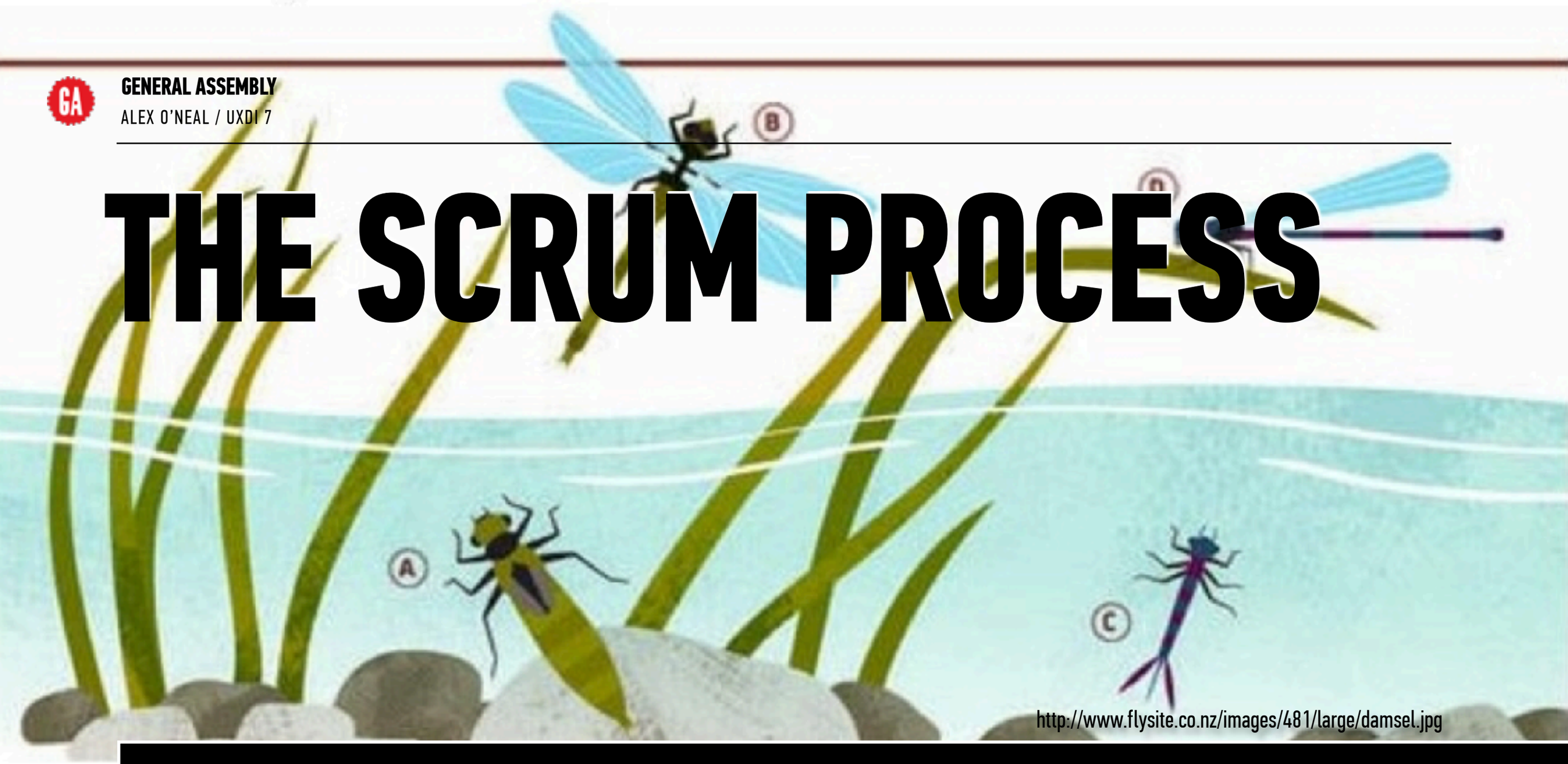
GENERAL ASSEMBLY
ALEX O'NEAL / UXDI 7

THE SCRUM PROCESS



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AGILE, BACKLOG, BURN-DOWN CHART, EPICS, SCRUM, STAND-UP, THEMES, TRELLO, USER STORIES

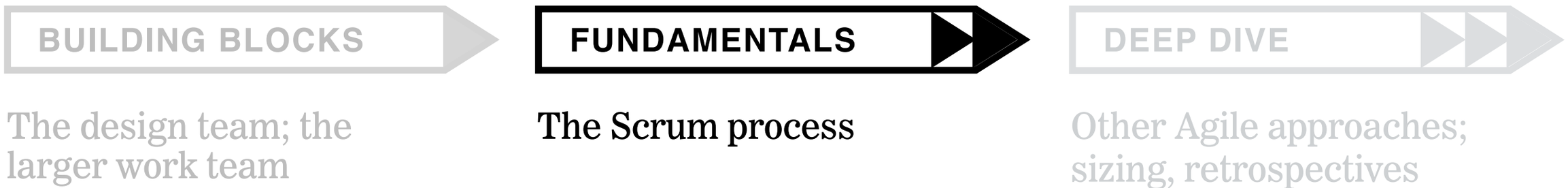
OBJECTIVES

Designers and developers will be able to:

