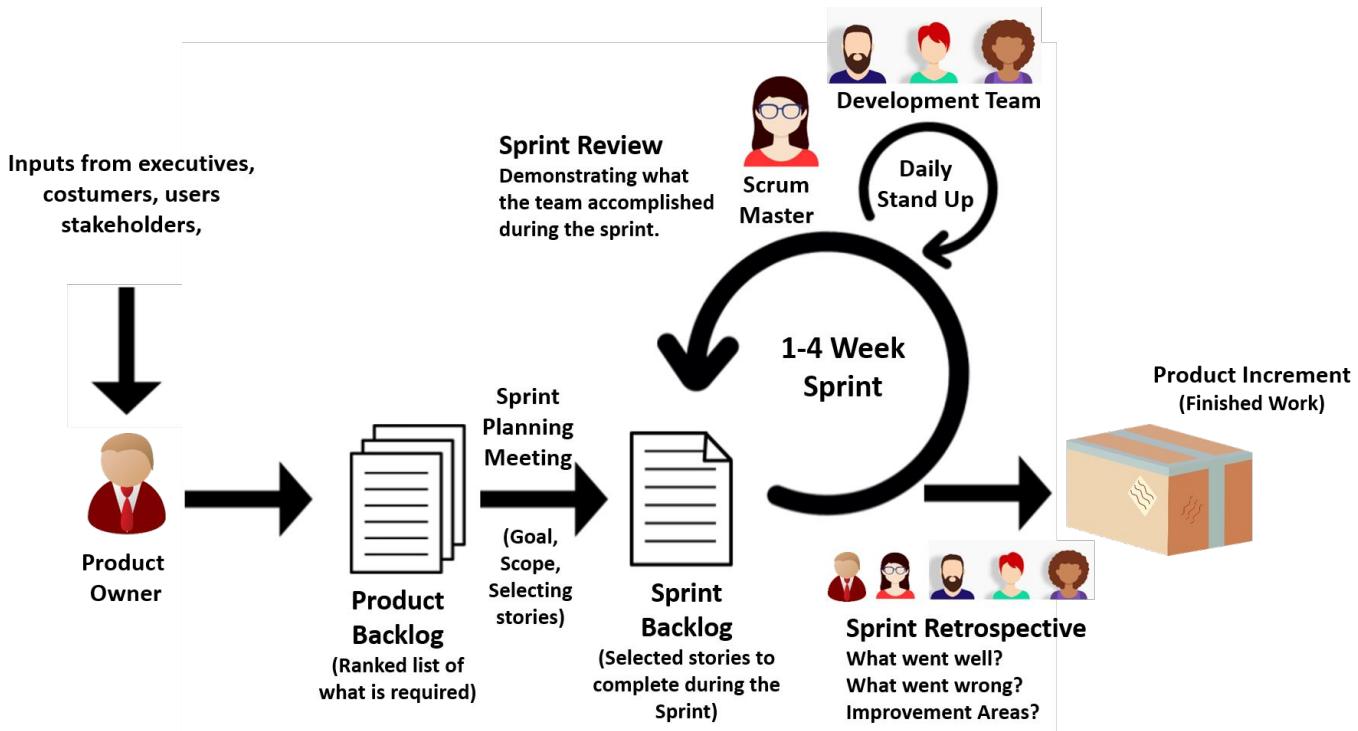


Scrum Overview



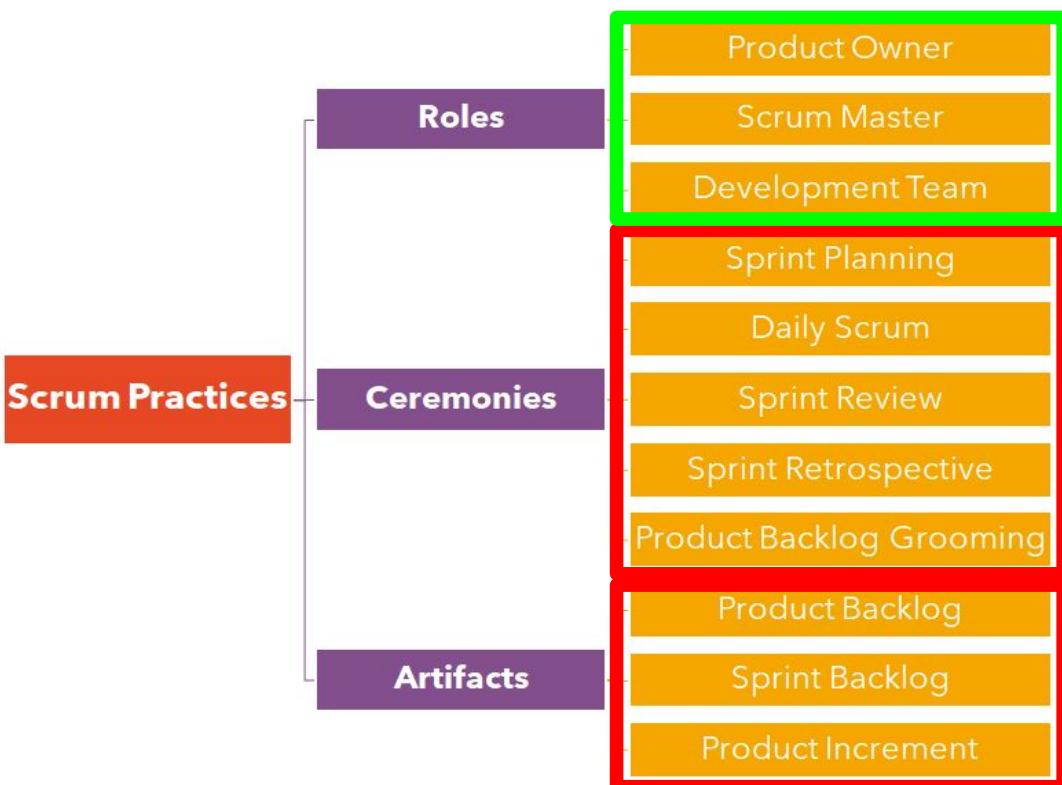
CLARUSWAY[©]
WAY TO REINVENT YOURSELF

Scrum Framework

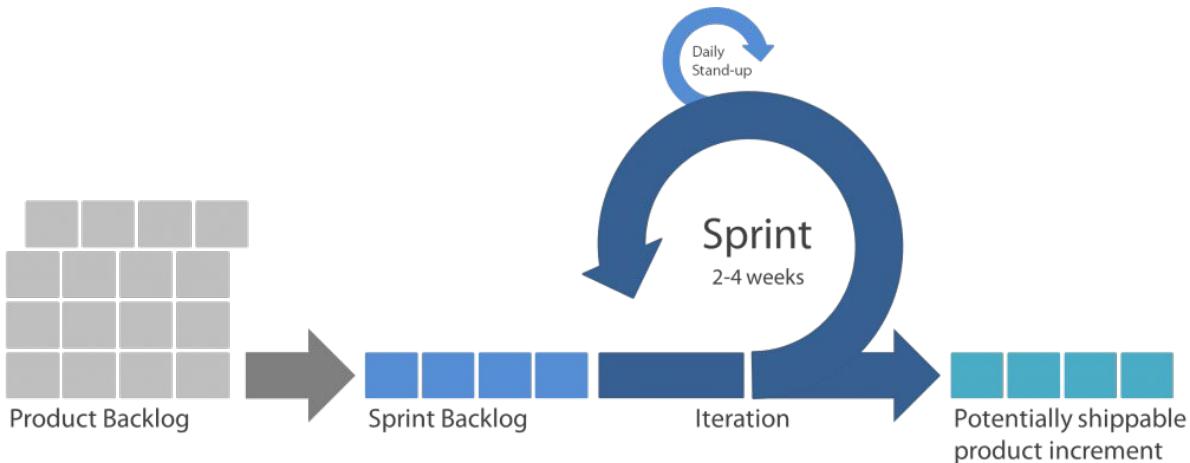


7

Scrum Practices



8



Scrum projects are divided into:



Students choose an option

Pear Deck Interactive Slide
Do not remove this bar



2 Scrum Roles



Scrum Roles



Product Owner



Responsible for the project's success by defining the project vision, requirements, and priorities

Scrum Master



Accountable to the team to remove impediments that will prevent them from achieving the goals of the Product Owner

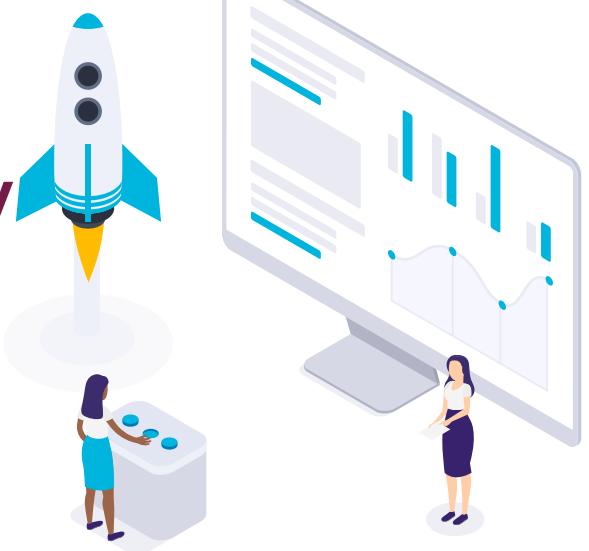
Development Team



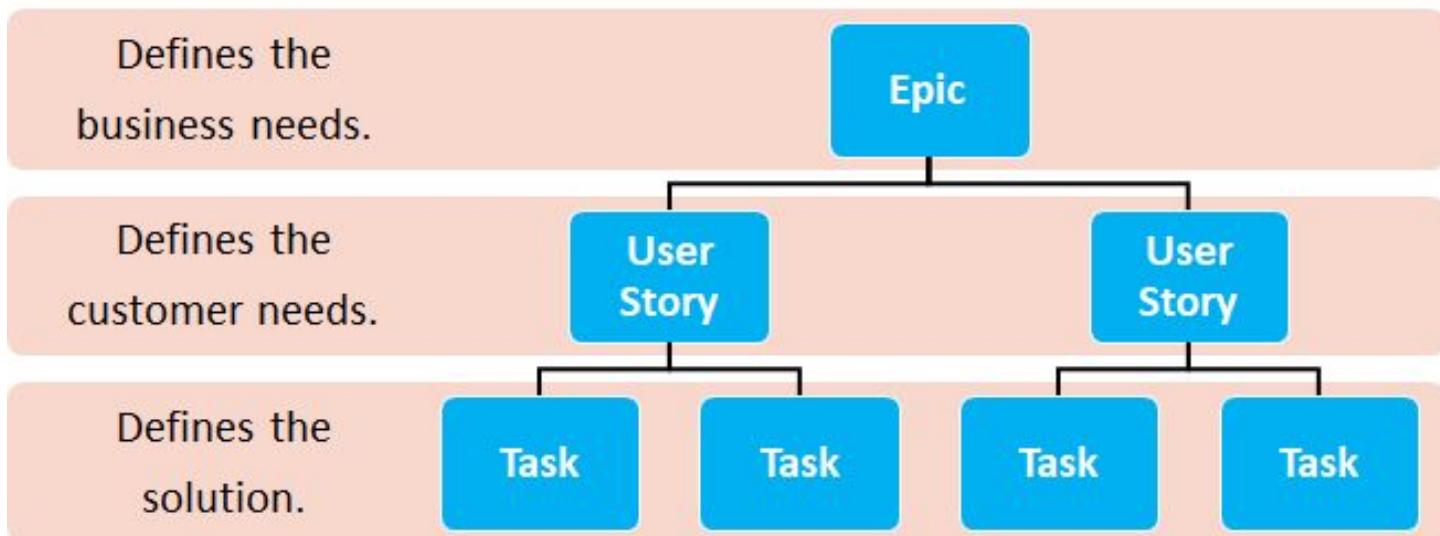
Team comprises 3-9 people, with a mix of roles, and self-organizes to determine how to best meet the goals of the Product Owner



Epic, User Story and Task



Epic, User Story and Task



Epic



- Big chunk of work.
- Few lines of description.
- More than one sprint to complete.

