CS353 Team Project

Week 9

DR. Chris Roadknight

ASSISTANT PROFESSOR, MAYNOOTH UNIVERSITY, IRELAND

Plan

week	date	content
3	15/09/2021	Introduction
4	22/09/2021	Scrum, team allocation, initial introductions
5	29/09/2021	Supervisor allocation, project decision , Special Projects
6	06/10/2021	Project sign off, Sprint 1, Week 1. Sprint Planning
7	13/10/2021	Sprint 1, Week 2
8	20/10/2021	Sprint 1, Week 3. Sprint Review, Sprint Retrospective
9	27/10/2021	Sprint 2, Week 1. Sprint Planning
10	03/11/2021	Sprint 2, Week 2
11	10/11/2021	Sprint 2, Week 3. Sprint Review, Sprint Retrospective
12	17/11/2021	Sprint 3, Week 1. Sprint Planning
13	24/11/2021	Sprint 3, Week 2
14	01/12/2021	Sprint 3, Week 3. Sprint Review, Sprint Retrospective
15	08/12/2021	Sprint 4, Week 1. Sprint Planning
16	15/12/2021	Sprint 4, Week 2
17	22/12/2021	Sprint 4, Week 3. Sprint Review, Sprint Retrospective
18	29/12/2021	Wrap up, submission deadline ?

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Sprint 4. Test Driven Development, Version control, Documentation

Sprint 3. Story Maps, Testing Testing Testing

Sprint 2. User Stories and how they influence development. Task estimation. Burndown Charts

Sprint 1. What is the project, who is the team, what has been done similar, what is Agile/Scrum, what is a first simple approach.

Weightings

50% Group Mark

Group Sections of the Report – Identical for all members [25%]
Co-operation Evaluation [10%] (5*2%) (2% completed)
Final Product Demo [15%] (do we want video or live??)

50% Individual Mark

Individual proposal [5%] (completed)
Individual sections of final report [25%]
Peer assessment [20%]

Prize for best project
[Co-submission of academic paper?]

Final Product Demo

Live presentation or submitted Video?

There are merits in both…

Being able to present your work live, and be questioned is an important skill.

As is…

Preparing a video screencast demo. (there will still be questions)

…so, I will let you decide.

VOTE!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!

Sprint 1, Week 3

User Stories and Task Estimations

Both are required for Sprint Planning

User Stories

Before you start Sprint 2…investigate and generate User Stories

A set of ‘conversations’ about how users might interact with the software

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

As an editing Lecturer, I want to be able to share documents without using moodle so that I have a more robust method to disseminate notes

200 example user stories on moodle
From:
https://www.mountaingoatsoftware.com/uploads/documents/example-user-stories.pdf

News

- As a site visitor, I can read current news on the home page so that I stay current on agile news.
- As a site visitor, I can access old news that is no longer on the home page, so I can access things I remember from the past or that others mention to me.
- As a site visitor, I can email news items to the editor, so they can be considered for publication. (Note: this could just be an email link to the editor.)
- As a site a site editor, I can set the following dates on a news item: Start Publishing Date, Old News Date, Stop Publishing Date so articles are published on and through appropriate dates. These dates refer to the date an item becomes visible on the site (perhaps next Monday), the date it stops appearing on the home page, and the date it is removed from the site (which may be never).
- As a site member, I can subscribe to an RSS feed of news (and events?) so I remain sufficiently and easily informed.
- As a site editor, I can assign priority numbers to news items, so I can indicate which articles I want featured most prominently on the site. Note: Items are displayed on the front page based on priority.