- Identify key steps in a Scrum sprint
- Recognize the key artifacts and processes used in a Sprint
- Recognize and use Trello to track sprint work

AGENDA

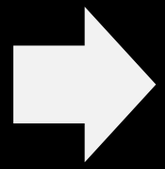
- Steps in the process
- Artifacts of Scrum
- Agile alternatives to Scrum
- Taking stock/Q&A



STEPS IN THE PROCESS

Pre-sprint

- Product backlog created
- User flow/IA designed
- Style guide, complex designs, prototypes created



Ceremonies

- Sprint planning
- Sprint review
- Sprint retrospective
- Daily scrum meeting

The bigger the project/company, the more likely pre-work happens.

BEFORE THE SPRINT

- Product owners/business determine goals of the project.
- Product owners create the product backlog, which consists of prioritized user stories.
  - POs often work closely with user experience and other specialists. Sometimes UXDs create user stories.
  - Developers often contribute stories, too.
  - Anyone is allowed to contribute a story, but the PO puts them into the backlog and prioritizes them.
  - The backlog evolves over the course of the project.

Remember this?

Product development has four phases, which may overlap somewhat:

1. **Fuzzy front-end (FFE)**. Figuring out what you want to do. Includes research.
2. **Product design**. Creating use cases and defining requirements (this is where URDs are born); designing how to meet those needs.
3. **Product implementation**. This is when the product is developed.
4. **Commercialization**. Production and market launch. Some people call this fuzzy back-end.

Based on IEEE (Institute of Electrical and Electronics Engineers) practices

USER STORIES

What is a user story?

User stories are short, simple descriptions of a feature told from the perspective of the person who desires the new capability, usually a user or customer of the system. They typically follow a simple template:

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

https://www.mountaingoatsoftware.com/agile/user-stories

KINDS OF USER STORIES

Kinds of user stories include:

- Basic user stories. These are the small, targeted stories sized by developers and accepted into sprints.
- Epics. Epics are stories with a large scope. Smaller stories fall beneath them. Frequently user story software shows parent > child relationships between epics and normal user stories.
- Themes. Themes are groups of related user stories.

https://www.mountaingoatsoftware.com/agile/user-stories

CHARACTERISTICS OF USER STORIES

Characteristics of user stories include:

- The user story itself. As a _____, I want to _____, so that _____.
- Resources. These can be details, UX deliverables, or contextual information from the PO or other stakeholders.
- Tasks. These are created by the Scrum team when the story is sized/accepted.
- Definition of done. This is what defines the story as done. Stories can only be approved as "done" by the product owner.