Examples of Epics:

- As a bank, we want a facial recognition system in our branches.
- As the marketing department, we want a mobile application and a website to reach more customers.

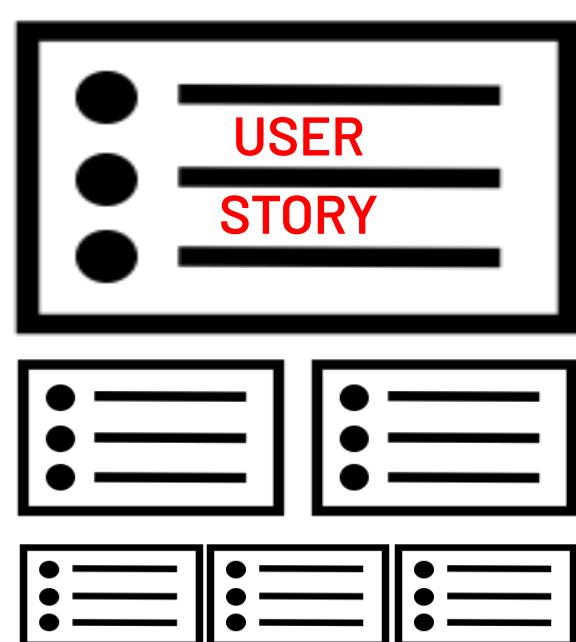
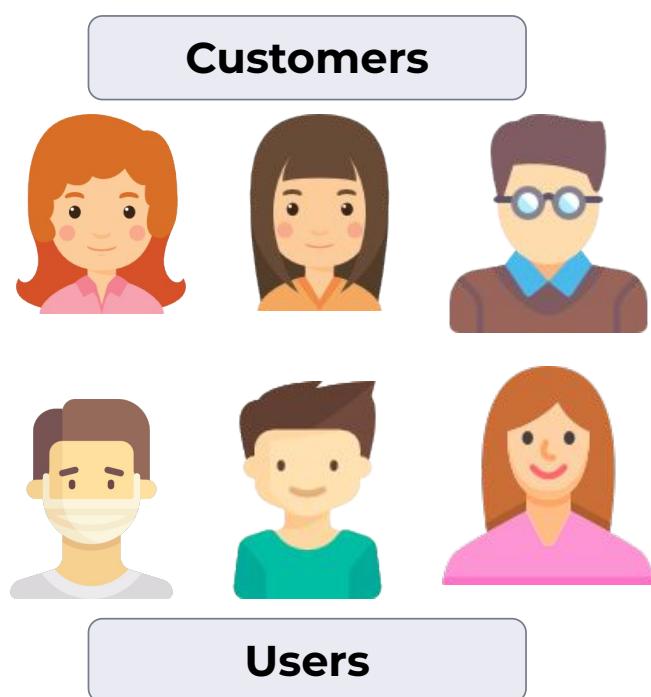
Import things when creating epics



- Create epics that leadership team at your work would want to track.
- An epic should be a product feature, customer request or business requirement.
- Let your organisational culture decide/ direct the size of your epic.
- Epics should not be too short or too long.

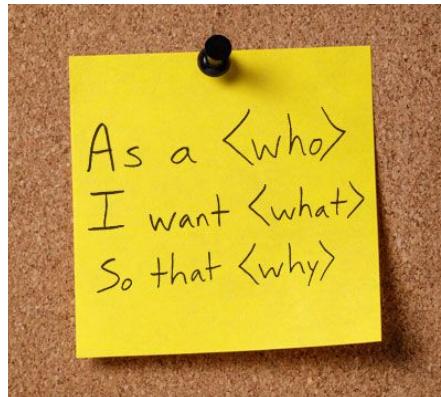
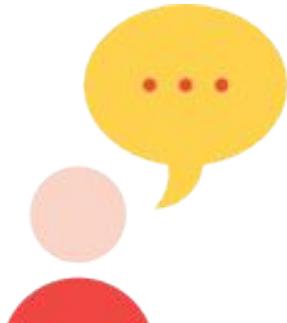
User Story

15



16

User Story



- User Needs.
- Few lines of description.
- Deliver during a sprint.

Examples of User Stories:

- As a registered user, I want to add items to the cart so that I can purchase multiple items at once.
- As a student, I want to apply for the exam online so that I can save time.

How to write User Story?

As a <type of user>, I want <some goal> so that <some reason>.

Examples of User Stories

As a user, I want to migrate all my data backup in a cloud system to free up my device.

As a consumer, I want to shop grocery items from a mobile app so that I could skip the lines in the store.



Import things when creating user stories

- Should be short, simple descriptions written through the agile project.
- Anyone can write the user story.
- It is expressed in plain language so the customer can understand what the final product is all about
- Should answer the ‘who’, ‘what’ and ‘why’.
- “Heart of Scrum” because they serve as the ‘building blocks’ of the sprint.

19

Task



- Represents a technical activity
- Description of individual work item
- Created by anyone

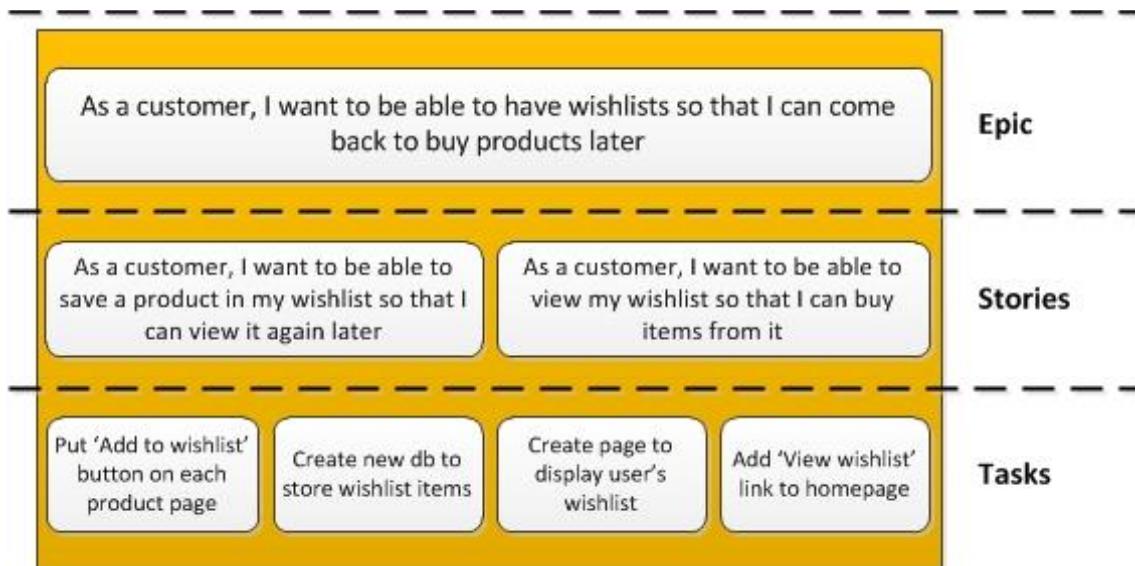
Examples of Tasks:

- Redesign a single web page
- Create a new logo
- Perform usability testing

20

Epic, User Story and Task

- Ecommerce website
 - Customer wants a wishlist section



21



Which project management tool are you familiar with?

 ClickUp

 JIRA

 Trello


monday.com



Students choose an option

Estimation of User Stories

T-Shirt Sizing



Story Points

1, 2, 3, 5, 8, 13, 21

23

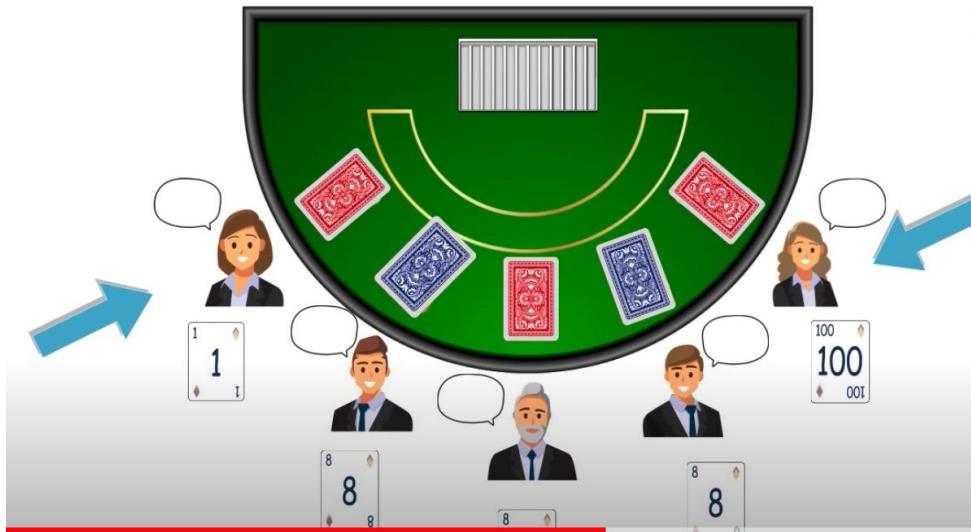
Estimation

Story Points Estimation Cheat Sheet

How much is known about the task	Everything	Almost everything	Something	Almost nothing	Nothing	Nothing
Dependencies	None	Almost none	Some	Few	More than few	Unknown
How much work effort	Less than 2 hours	Half a day	Up to two days	Few days	Around a week	More than one week
Story Points	1	2	3	5	8 Should be split into smaller items	13 Must be split into smaller items

24

Estimation Planning Poker



25

How Does Poker work?