User Stories

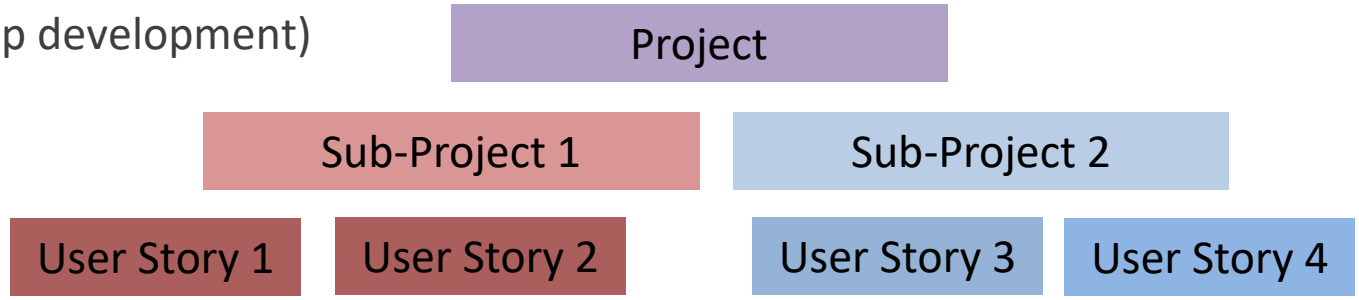
User stories (and providing he code to satisfy them) are the smallest discrete piece of work in an agile framework

A general explanation of a software feature written from the perspective of the end user

Stories that are accepted as a task will need to be ‘burned down’

Several user stories can be combined into a larger piece of work.

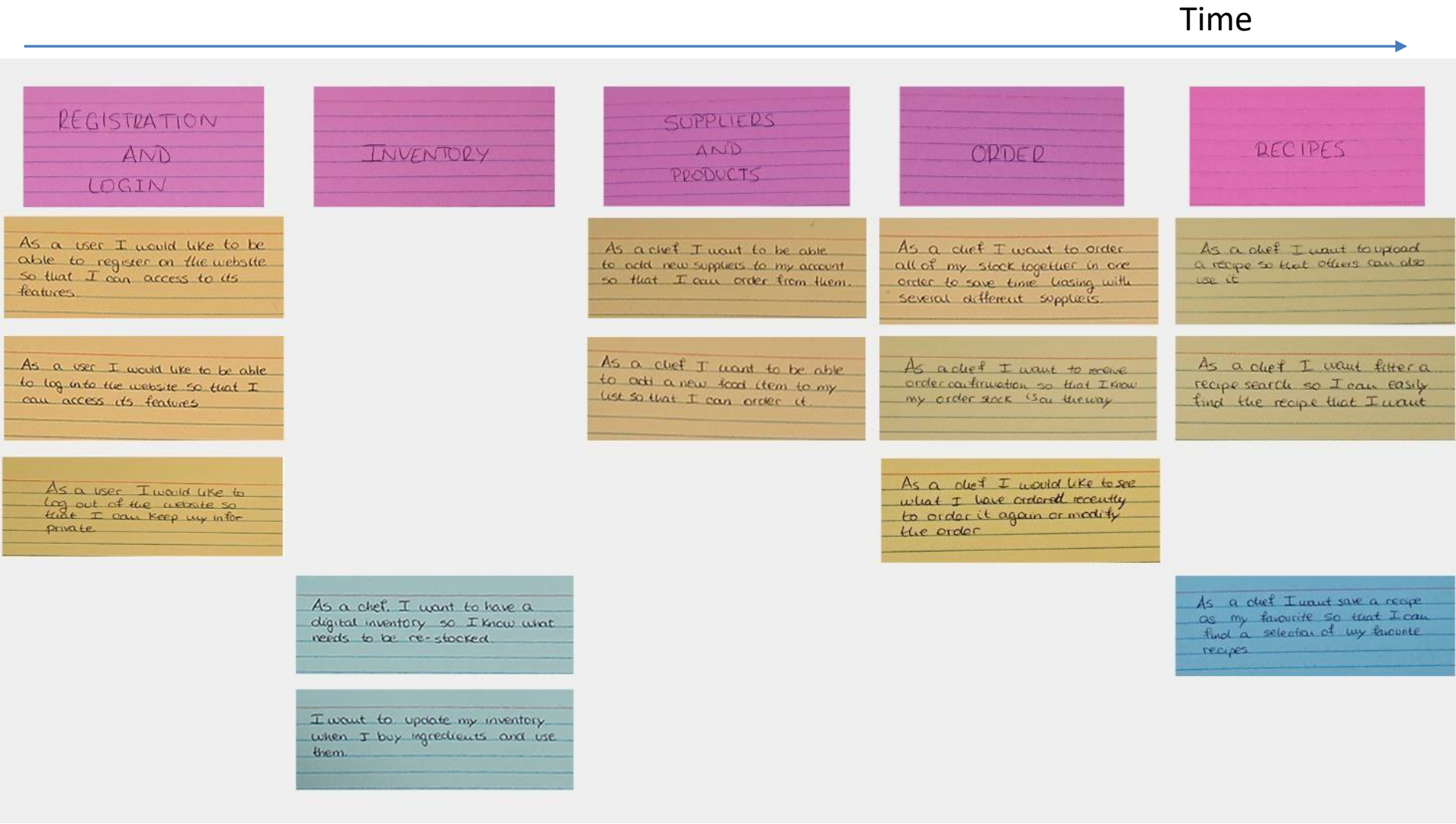
(Bottom up development)



