



Current Trends
in
Web Engineering

Current Trends in Web Engineering

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SECTION://3

■ Sprint & Meetings



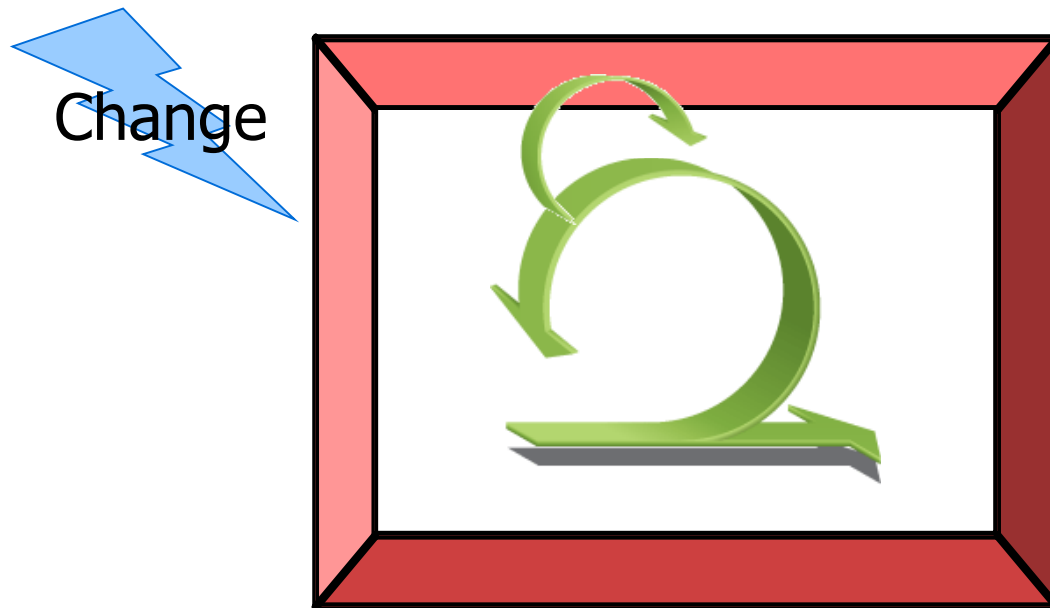
Sprints

- Scrum projects make progress in a series of “sprints”
- Typical duration is 2–4 weeks or a calendar month at most
- A constant duration leads to a better rhythm
- Product is designed, coded, and tested during the sprint
- Every sprint a sprint goal should be reached – which describes the product increment
- The product gets developed sprint by sprint