Step 1: Hand out the cards to participants

Step 2: Read the story out loud

Step 3: Discuss the story

Step 4: Select and share

Step 5: Reach a consensus



26

The Benefits and Who to Include

- ▶ Estimating tasks relative to each other.
- ▶ Lending an equal voice to everyone on the team.
- ▶ Identifying gaps in requirement and implementation.

Scrum team members

Scrum master

Product owner

27

Estimation

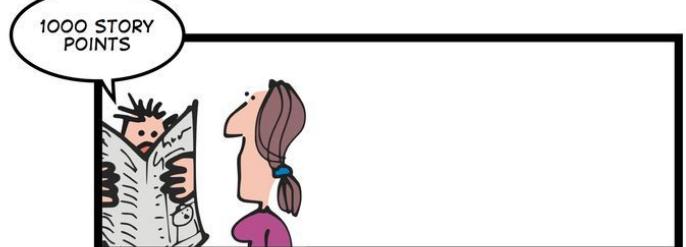
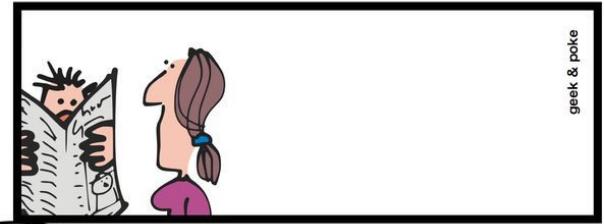
Planning Poker



28



Which one is NOT
relative estimation of
story?

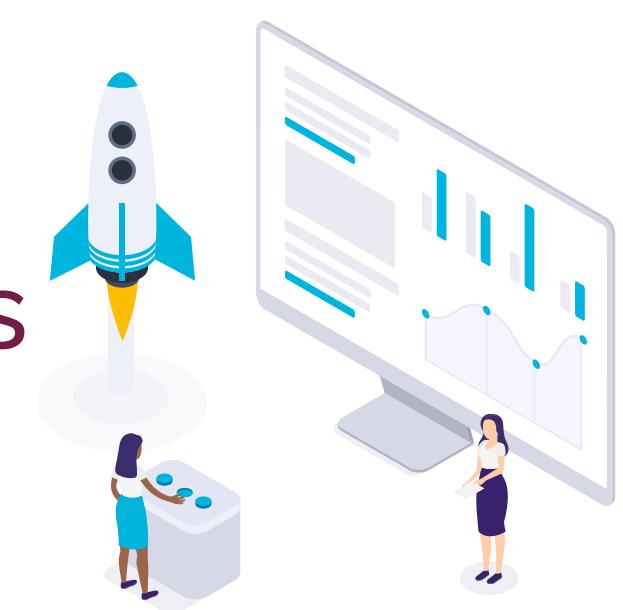


Students choose an option

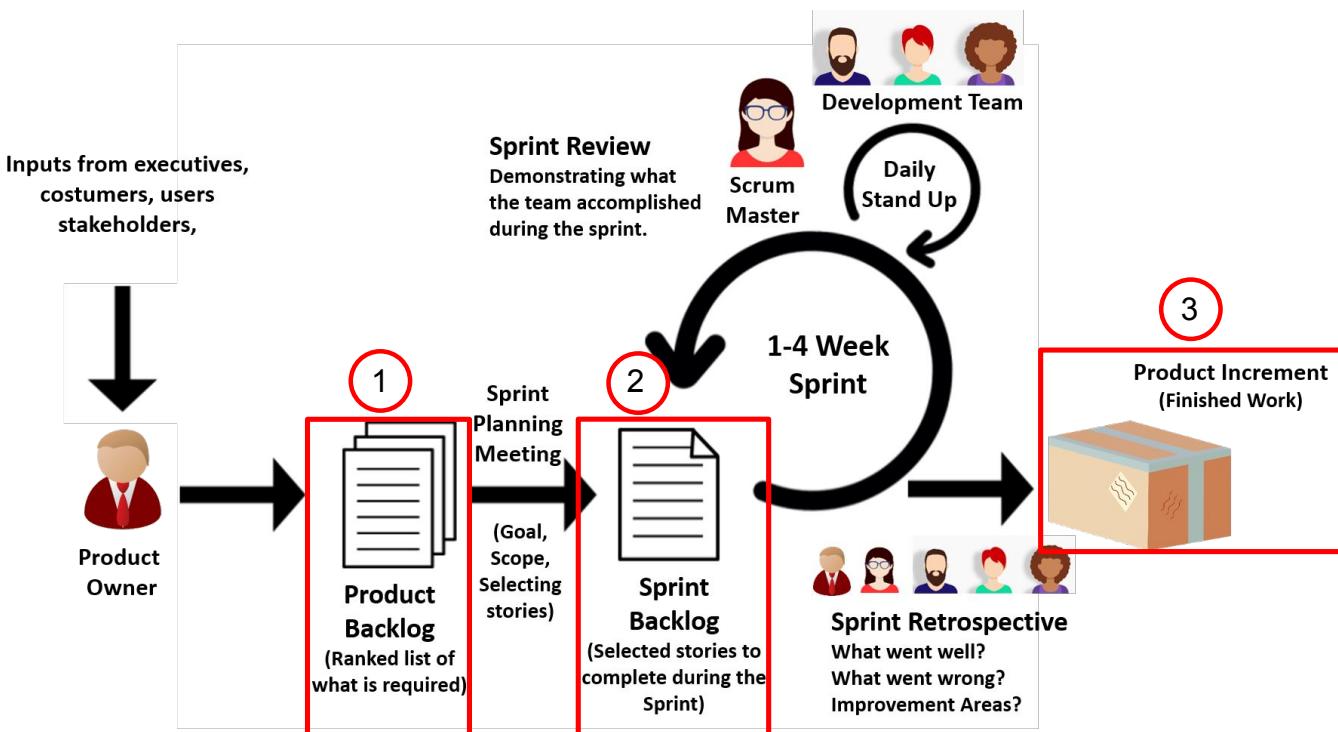
Pear Deck Interactive Slide
Do not remove this bar



4 Scrum Artifacts



Main Scrum Artifacts



31

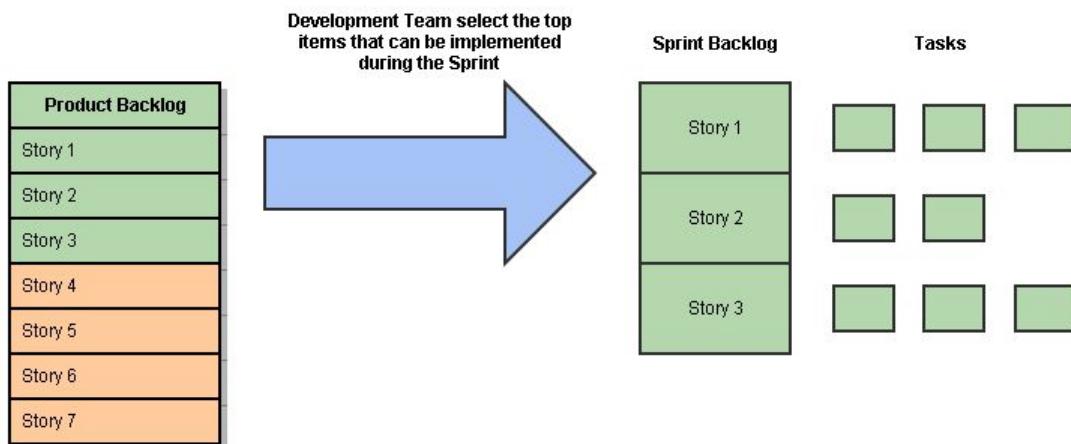
Product Backlog

User story	Story point(s)	Priority
As a user, I am able to search for documents so I can find them more easily	2	1
As a site visitor, I can compare different types of accounts to see which account type suites me best	1	2
As a user, I can submit questions through the website so I know how to better use the product	1	3
As a site visitor, I am shown what I can do in the product so I know whether or not this product will fill my needs	2	4
As a user, I want to be able to retrieve documents that were deleted so I can reclaim documents that were deleted on accident	3	5
As a site visitor and user, I can sign up for newsletters to remain up to date on the product	2	6
As a user, I am notified when a new feature is released so I know what is possible	1	7
As a user, I can change my user name if desired	3	8
As an admin, I need the ability to update which team a user belongs to so I can make sure all teams are up to date	3	9
As a user, I can enable spell check so I can be confident my final document has no spelling errors	4	10

- Ordered list of everything
- List of prioritized items
- Product Owner is responsible
- Dynamic
- Should be refined regularly

32

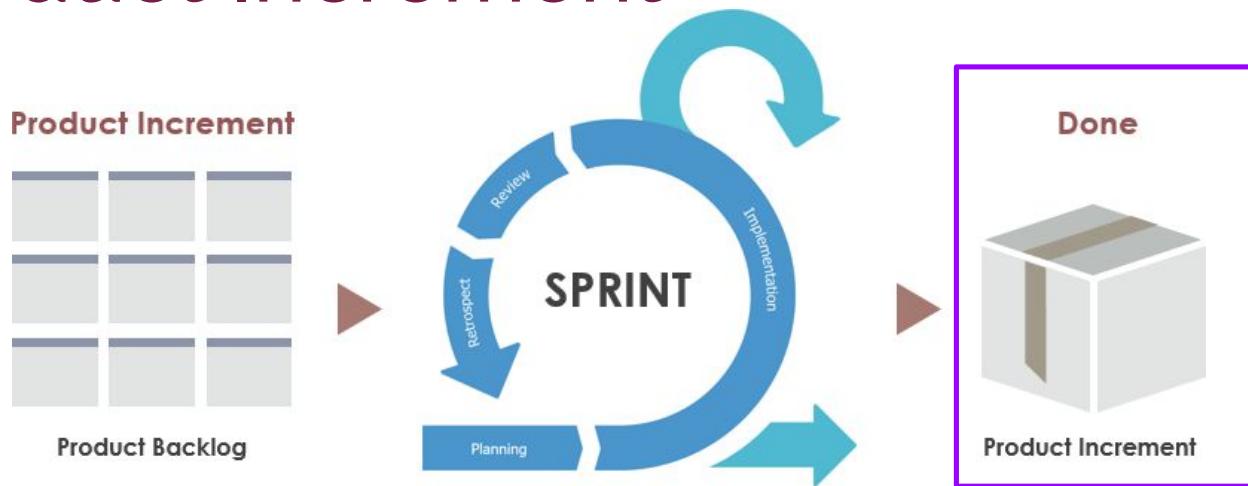
Sprint Backlog



- The set of Product Backlog items selected for the Sprint
- A plan for delivering the product Increment and realizing Sprint Goal
- Highly visible, real-time picture of the work

33

Product Increment



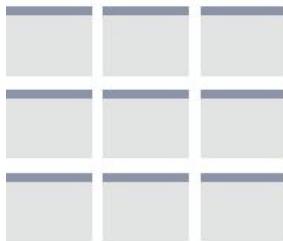
- The sum of all the Product Backlog items completed during a Sprint and the value of the increments of all previous Sprints.
- At the end of a Sprint, the new Increment must be “Done”.