User Stories

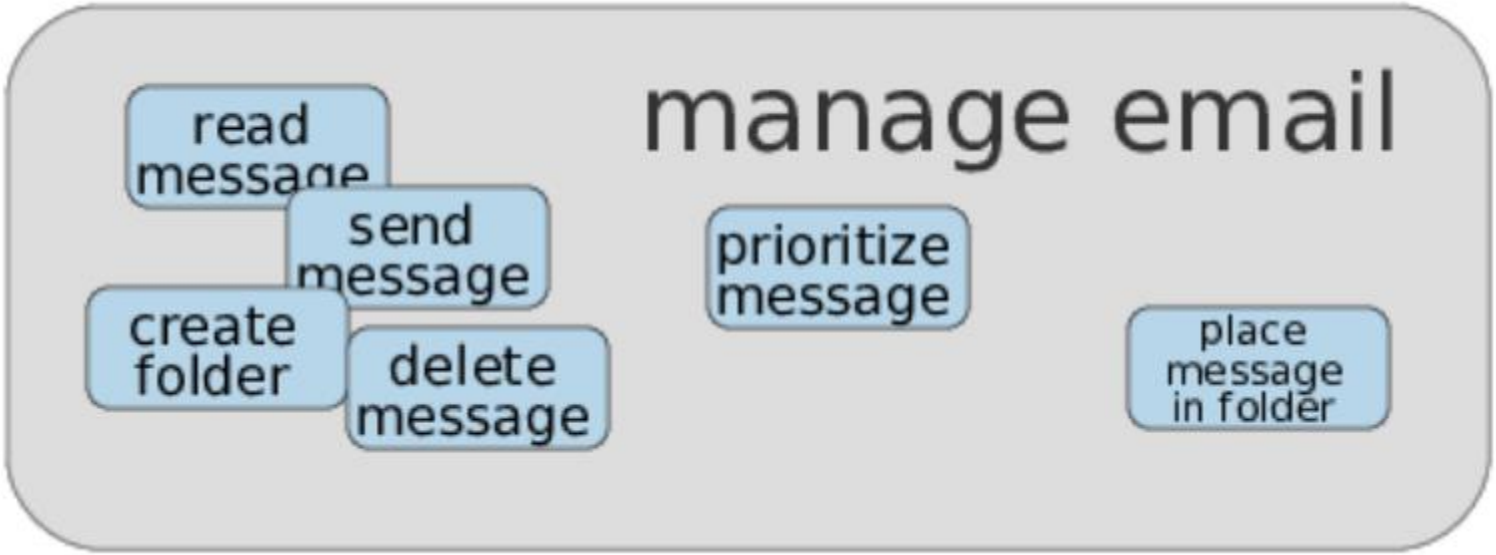
1. During a sprint planning meeting, the team decides what stories they'll tackle that sprint.
2. Teams discuss the requirements and functionality that each user story requires.
3. Team constructs a Story Map
4. User stories can be updated over time
5. Sometimes need an 'Acceptance Criteria' – when is it finished
6.