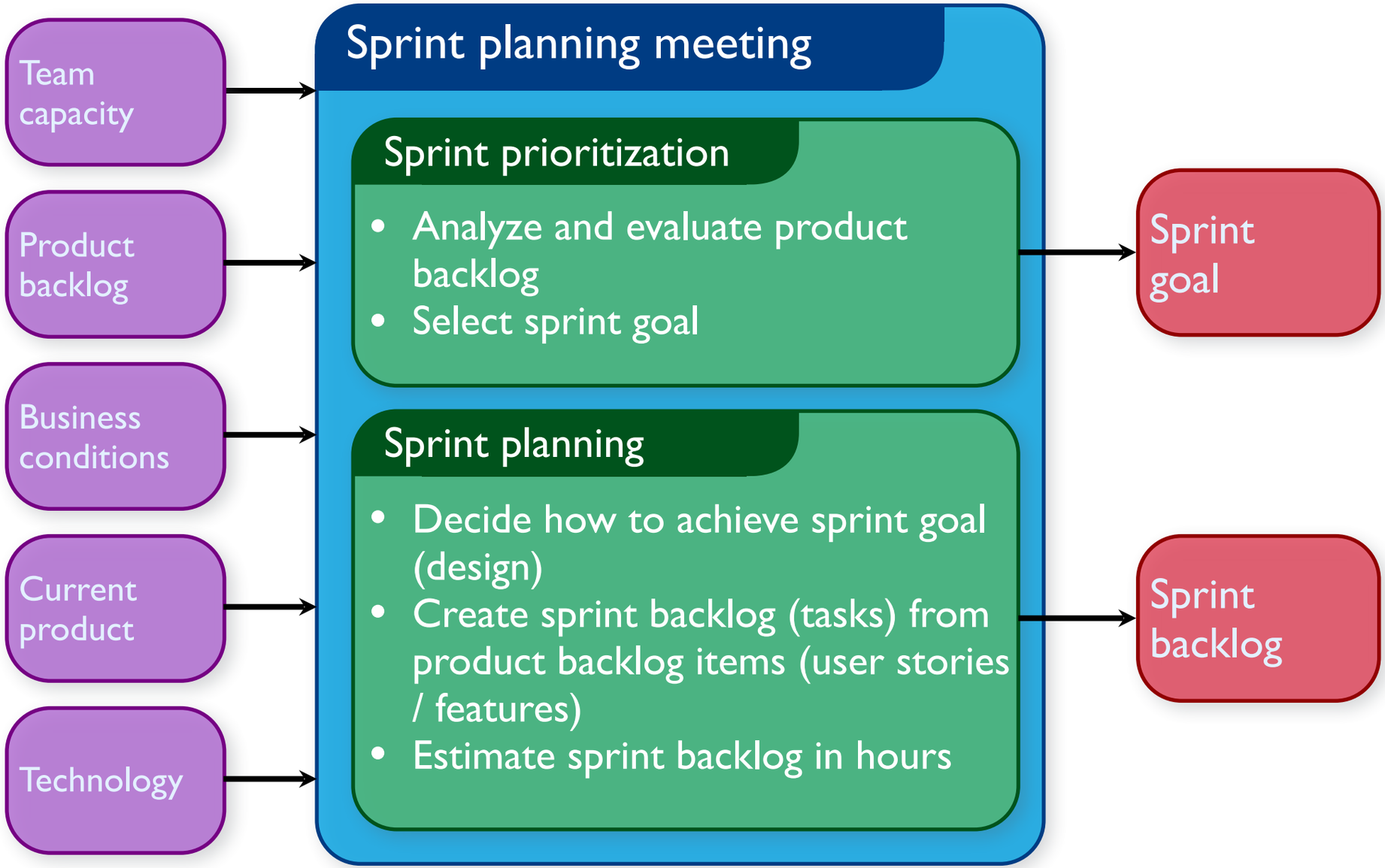
ACTIVITY ~15 min

Evaluate user stories

SMALL GROUPS

- Take the user stories you created last lesson
- Are they epics or basic user stories?
- Brainstorm design and/or development tasks.
- What is the definition of done for each?
- (Last 5 mins.) Regroup, share, and discuss.

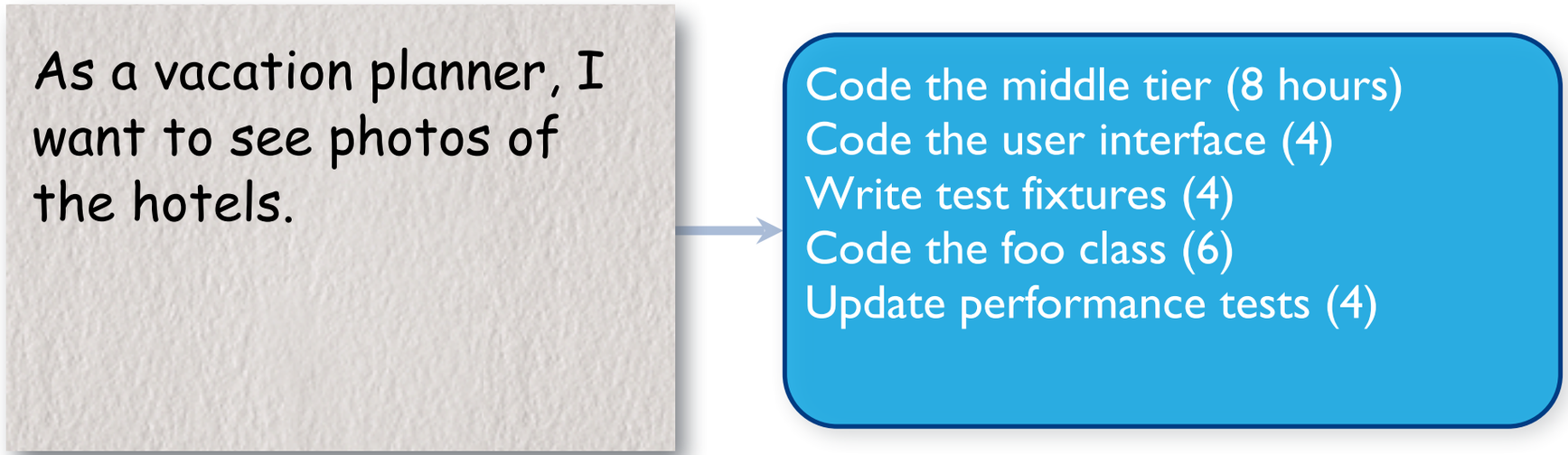
- Tasks. These are created by the Scrum team when the story is sized/accepted.
- Definition of done. This is what defines the story as done. Stories can only be approved as "done" by the product owner.



https://www.mountaingoatsoftware.com/agile/scrum/a-reusable-scrum-presentation

SPRINT PLANNING

- Team selects items from the product backlog they can commit to completing.
- Sprint backlog is created
  - Tasks are identified and each is estimated (1-16 hours)
  - Collaboratively, not done alone by the ScrumMaster
- High-level design is considered