34

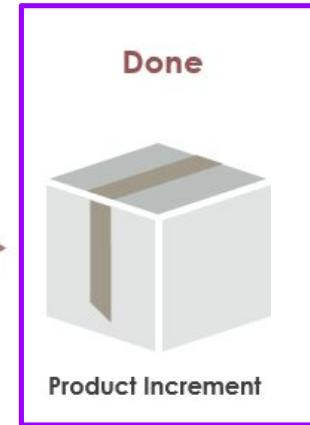
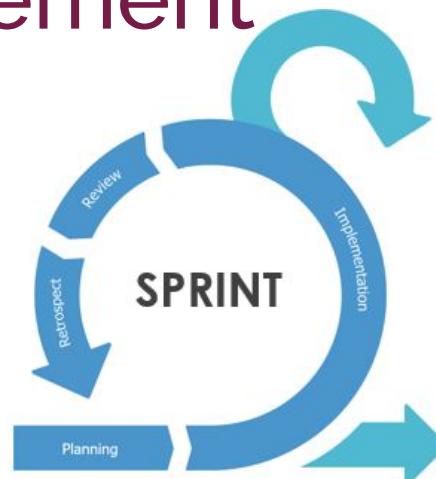
Product Increment



Product Increment



Product Backlog



Product Increment

Definition Done

- Tests written and passing
- Continuous Integration build passing
- Cross-browser testing done on current top 5 browsers according to analytics
- Mobile testing done on current top 3 mobile devices according to analytics
- Code coverage is at least 80%
- Code reviewed
- Documentation updated
- Acceptance criteria met

Status

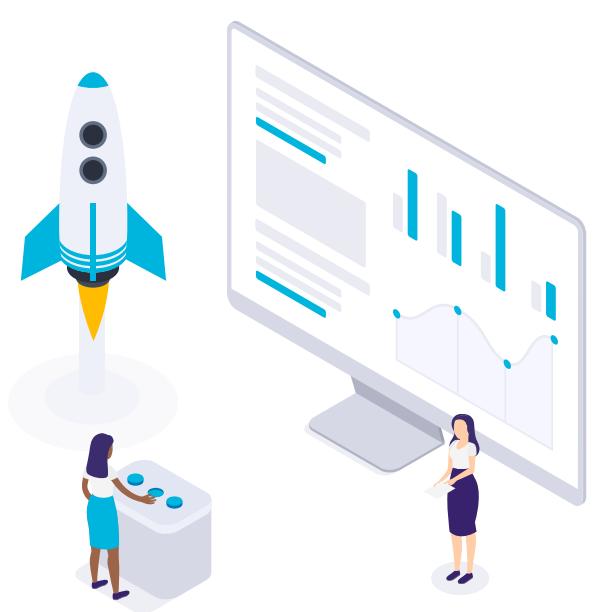
✓
✓
✓
□
□
✓
□
✓
✓

35



Scrum Ceremonies

5



Scrum Meetings



Sprint Planning

Determine what work will be completed in the upcoming sprint based on the backlog.

Daily Standup

A 15-minute meeting for team to share what they did yesterday, what they'll do today, and blockers.

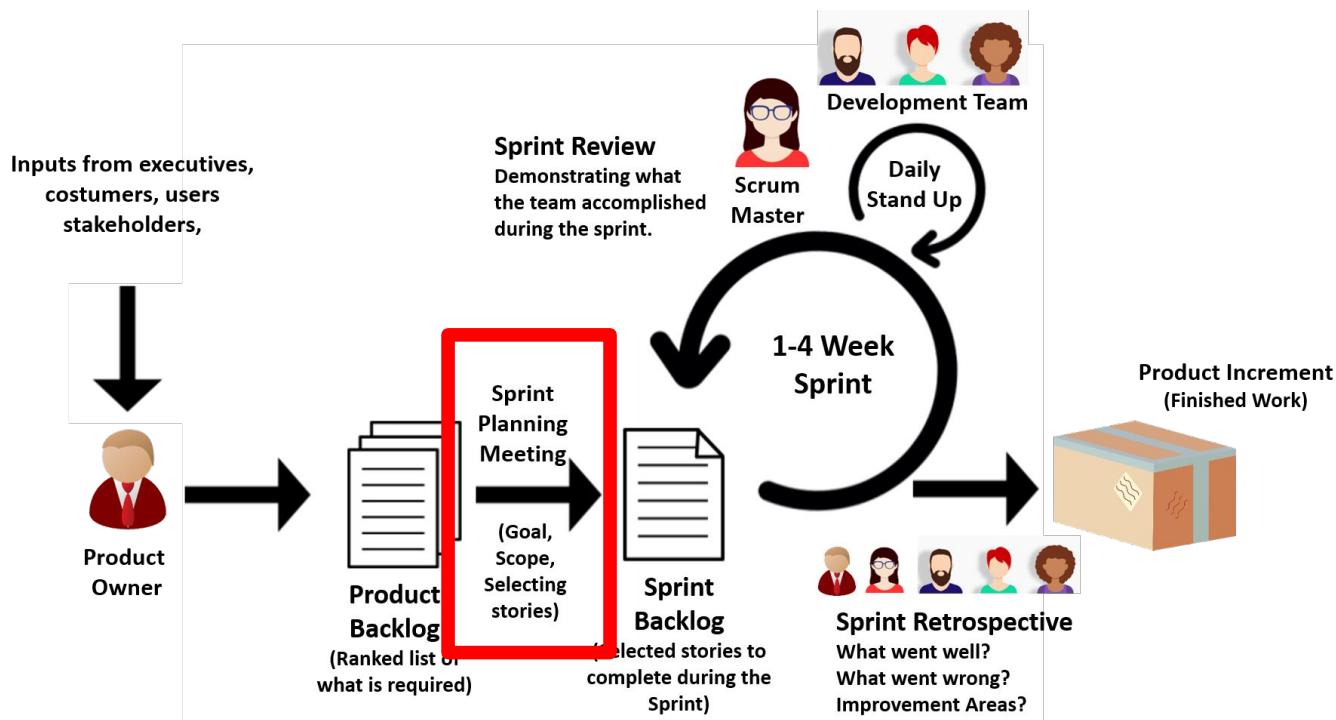
Sprint Review

Share work completed in the sprint and get feedback from stakeholders.

Retrospective

Reflect on what did/did not go well in the previous sprint and identify improvements.

Sprint Planning





Sprint Planning

Determine what work will be completed in the upcoming sprint based on the backlog.

- Maximum 8 Hours.

- Assign points to user stories to indicate the level of effort.

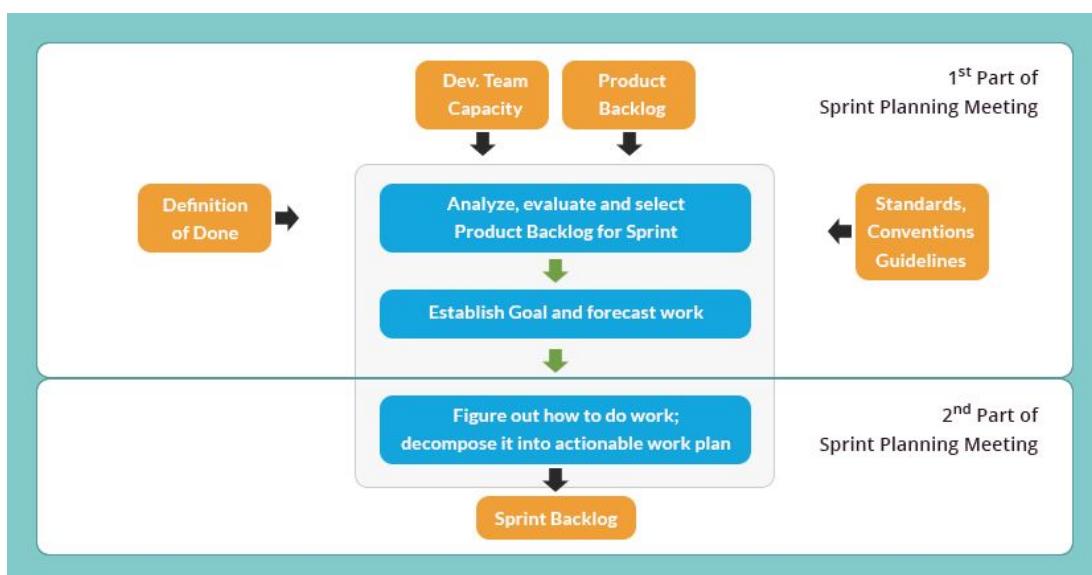
- Agree on what work will be done and by whom.

The screenshot shows a Jira backlog for 'Sprint 2' with 0 issues. The backlog contains 16 items, each with a small icon, a title, a point value (e.g., 3.0), an assignee, and a status (e.g., Large Team Support). The items include tasks like 'Update LocalTransportController to handle...', 'Extend booking experience in UI...', 'Update FlightController to handle...', 'Reward Customers an extra 5-10% when...', 'Update UI controls on travel booking page...', 'Engage Jupiter Express for outer solar...', 'Add Phobos and Deimos Tours as a Pr...', and 'Create Email Campaign for Saturn Sum...'. A 'Create Sprint' button is visible at the top right.