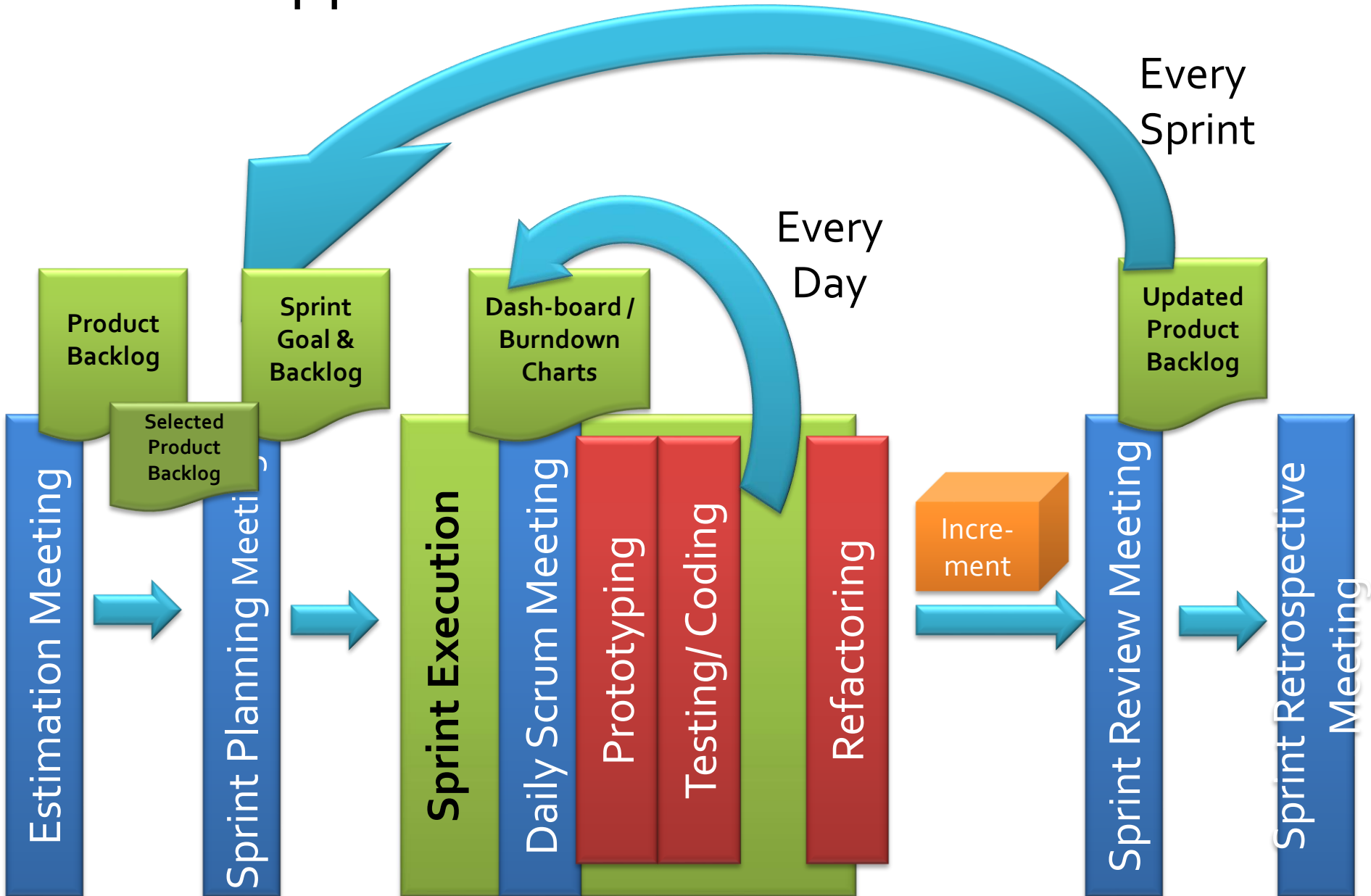


No changes during a sprint

- Plan sprint durations around how long you can commit to keeping change out of the sprint



Scrum 'applied' in more detail...



The Meetings

■ 5 Meetings

- ▶ Estimation / Pre Planning
 - Forming the Product Backlog
- ▶ Sprint Planning
 - Define tasks and negotiate a commitment on Sprint Goals
- ▶ Daily Scrum
 - Team reports to itself – daily commitment
- ▶ Sprint Review
 - Demonstration of working software
- ▶ Sprint Retrospective
 - Improve the process

■ Other meetings

- ▶ Design Meetings, UI workshops
- ▶ Release Planning Meeting
 - Requirements workshops (Story writing)
 - Estimation workshops (Story estimating)



The Meetings - Timing

- A sprint is 100% of the time box.
 - ▶ 5% of 4 weeks sprint → 1 day
 - ▶ 5% of 2 weeks sprint → 1/2 day
- Meetings
 - ▶ Sprint Planning (5%)
 - ▶ Daily Scrum (15 min/day)
 - ▶ Sprint Review & Sprint Retrospective (5%)
- Capacity
 - ▶ Gross Capacity:
 - #team member * net work hour / day * days
 - ▶ Net Capacity:
 - Gross Capacity – 20% Noise
 - 10% Meetings – 10% Look Ahead – 15% mission critical problems
 - Look ahead: e.g. Grooming, helping PO



The Meetings

- **Estimation / Pre Planning**
- Sprint Planning
- Daily Scrum
- Sprint Review
- Sprint Retrospective



Estimation / Pre-Planning

- Let's say we have a product backlog
 - ▶ How we got there will be discussed in a later section.
- Estimation Meeting is about estimating size of Stories
 - ▶ How does the size of a story look like?
 - ▶ Example: 1 – 2, 1 – 3, 17 – 18, 230 – 247
- Why is this important?



Estimating Relative Size



Scale: 1-50

Echidna

?