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STORY SIZING

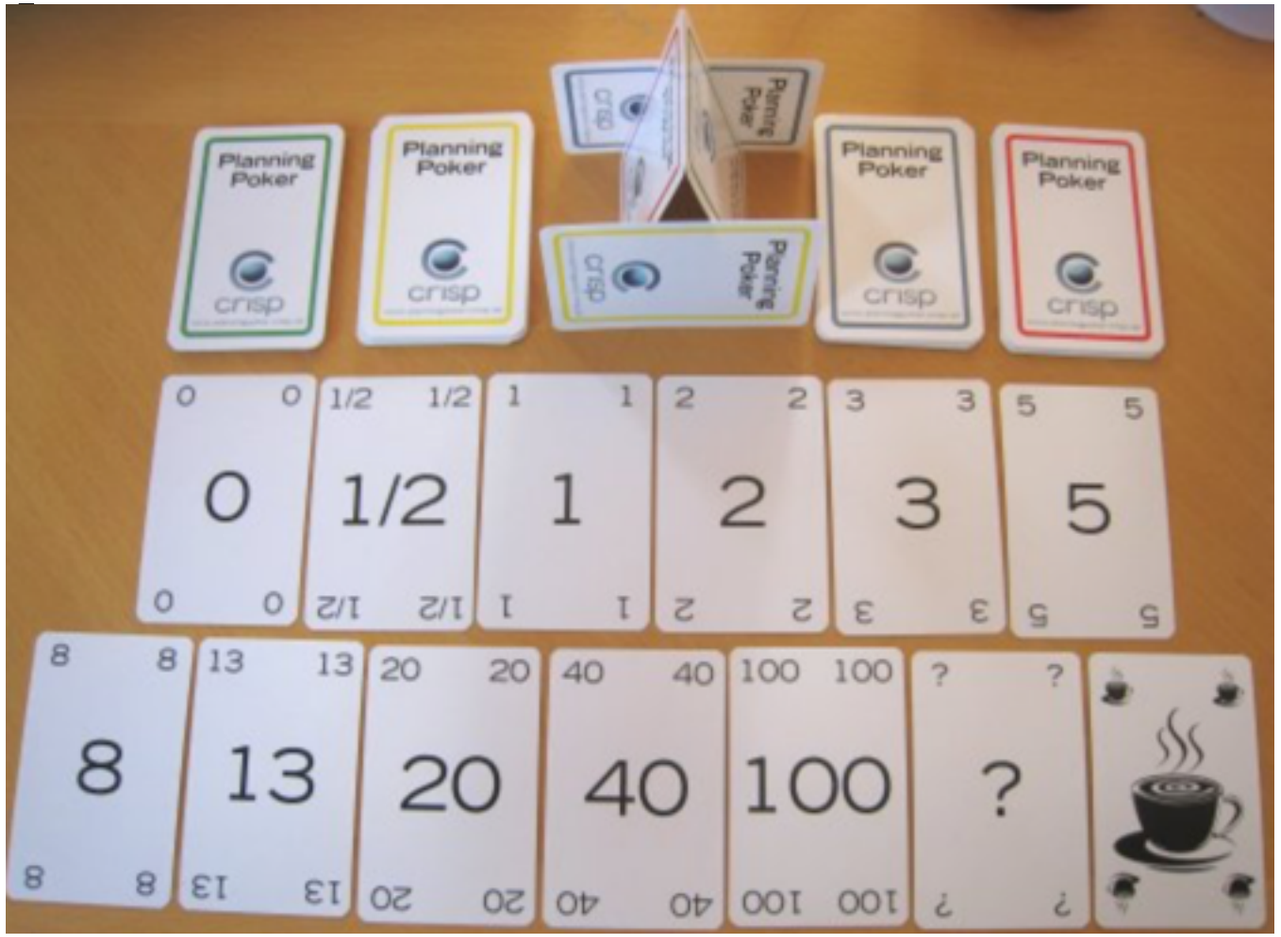
A crucial part of getting stories ready to accept into a sprint is sizing. This ideally happens in its own meeting, but sometimes happens in the same meeting as sprint acceptance.

Sizing is the evaluation of backlog stories by the Scrum team – not the PO or the ScrumMaster.

HOW DOES SIZING HAPPEN?

There are different approaches, but we're going to use Planning Poker. Team members show cards that estimate size. Common sizing measures are Fibonacci numbers and T-shirt sizes.

https://en.wikipedia.org/wiki/Planning_poker



MORE ON SIZING LATER

Right now we're learning Scrum at a high level; in two weeks WDI9 developers will be sizing and accepting stories created by the UXDI6 class. We'll have a more detailed lesson on sizing at that time.