39

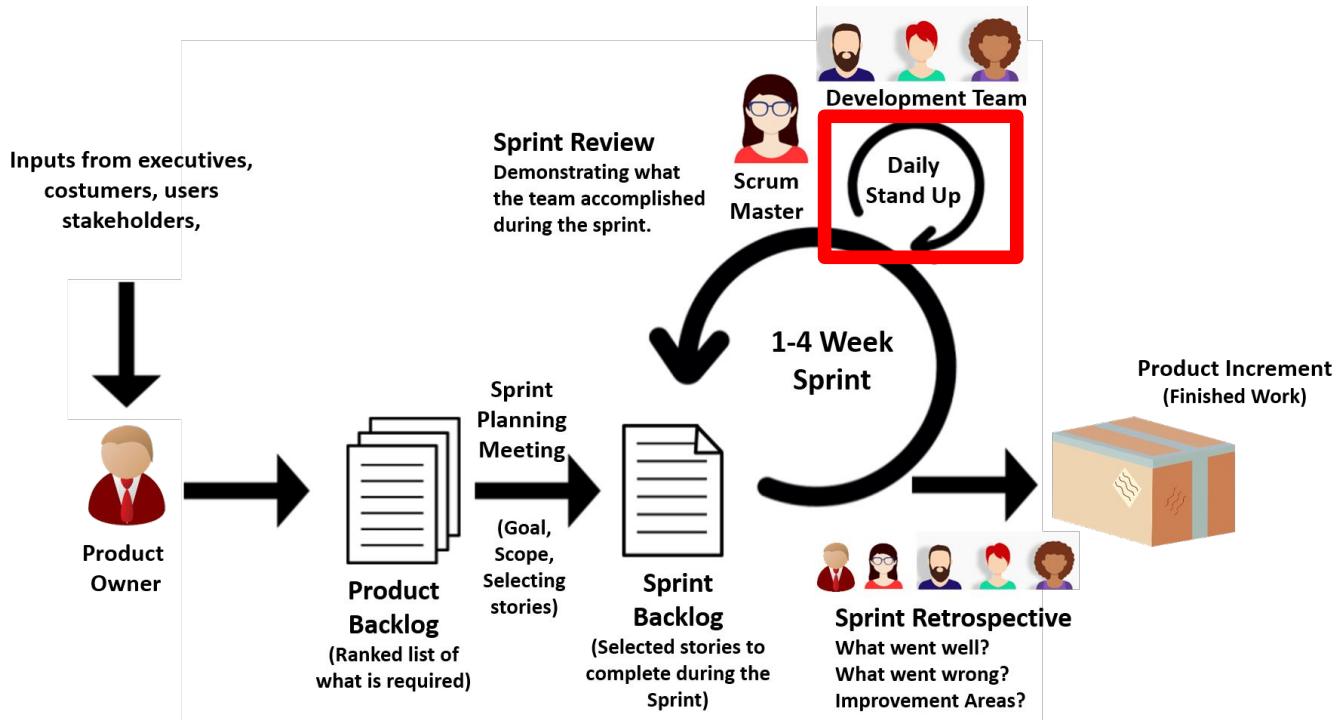
Sprint Planning

Determine what work will be completed in the upcoming sprint based on the backlog.



40

Daily Standup



Daily Standup

A 15-minute meeting for team to share what they did yesterday, what they'll do today, and blockers.

- 15 minutes max: Additional conversations can happen after standup.
- Happen on a daily basis during a sprint.
- Everyone answers three questions.

1. What did I do yesterday?
2. What will I do today?
3. What blockers do I have?





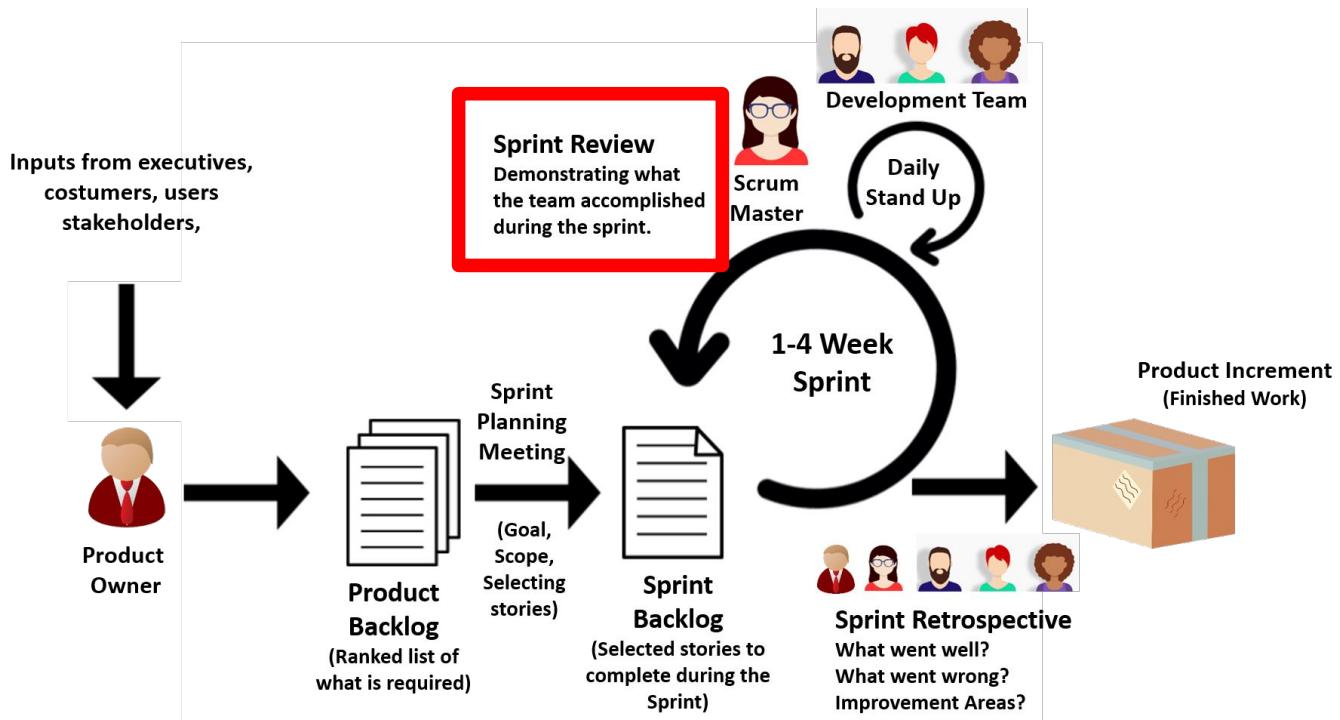
Who should necessarily attend the Daily Standup meeting?



Students choose an option

Pear Deck Interactive Slide
Do not remove this bar

Sprint Review



Sprint Review



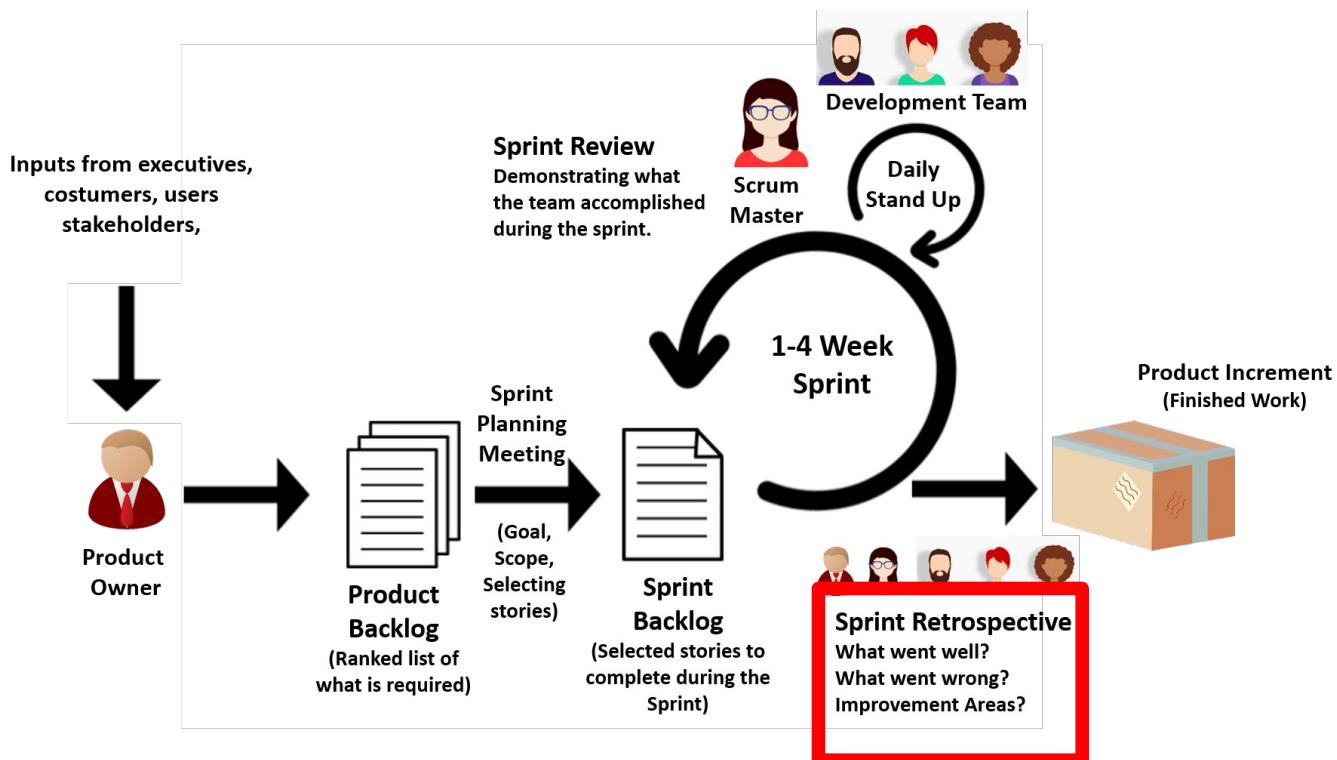
Share work completed in the sprint and get feedback from stakeholders.

- Team members share the work that they completed in the sprint.
- Stakeholders share feedback that's incorporated into future sprints.
- Celebrate progress and achievements.



Sprint Retrospective

45



46

Sprint Retrospective



Reflect on what did/did not go well in the previous sprint and identify improvements.

- Opportunity for the Scrum Team to inspect itself.
- Learnings are incorporated into future sprints.
- Make it more effective and enjoyable for the next Sprint.

1. What went well?
2. What didn't go well?
3. What can we do differently?



47



What happens when all the Sprint Items cannot be completed?