Example story map



User Stories Achieved by user tasks

The ‘Manage email’ story is achieved by actions such as ‘read message’ – this is a user task



Estimating Tasks

- Two broad categories of estimation methods:
  - 1: Model based – e.g. COCOMO
    - Uses models usually built from observations
    - Perhaps tailored to the current domain
  - 2: Expert (consensus) based – e.g. Wideband Delphi
    - Uses experts and their experience

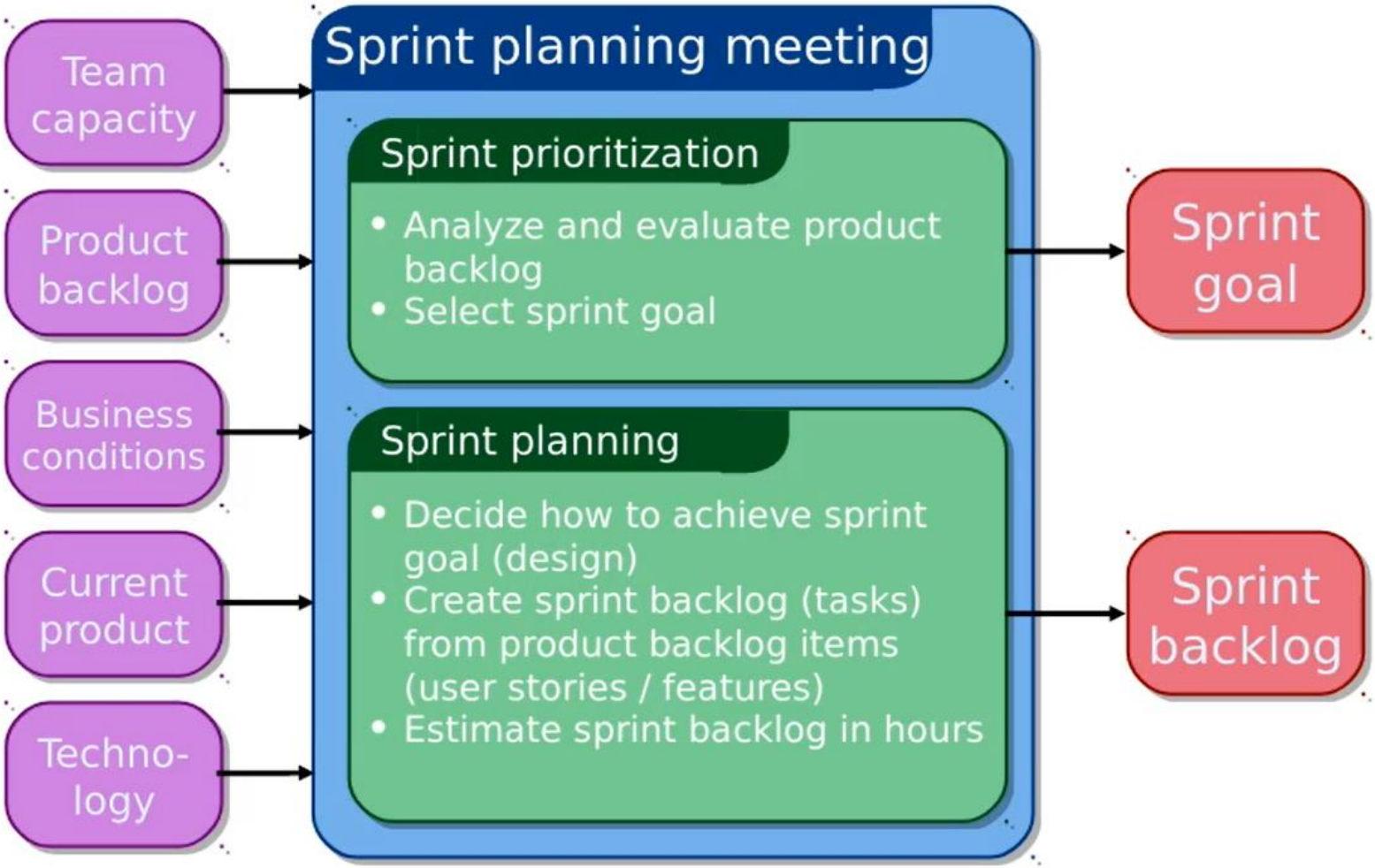
Planning Poker

- A variation of Wideband Delphi
  - 1: Assemble a group of experts (around 10)
  - 2: Give each estimator a deck of cards (usually 0, 1, 2, 3, 5, 8, 13, 20, 40, and 100)
  - 3: Moderator reads a description of the user story. The product owner can answer questions from estimators.
  - 4: Each estimator selects a card and places it face down on the table. When all estimates are in, the cards are flipped over.
  - 5: If the estimates vary widely, the owners of the high and low estimates discuss the reasons why their estimates are so different. All estimators should participate in the discussion.
  - 6: Repeat from step 4 until estimates converge to within some predetermined threshold.

Planning Poker