THE DAILY SCRUM

- Parameters
  - Daily
  - 15-minutes
  - Stand-up
- Not for problem solving
  - Whole world is invited
  - Only team members, ScrumMaster, product owner, can talk
- Helps avoid other unnecessary meetings

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EVERYONE ANSWERS 3 QUESTIONS

1. What did you do yesterday?
2. What will you do today?
3. Is anything in your way?

These are not status for the ScrumMaster. They are commitments in front of peers

https://www.mountaingoatsoftware.com/agile/scrum/a-reusable-scrum-presentation

THE SPRINT REVIEW

- Team presents what it accomplished during the sprint
- Typically takes the form of a demo of new features or underlying architecture
- Informal
  - 2-hour prep time rule
  - No slides
- Whole team participates
- Invite the world

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SPRINT RETROSPECTIVE

- Periodically take a look at what is and is not working
- Typically 15–30 minutes
- Done after every sprint
- Whole team participates
  - ScrumMaster
  - Product owner
  - Team
  - Possibly customers and others

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START / STOP / CONTINUE

- Whole team gathers and discusses what they'd like to:

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ARTIFACTS

Artifacts

- Product backlog
- Sprint backlog
- Burndown charts

PRODUCT BACKLOG

This is the product backlog

- The requirements
- A list of all desired work on the project
- Ideally expressed such that each item has value to the users or customers of the product
- Prioritized by the product owner
- Reprioritized at the start of each sprint

A SAMPLE PRODUCT BACKLOG

Backlog item	Estimate
Allow a guest to make a reservation	3
As a guest, I want to cancel a reservation.	5
As a guest, I want to change the dates of a reservation.	3
As a hotel employee, I can run RevPAR reports (revenue-per-available-room)	8
Improve exception handling	8
...	30
...	50

ACTIVITY ~10 min

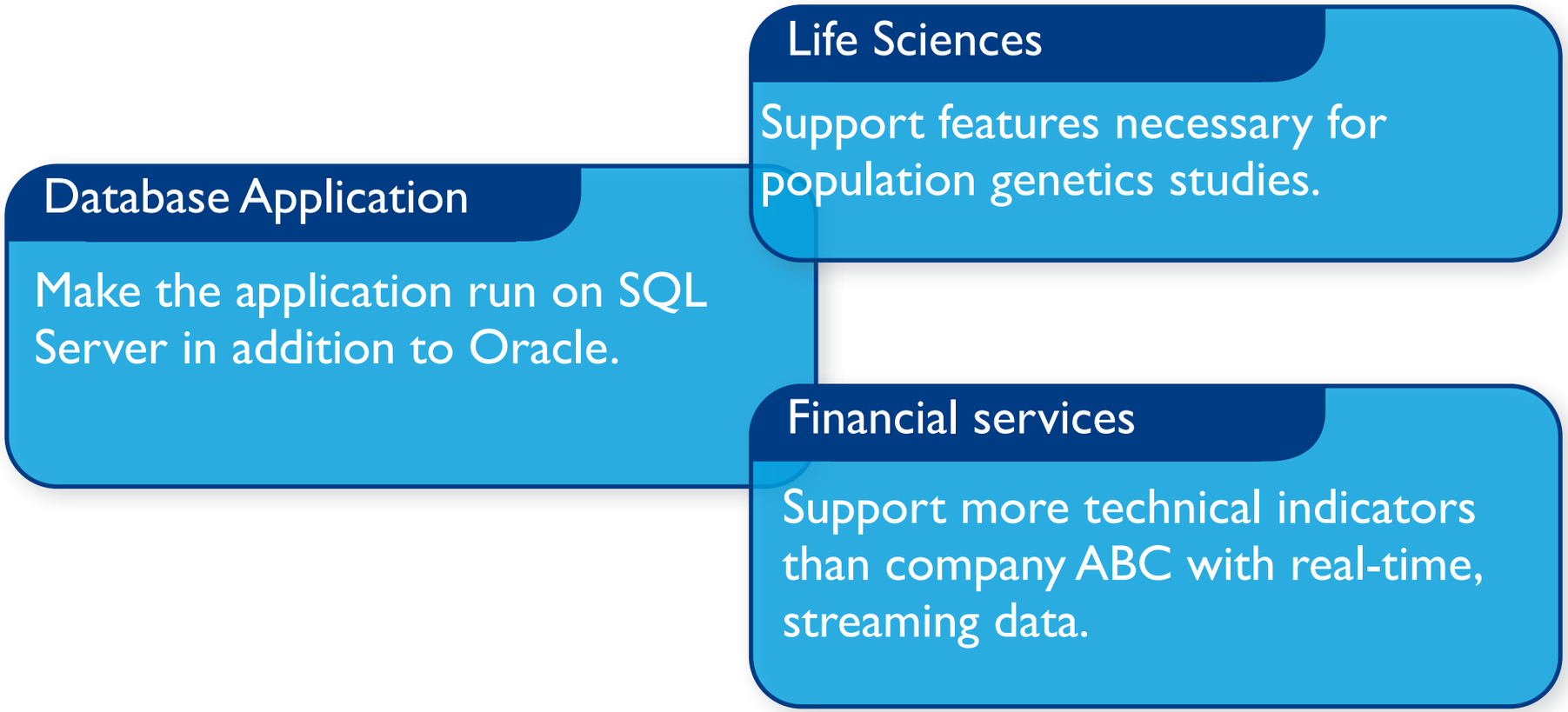
SMALL GROUPS

Prioritize user stories

- Take the user stories you created and evaluated
- Sort them from most urgent to least for a product backlog
- Share and discuss!