Sprint Backlog

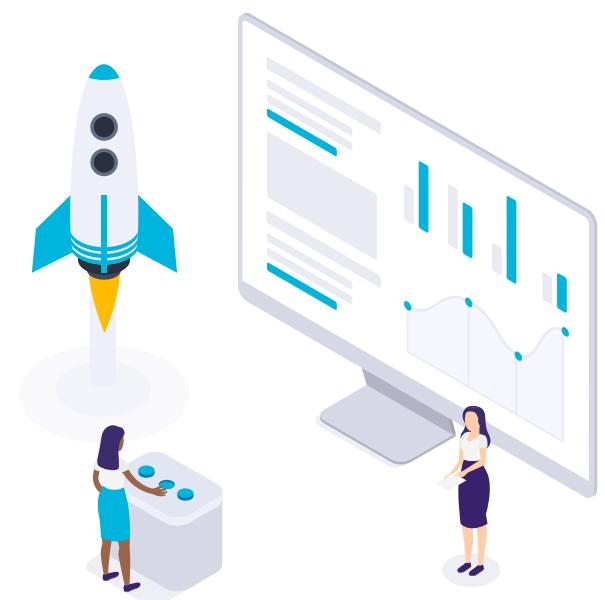
TO DO	DOING	DONE
■ Red	■ Green	■ Green
■ Purple	■ Blue	■ Blue
■ Green	■ Red	■ Green



Students choose an option



KANBAN

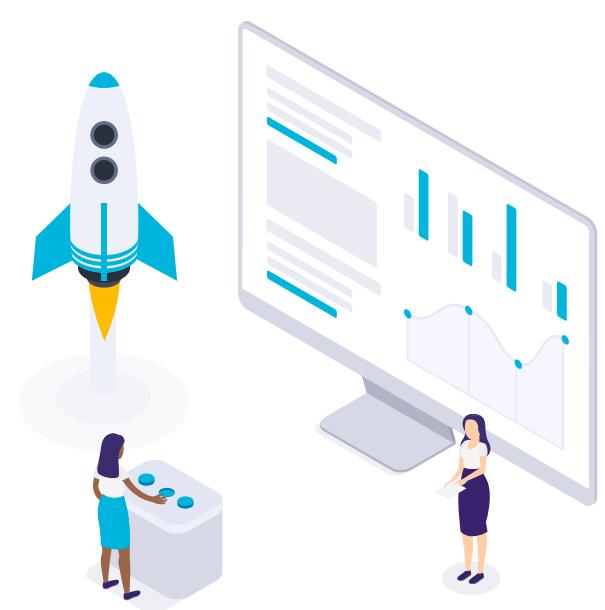


CLARUSWAY[©]
WAY TO REINVENT YOURSELF



► KANBAN

- ▷ Kanban Overview
- ▷ Practices of Kanban
- ▷ Kanban vs Scrum

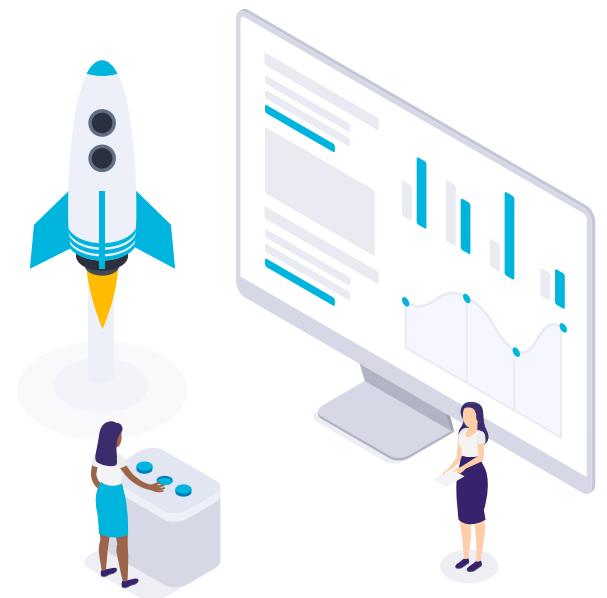


CLARUSWAY[©]
WAY TO REINVENT YOURSELF



1

Kanban Overview



CLARUSWAY[©]
WAY TO REINVENT YOURSELF

What is Kanban?

Kanban is a fusion word with Japanese roots. The word “kan” means visual, and the meaning of the word “ban” is card.

KAN + **BAN**
↓ ↓
署名する + ボード

=

“signboard”



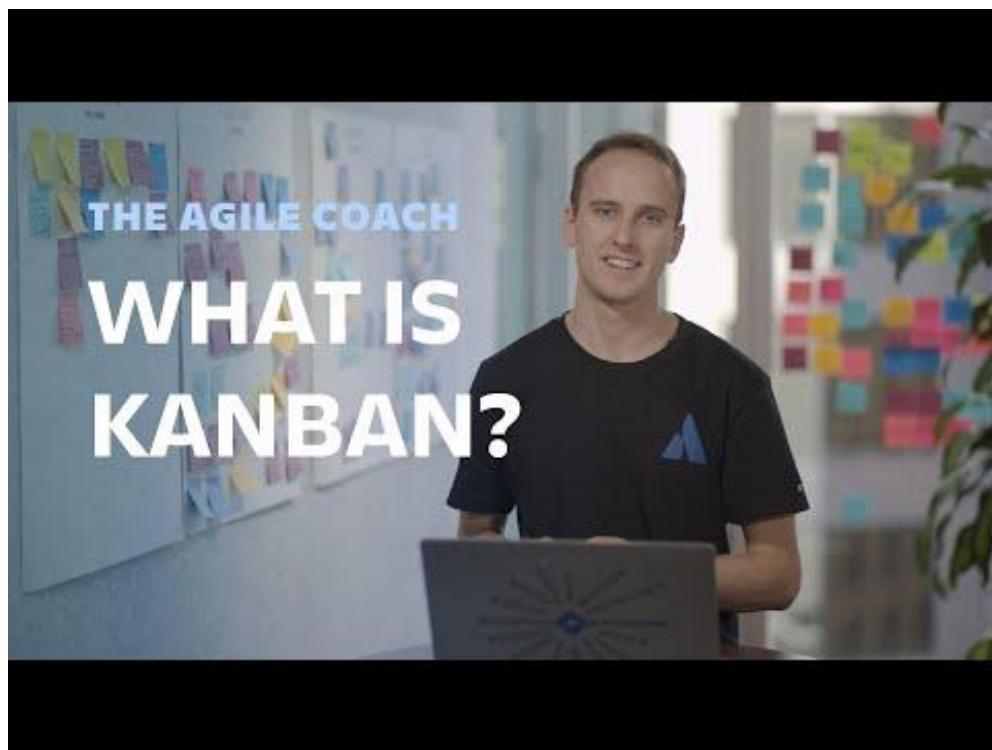
The word kanban is Japanese and roughly translated means “card you can see.”



Students choose an option

Pear Deck Interactive Slide
Do not remove this bar

► What is Kanban?



A Brief History on Kanban



- ▶ Dates back to the 1940s
- ▶ Toyota updated its production method based on the model that supermarkets use to manage stocks on shelves
- ▶ To monitor capacity levels in real-time, the company started using a card called "kanban" between different production teams

55

Kanban

- No certain time limits in kanban
- Flexible in deadlines for the tasks
- No certain roles like:
 - a. product owner,
 - b. scrum master
 - c. development team

56

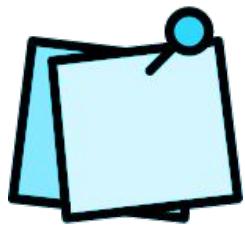
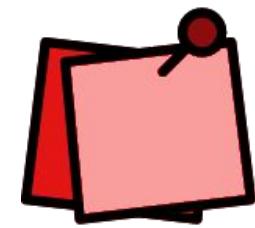
Practices of Kanban



Visualizing
the Workflow

Limit Work
in Progress
(WIP)

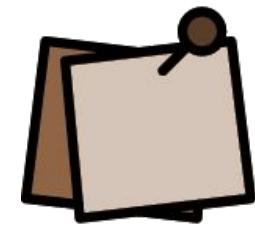
Managing Flow



Making Process
Policies Explicit

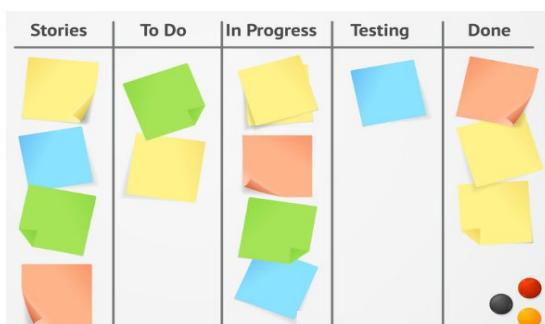
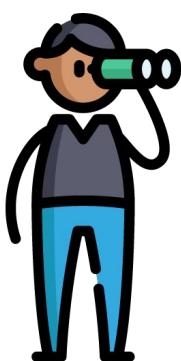
Implementing
Feedback Loops

Evolving
Experimentally



57

Visualizing the Workflow



- **First Practice**

- Visualization is the first step to start with Kanban
- When you visualize the process, it can be seen what you and your team are currently doing

58

Kanban Board



To Do

Ongoing

Review

Done

59

Kanban Board



To Do

Ongoing

Review

Done

Kanban vs Scrum

Kanban Board

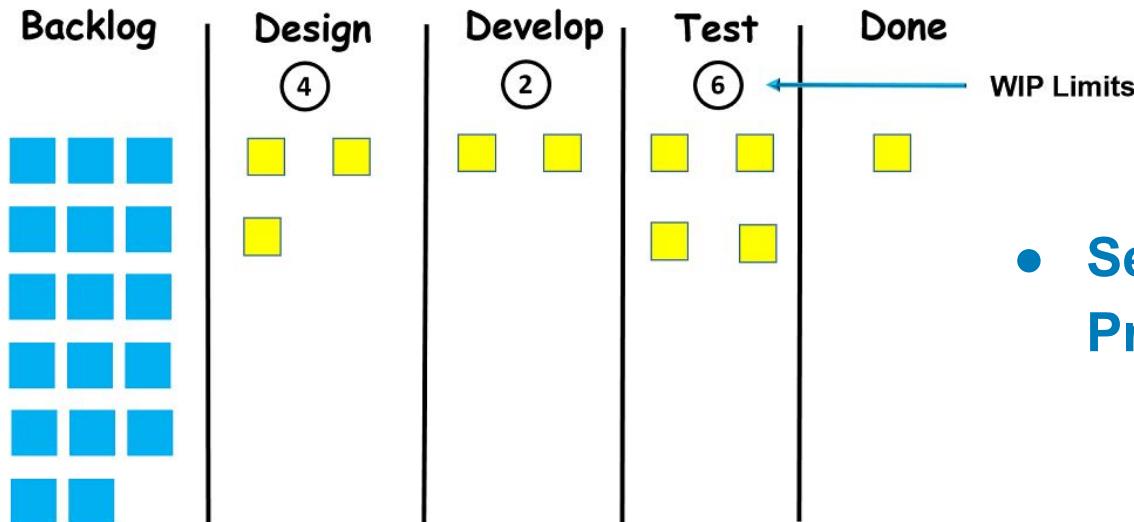
Kanban Overview

Scrum Overview

Kahoot

60

Limit Work in Progress (WIP)