All Pictures from Wikipedia.de

Estimating Relative Size



Scale: 1-50

All Pictures from Wikipedia.de

Estimation

■ Estimation also an art of scaling

- ▶ 1 – 2, 1 – 3, 17 – 18, 230 – 247
- ▶ Size of a backlog item compared to others
 - Several approaches like S, M, L, XL, XXL
- ▶ Recommended Approaches:
 - Fibonacci sequence: 1, 2, 3, 5, 8, 13, 21, ...
 - Planning Poker with Fibonacci-oriented sequence:
0, $\frac{1}{2}$, 1, 2, 3, 5, 8, 13, 20, 40, 100, ...
 - Don't forget the power of poker cards
 - Affinity Estimation



The Meetings

- Estimation / Pre Planning
- **Sprint Planning**
- Daily Scrum
- Sprint Review
- Sprint Retrospective

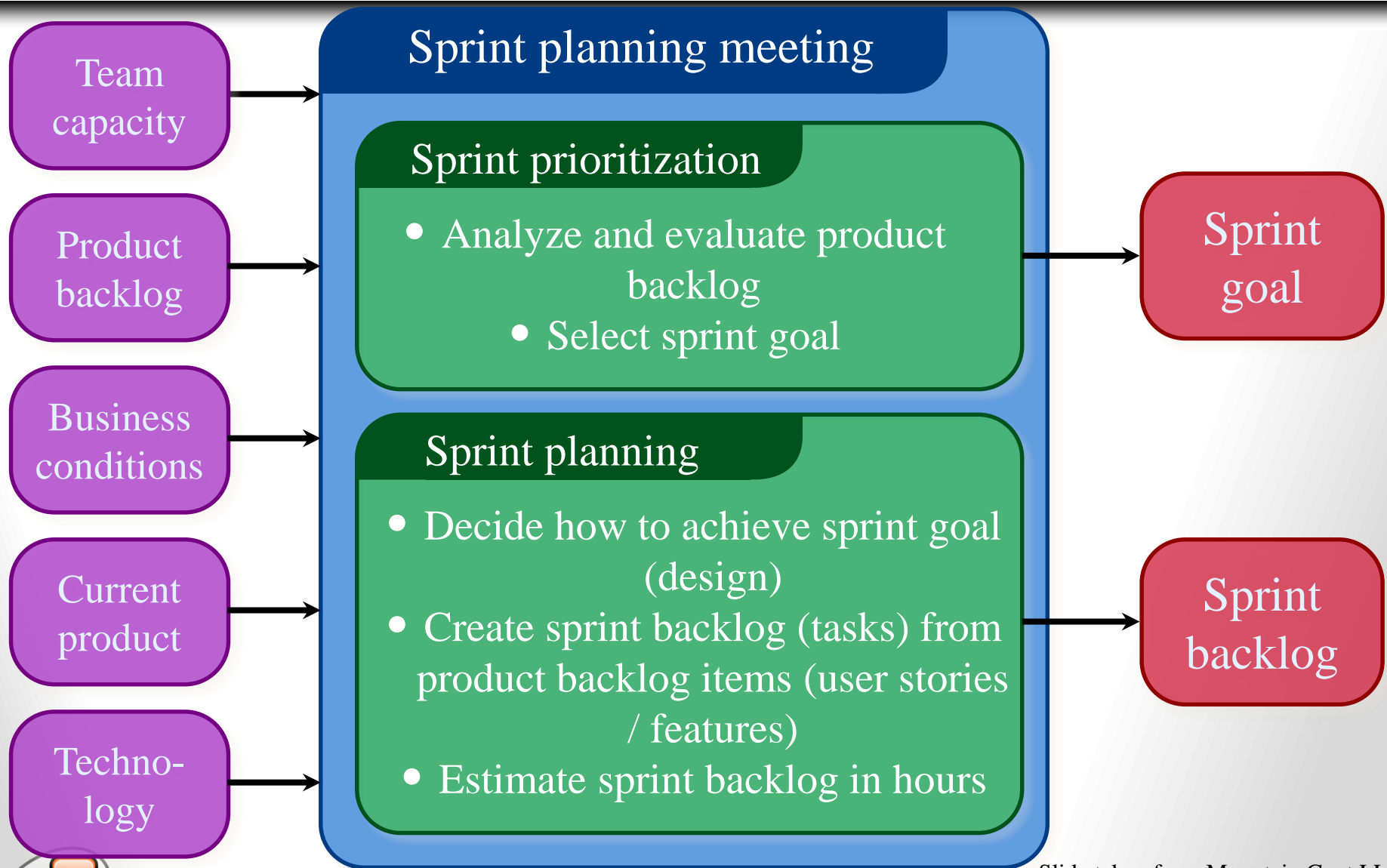


Sprint Planning

- Sprint Planning is about transforming Product Backlog items (Stories) into Sprint Backlog items (Tasks)
- Before the meeting
 - ▶ The team, with the support of the product owner, estimates the product backlog items
 - ▶ The product owner prioritizes the product backlog



Sprint Planning Meeting



Slide taken from Mountain Goat LLC

Sprint Planning

Slide taken from Mountain Goat LLC

- Team selects items from the product backlog they can commit to completing
 - ▶ Following the prioritization of the stories
- Sprint backlog is created
 - ▶ Tasks are identified and each estimated in work units (eg $\frac{1}{4}$ days)
 - ▶ Collaboratively, not done alone by the ScrumMaster
- High-level design is considered

As a vacation planner,
I want to see photos
of the hotels.