THE SPRINT GOAL

- A short statement of what the work will be focused on during the sprint



MANAGING THE SPRINT BACKLOG

- Individuals sign up for work of their own choosing
  - Work is never assigned
- Estimated work remaining is updated daily

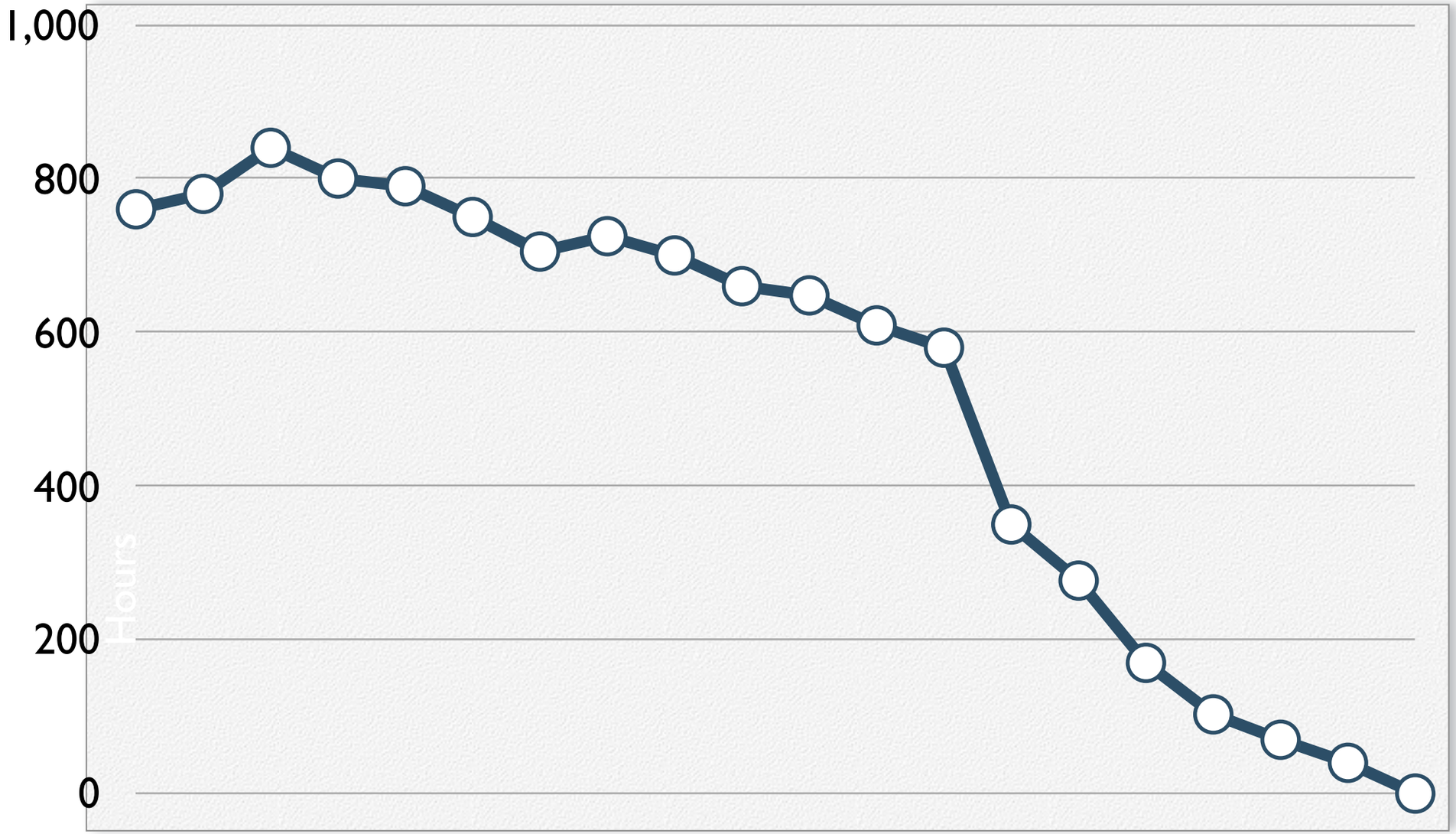
MANAGING THE SPRINT BACKLOG

- Any team member can add, delete or change the sprint backlog; PO prioritizes it.
- Work for the sprint emerges
- If work is unclear, define a sprint backlog item with a larger amount of time and break it down later
- Update work remaining as more becomes known