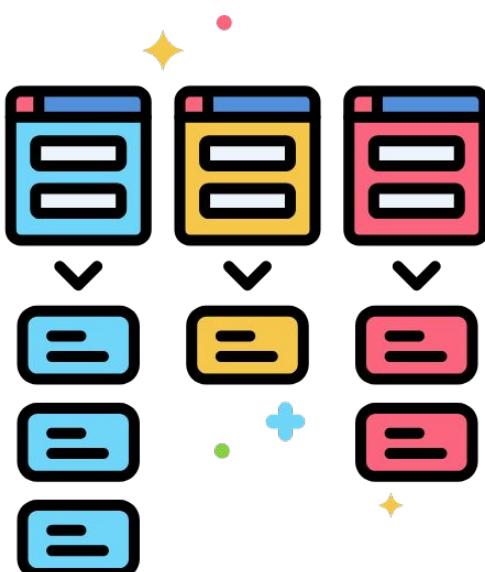


- **Second Practice**

- When you assign a limit to each column, your team doesn't work more than they can handle

Managing Flow

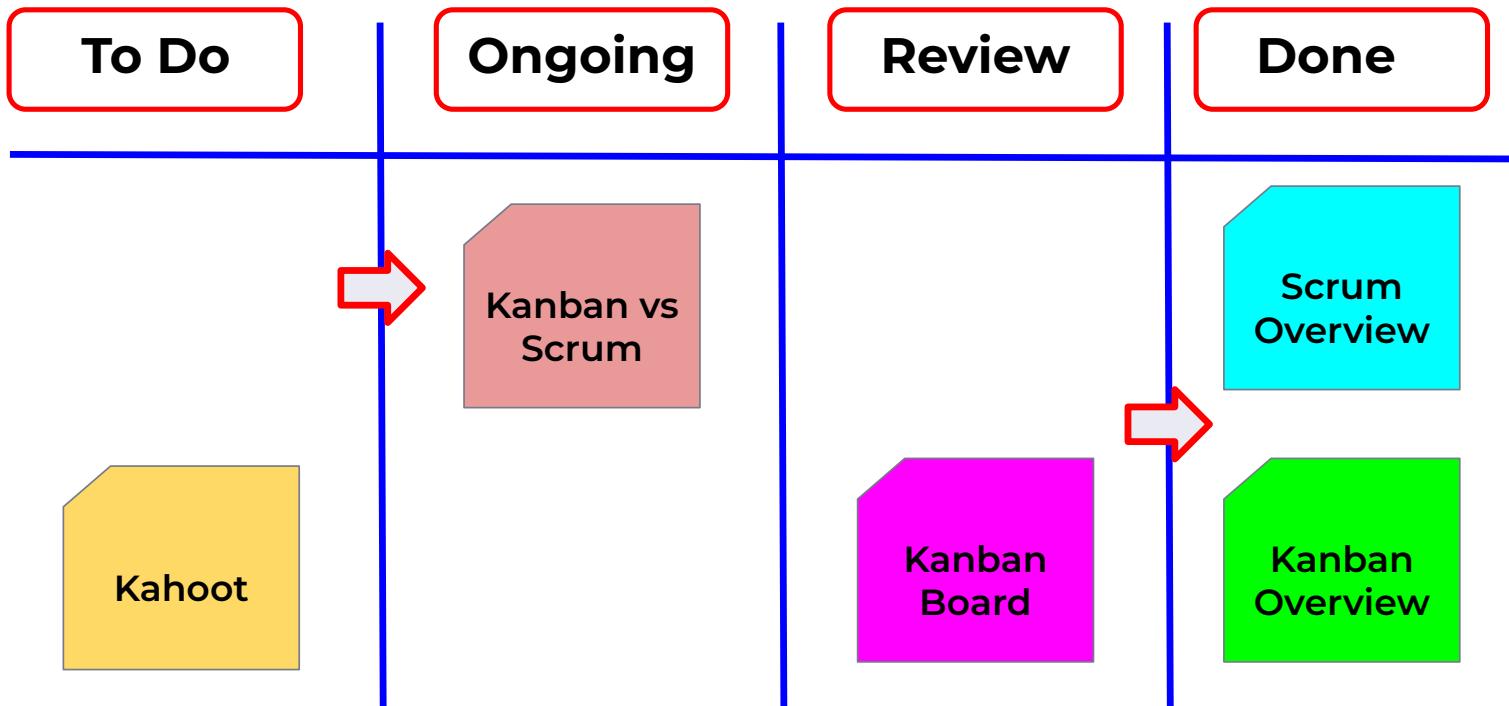
- **Third Practice**



- As you manage the flow and improve it, your team's pace becomes more predictable
- This makes it easy for you to make commitments to your customers

Kanban Board

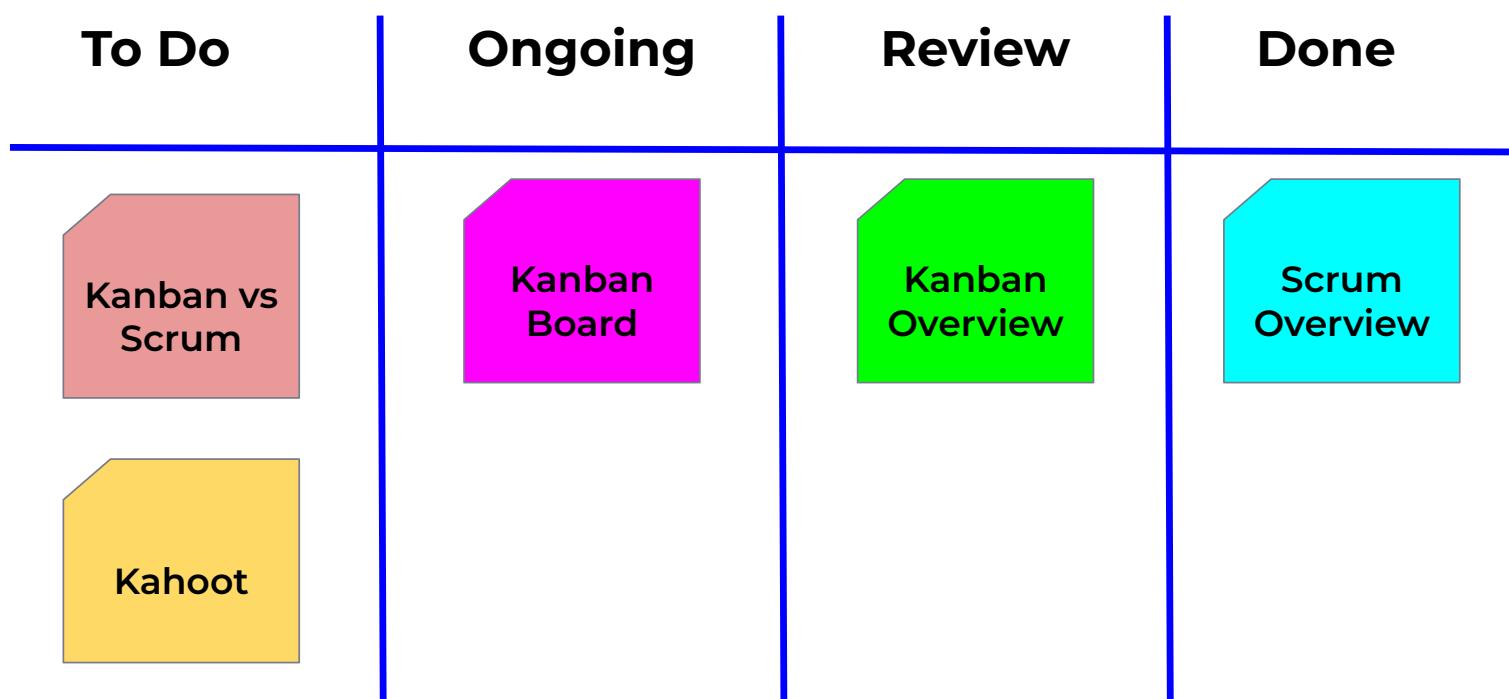
WORKFLOW



63

Kanban Board

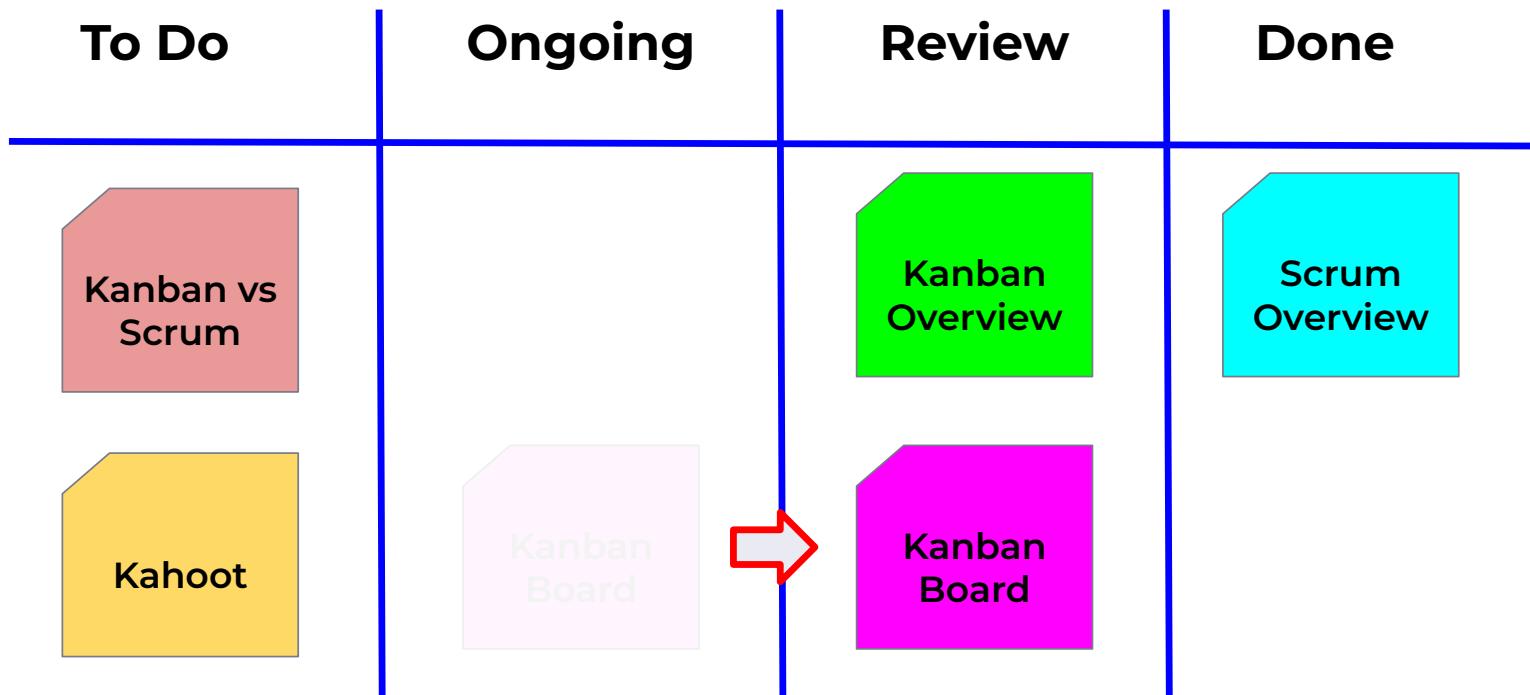
PULL SYSTEM



64

Kanban Board

PULL SYSTEM



65



In kanban, each stage of a project is demonstrated with a **what?**



Students choose an option

Pear Deck Interactive Slide
Do not remove this bar

Kanban Board

CARDS

Planned (37)