Code the middle tier (8 hours)
Code the user interface (4)
Write test fixtures (4)
Code the foo class (6)
Update performance tests (4)

The Meetings

- Estimation / Pre Planning
- Sprint Planning
- **Daily Scrum**
- Sprint Review
- Sprint Retrospective



The daily scrum

Slide taken from Mountain Goat LLC

■ Parameters

- ▶ Daily
- ▶ 15-minutes
- ▶ Stand-up

■ Not for problem solving

- ▶ Whole world is invited
- ▶ Only team members, ScrumMaster, product owner, allowed to talk (i.e. only pigs allowed to talk – not chicken)

■ Helps avoid other unnecessary meetings



Everyone answers 3 questions

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

1
What did you do yesterday?

2
What will you do today?

3
Is anything in your way?



The Meetings

- Estimation / Pre Planning
- Sprint Planning
- Daily Scrum
- **Sprint Review**
- Sprint Retrospective



The sprint review

- Team presents what it accomplished during the sprint
- Typically takes the form of a demo of new features or underlying architecture
- PO decides on Done
(has to be defined by Scrum Team)
Good practice: "Definition of Done"
- Whole team participates
- Invite the world



The Meetings

- Estimation / Pre Planning
- Sprint Planning
- Daily Scrum
- Sprint Review
- **Sprint Retrospective**



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



Start / Stop / Continue

Slide taken from Mountain Goat LLC

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

Start doing

Stop doing

This is just one
of many ways to
do a sprint
retrospective.

Continue doing



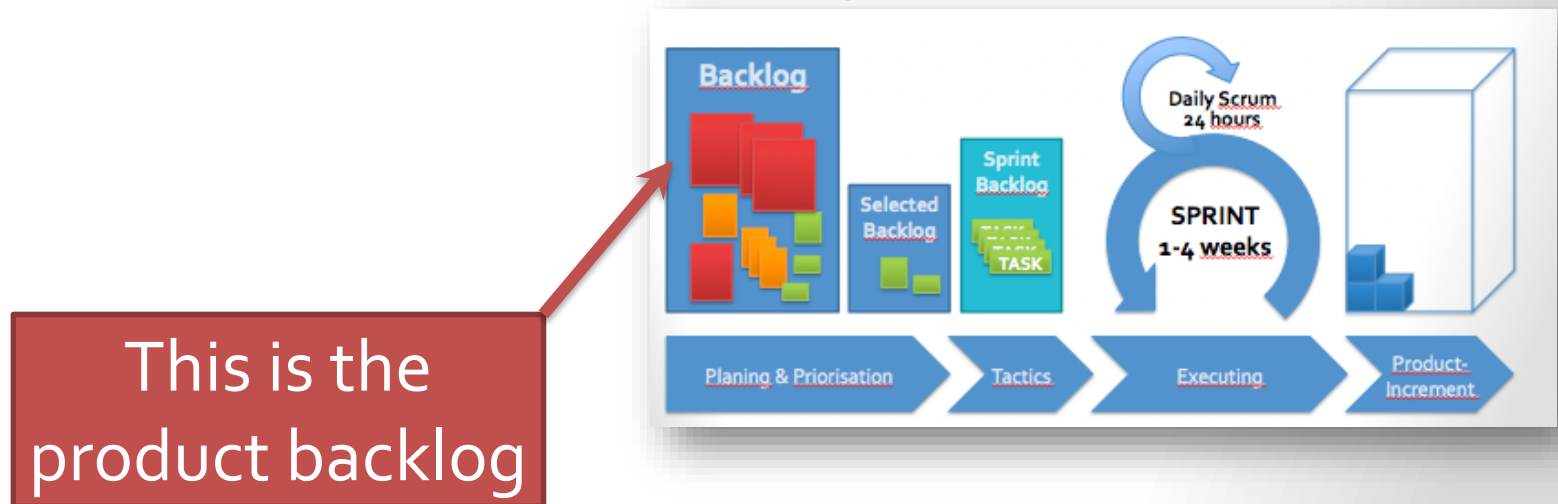
SECTION://4

■ Scrum Artifacts



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

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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

The sprint goal

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

Database Application

Make the application run on SQL Server in addition to Oracle.