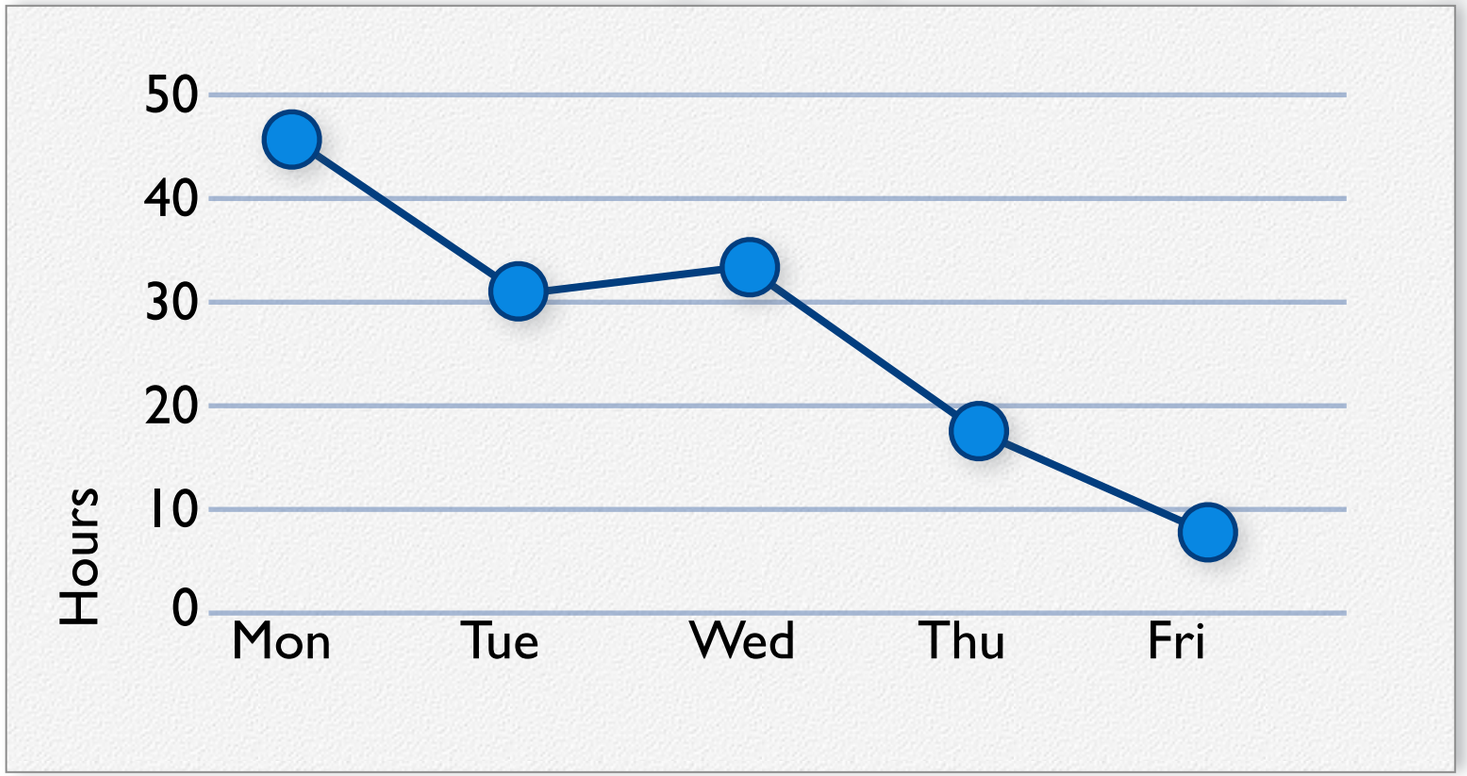
A SPRINT BACKLOG

Tasks	Mon	Tues	Wed	Thur	Fri
Code the user interface	8	4	8		
Code the middle tier	16	12	10	4	
Test the middle tier	8	16	16	11	8
Write online help	12				
Write the foo class	8	8	8	8	8
Add error logging			8	4	

A SPRINT BURNDOWN CHART



Tasks	Mon	Tues	Wed	Thur	Fri
Code the user interface	8	4	8		
Code the middle tier	16	12	10	7	
Test the middle tier	8	16	16	11	8
Write online help	12				



A SCRUM READING LIST

- Agile and Iterative Development: A Manager's Guide by Craig Larman
- Agile Estimating and Planning by Mike Cohn
- Agile Project Management with Scrum by Ken Schwaber
- Agile Retrospectives by Esther Derby and Diana Larsen

A SCRUM READING LIST

- Agile Software Development Ecosystems by Jim Highsmith
- Agile Software Development with Scrum by Ken Schwaber and Mike Beedle
- Scrum and The Enterprise by Ken Schwaber
- Succeeding with Agile by Mike Cohn
- User Stories Applied for Agile Software Development by Mike Cohn