- PAN:5791: A: Build Framework, M: Build, P: NGP: Website Build, 27/11/2017, 6.00, 0.00, 0.00%
- PAN:5819: A: Build Framework, M: Build, P: NIMBL: Website B..., 27/11/2017, 6.00, 0.00, 0.00%
- PAN:5792: A: Build Page content, M: Build, P: NGP: Website Build, 27/11/2017, 6.00, 0.00, 0.00%
- PAN:5981: A: Design UI, M: Design, P: Time Point: Websit..., 28/11/2017, 8.00, 0.00, 0.00%

In Progress (32)

- PAN:5641: A: (1) Design Wireframes, M: Design, P: Nitro: Website Build, 23/10/2017, 6.00, 0.00, 0.00%
- PAN:6068: A: Build Framework, M: Build, P: Site Seeker: Websit..., 4/12/2017, 6.00, 0.00, 0.00%
- PAN:6218: A: Design UI, M: Design, P: CI Event: Website B..., 18/12/2017, 8.00, 0.00, 0.00%
- PAN:5640: A: Design UI, M: Design, P: Nitro: Website Build, 23/10/2017, 8.00, 0.00, 0.00%

On Hold (3)

- PAN:5642: A: (2) Design Wireframes, M: Design, P: Nitro: Website Build, 23/10/2017, 6.00, 0.00, 0.00%
- PAN:5951: A: Build Page Content, M: Build, P: Law In Order: Webs..., 5/12/2017, 6.00, 0.00, 0.00%
- PAN:6100: A: Build Framework, M: Build, P: Symply: Website Bu..., 7/12/2017, 6.00, 0.00, 0.00%

Complete (27)

- PAN:4437: A: Deliver Training, M: Backlog, P: Agile Project Templ..., 18/05/2017, 4.00, 0.00, 100.00%
- PAN:5794: A: Build Page Content, M: Deliver, P: NGP: Website Build, 8/12/2017, 4.00, 0.00, 100.00%
- PAN:4433: A: Design UI, M: Build, P: Agile Project Templ..., 18/05/2017, 8.00, 0.00, 100.00%
- PAN:4432: A: Design Wireframes, M: Sprint 1, P: Agile Project Templ..., 18/05/2017, 8.00, 0.00, 100.00%

Cancelled (1)

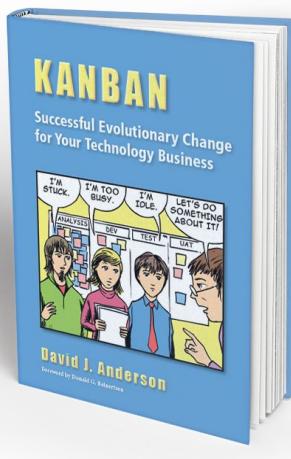
- PAN:5963: A: Build Page Content, M: Build, P: Time Point: Websit..., 5/12/2017, 6.00, 0.00, 0.00%

Roles

- Agata Norris
- Amy Lee
- Andrea Flott
- Blake Johnston
- Carey Bonn
- Chris Woolcott
- Colin Johnson

Making Process Policies Explicit

- Fourth Practice



- Being explicit allows the team to follow the process easily and make proposals for the improvements
- Team members who are not clear about the existing process can not improve the system

Implementing Feedback Loops

- **Fifth Practice**

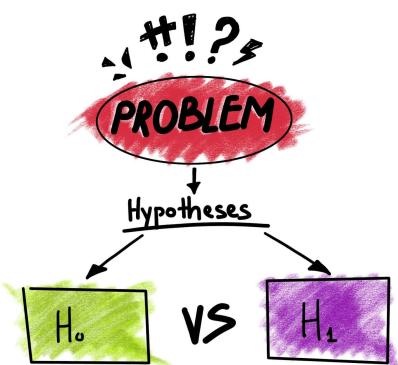


- You should know what your customers and the end-users think.
- Automated continuously running tests are preferred as they shorten feedback loops.

69

Evolving Experimentally

- **Sixth Practice**



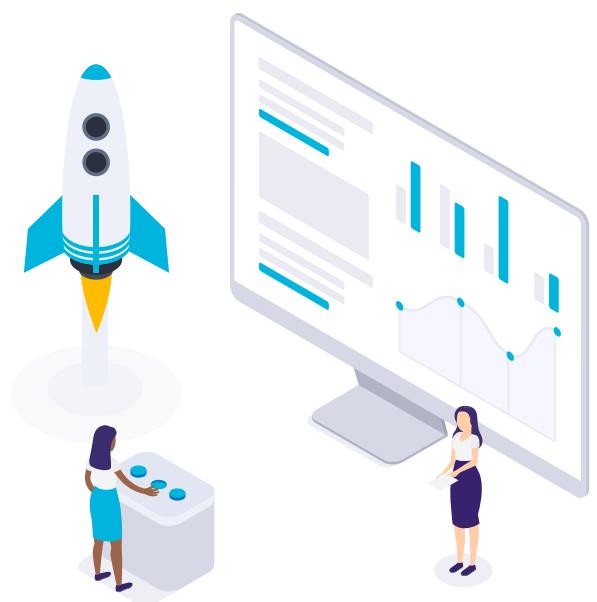
- Kanban encourages you to use scientific methods like you form a hypothesis and test it
- By using hypothesis testing, you can assess whether a change helps you improve or not
- Then you make a decision about whether to try some other solutions or to keep the current status

70



5

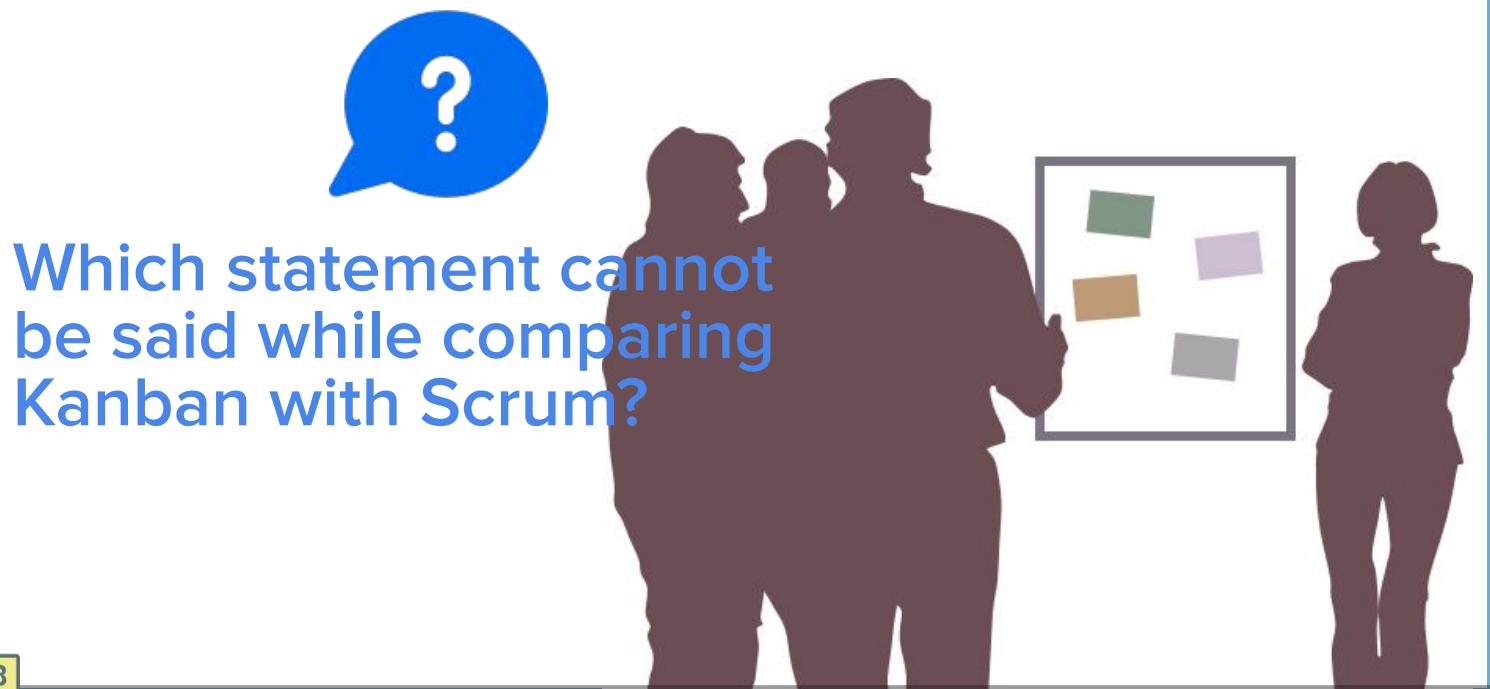
Kanban vs. Scrum



CLARUSWAY[©]
WAY TO REINVENT YOURSELF

Comparing Kanban with Scrum

	Scrum	Kanban
Model	Time-based (<i>e.g. biweekly sprints</i>)	Event-based (<i>continuous deliver</i>)
Planning	Sprint planning	Just-in-time planning
Limiting factor	Sprint capacity limit	Work in Progress (WiP)
Metrics	Velocity	Cycle/Lead time
Task estimation	Must be done before each sprint	Flexible (<i>can be done at any time</i>)



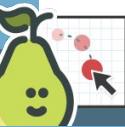
Which statement cannot
be said while comparing
Kanban with Scrum?



Students choose an option

Pear Deck Interactive Slide
Do not remove this bar

How well did you like this lesson?



Students, drag the icon!

Pear Deck Interactive Slide
Do not remove this bar



THANKS!

Any questions?