Life Sciences

Support features necessary for population genetics studies.

Financial services

Support more technical indicators than company ABC with real-time, streaming data.

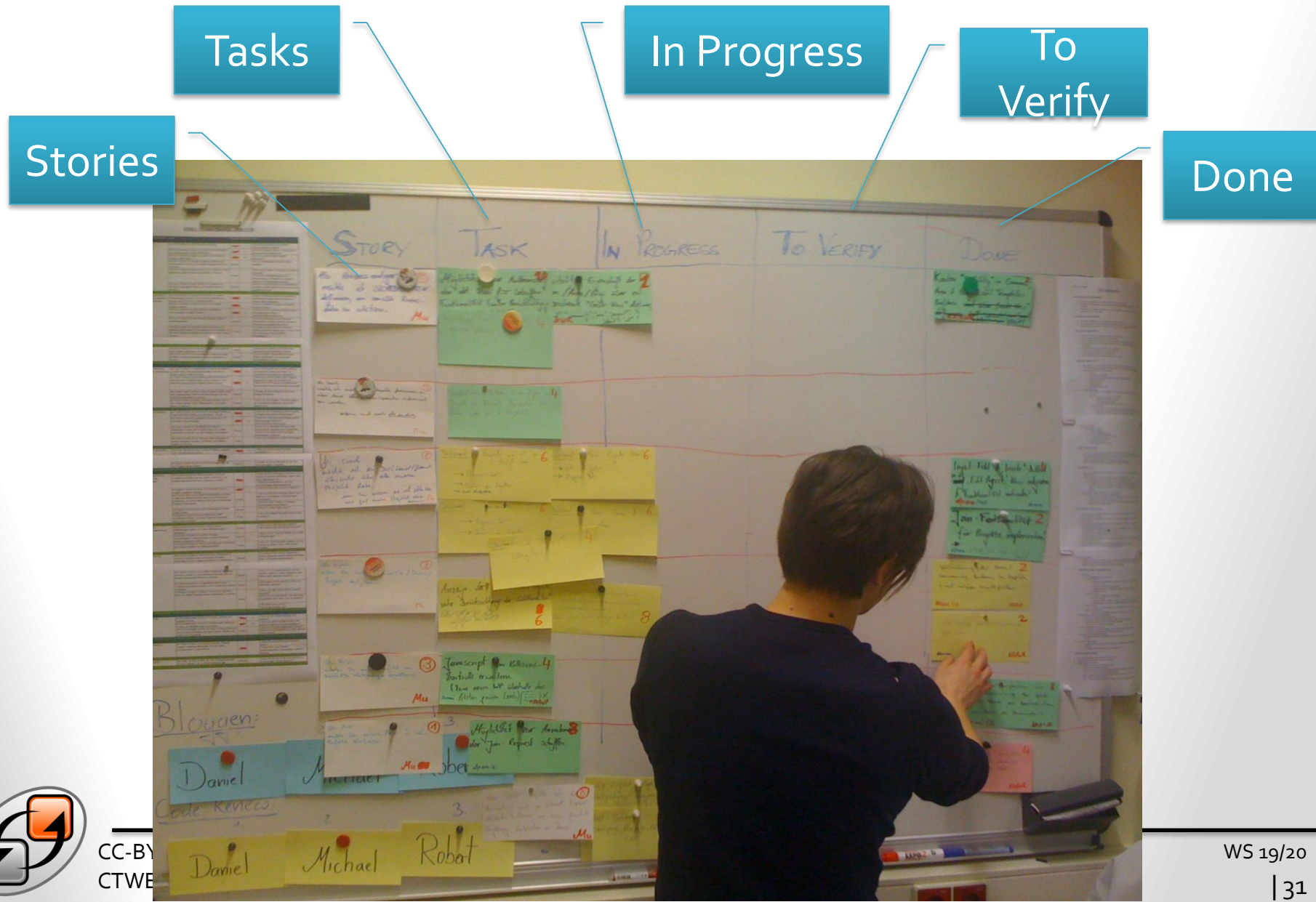


Managing the sprint backlog

- Individuals sign up for work of their own choosing
 - ▶ Work is never assigned
- Estimated work remaining is updated daily
- Any team member can add, delete or change the sprint backlog
- 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