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COMMON AGILE STYLES

Scrum

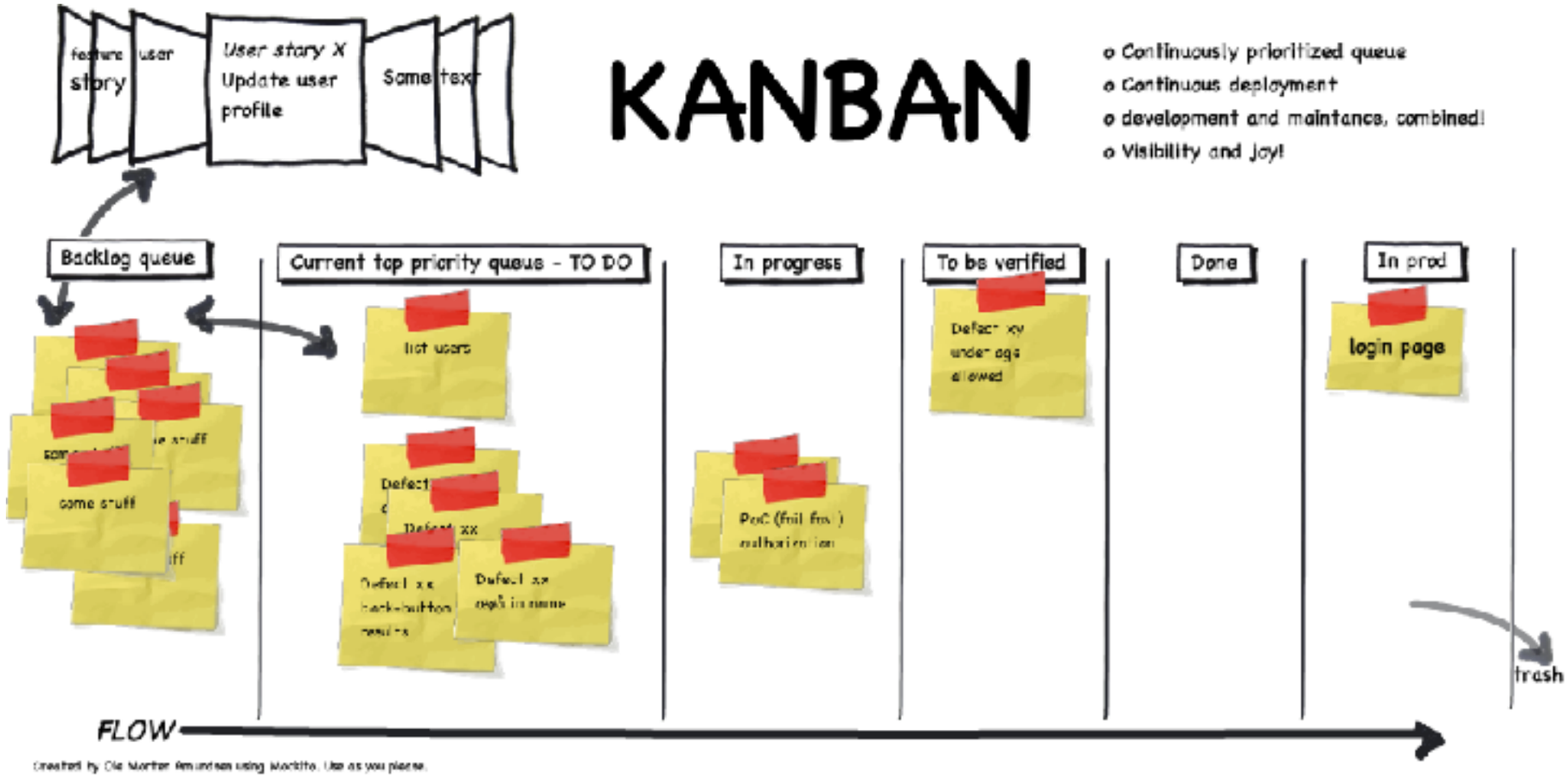
Scrum uses dedicated Scrum teams that work in sprints from a backlog of user stories. Product owners determine “what” and developers and designers determine “how.”

Scrum is characterized by daily stand-ups with three questions:

- What have I done?
- What will I be doing?
- Do I have any blocks or needs?

Kanban

Kanban is best described as fast-paced Scrum. There are no sprints, just a fixed number of stories per state and a backlog.



Lean startup

Lean is or is not Agile, depending on who you talk to. Here (in UXDI), Lean is an extremely slimmed-down Agile cycle with three steps:

- Build
- Measure
- Learn

COMMON AGILE STYLES

Lean UX

Lean UX is a design process that follows the Lean development cycle of “Build, Measure, Learn.”

Lean UX adds its own methods, most significantly Design Studio, a highly useful collaborative technique.

LESSON TITLE

TAKING STOCK

WE LEARNED

- The basic process of a sprint
- The standard artifacts of Scrum
- Alternatives to Scrum
- The joys of Trello

YOU DID

- Evaluated and revised Scrum user stories.
- Prioritized stories for a backlog.

COMING UP

- We'll discuss alternatives to Scrum in the Agile world.
- You'll apply the processes of Scrum in a collaborative project across two classes.
- In the real world, you'll see how Scrum and similar approaches can significantly improve the quality not only of work product, but your work life overall.

Q&A

Mountain Goat Software, User stories
— *https://www.mountaingoatsoftware.com/agile/user-stories*