SCRUM

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AGILE AND REQUIREMENTS

Product Vision

Vision Statement	Phrase or sentence to summarise the vision		
Target group	Needs	Product	Value
Which market segment does the product address? Who are its target customers and users?	Which needs does the product fulfil and how does it create value for its customers and users? Which emotions does it evoke?	What are the three to five top features that are crucial for the success of the product? What will the product roughly look like? What are its unique selling points?	How is the product going to benefit the company? For instance, what are its revenue sources? What is the cost structure? Which sales channels will be used? Will it save cost?

Task, User Story, Epic, Theme

<table>
<tr><th colspan="5">Theme
Increase Website Traffic</th></tr>
<tr><td colspan="2">Epic
Add new Video Section</td><td colspan="3">Epic
Improve Login Page Usability</td></tr>
<tr><td>User Story</td><td>User Story</td><td colspan="2">User Story
As a User,
I want to have the validation on the login page,
So that I can easily see when/if I make a mistake</td><td>User Story</td></tr>
<tr><td>Sub-task</td><td>Sub-task</td><td>Sub-task</td><td>Sub-task</td><td>Sub-task</td></tr>
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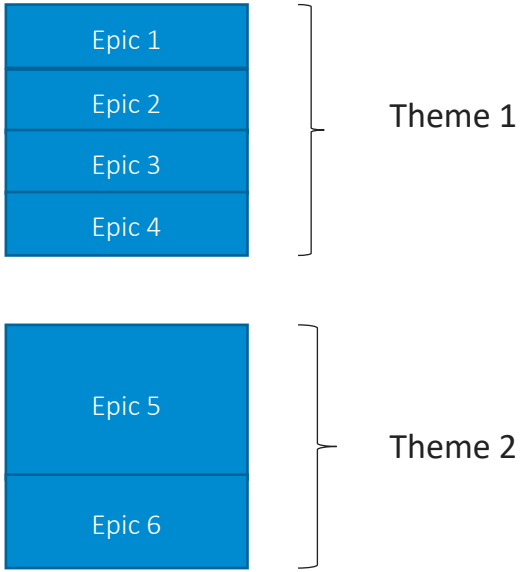
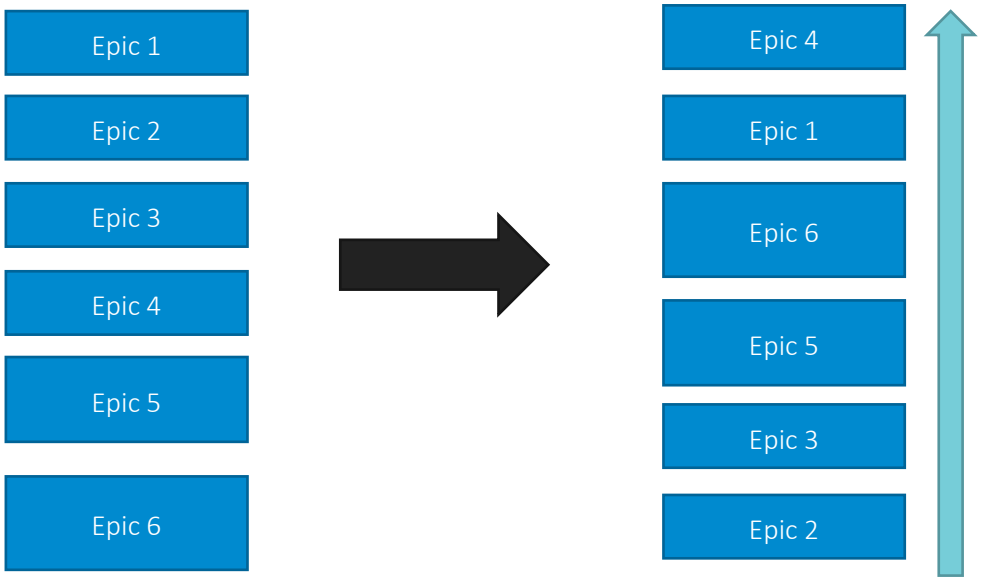
Start with Themes and Epics