Story/Task – Dashboard Example



A sprint backlog

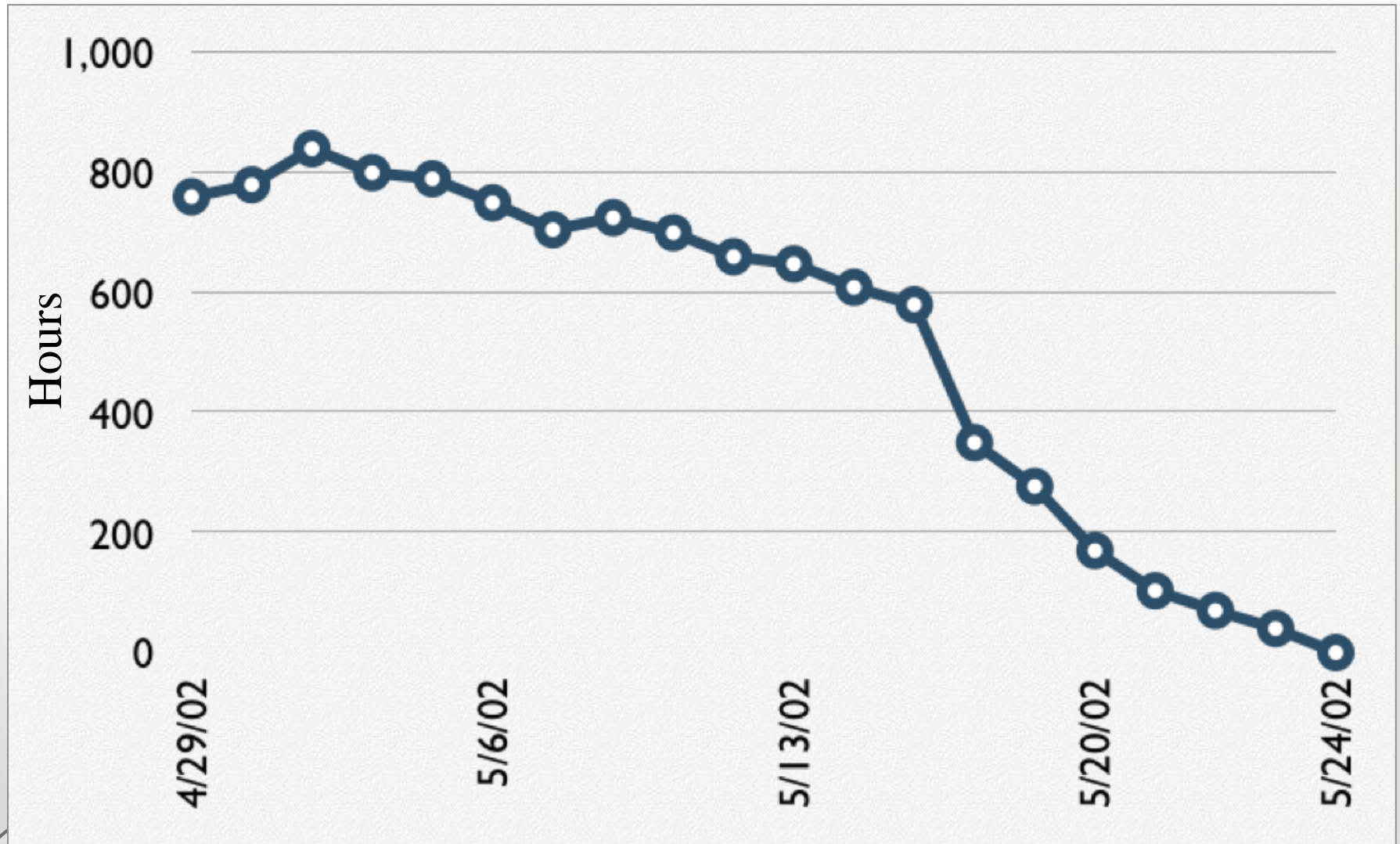
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Tasks	Mon	Tues	Wed	Thur	Fri
Code the user interface	8	4	8		
Code the middle tier	16	12	10	4	
Test the middle tier	8	16	16	11	8
Write online help	12				
Write the foo class	8	8	8	8	8
Add error logging			8	4	



A sprint burndown chart

Slide taken from Mountain Goat LLC



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				