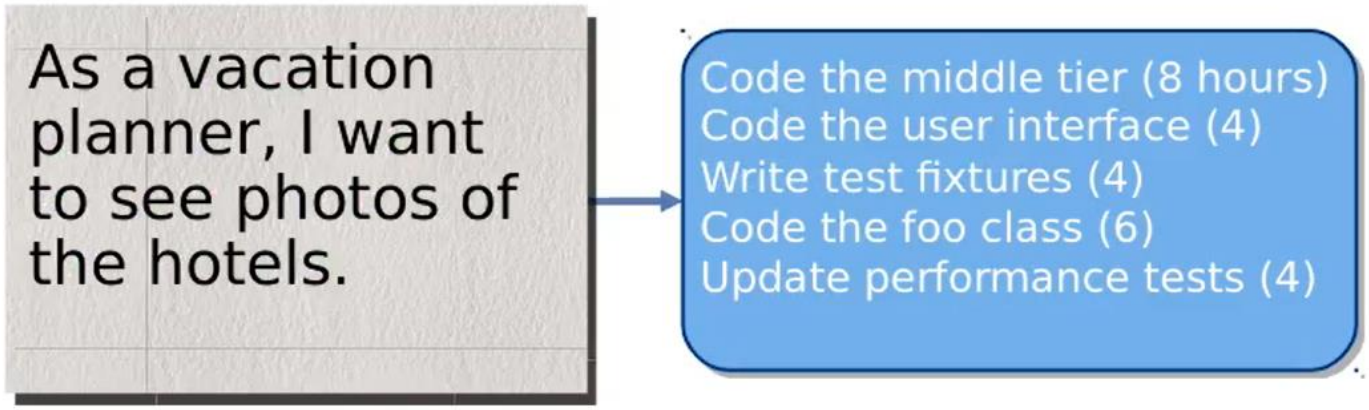
- How effective is it?:
  - One study found that estimates obtained through the Planning Poker process were less optimistic and more accurate than estimates obtained through mechanical combination of individual estimates for the same tasks.

Planning poker cards


Team capacity
Product backlog
Business conditions
Current product
Techno-logy
Sprint planning meeting
Sprint prioritization
• Analyze and evaluate product backlog
• Select sprint goal
Sprint planning
• Decide how to achieve sprint goal (design)
• Create sprint backlog (tasks) from product backlog items (user stories / features)
• Estimate sprint backlog in hours
Sprint goal
Sprint backlog

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



Today

1. Design some user stories, if you don't have any
2. Discuss user stories, discuss subprojects
3. Add some user stories to the Product Backlog
4. Have Sprint planning meeting **(arrange with a supervisor)**
    1. Analyse product backlog
    2. Decide sprint goal and how to achieve it
    3. Estimate hours for new tasks
    4. Create Sprint Backlog
    5. Estimate sprint backlog in hours

1. DOCUMENT EVERYTHING.
2. Any time left, check you have all documentation up to date