Slice the cake



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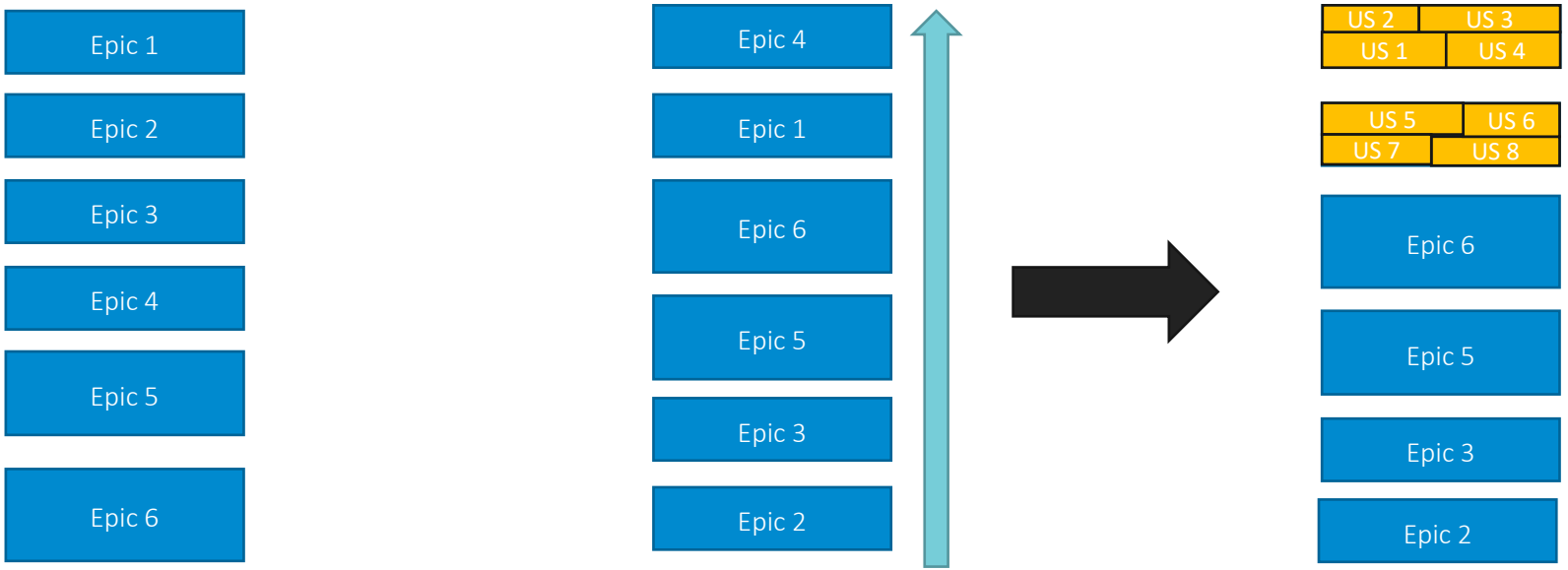
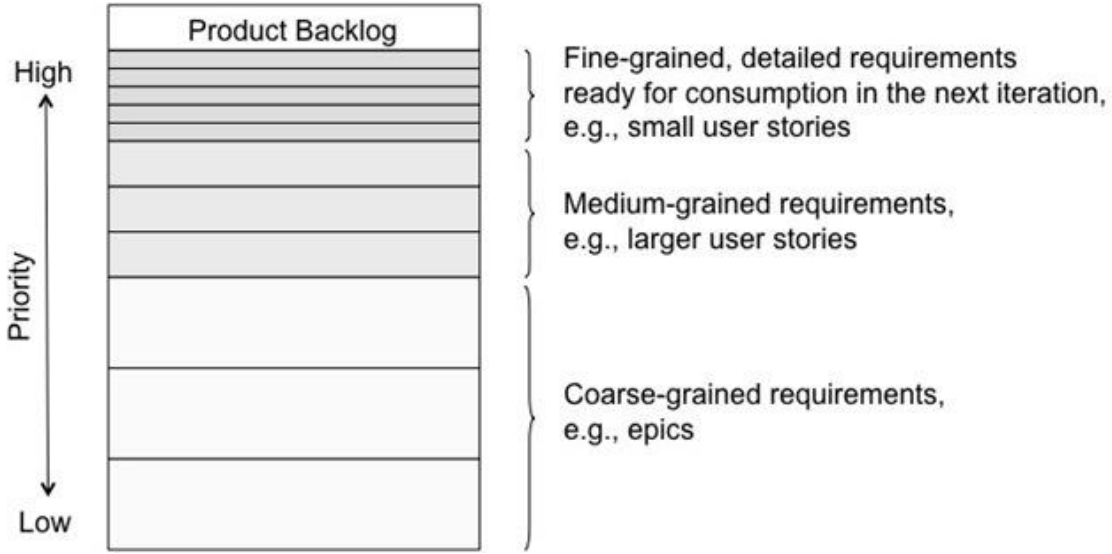
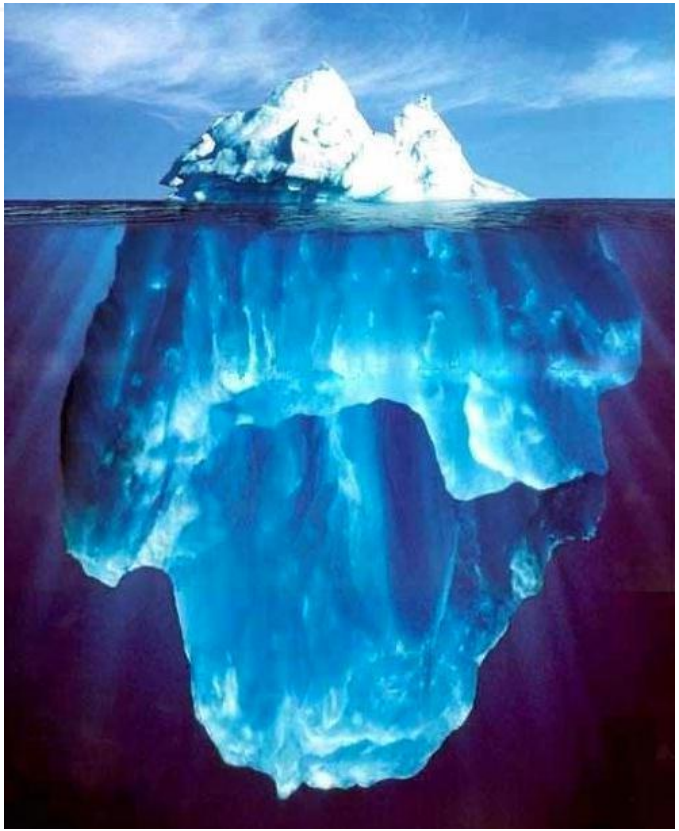


Backlog


Product Backlog
High
Priority
Low
Fine-grained, detailed requirements ready for consumption in the next iteration, e.g., small user stories
Medium-grained requirements, e.g., larger user stories
Coarse-grained requirements, e.g., epics



User Stories

…a piece of functionality valuable for the end-user.

Card

Conversation

Confirmation

User story: Card

A written description of the user story for planning purposes and as a reminder, starting point for discussion.

Card

As a [user role] I want [activity] so I can [benefit]

As a [user role] I can [activity] so that [benefit]

User role – who (new user, guest, job-seeker)?

Activity – functionality, action of the system, what?

Benefit – value for the end-user, why?

User Story Card examples

- **As a** recruiter **I want** to search by job-seeker's name **so** I can find all resumes of job-seeker
- **As a** recruiter **I want** to search resumes by job-seeker's name
- Search resume by job-seeker's name
- Search resume
- Search

Non-estimable uncertain stories

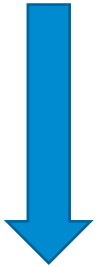
- **Spike** is an experiment to gain knowledge so that developers can estimate the story.
- Research, prototype, implementing some code or any other way to drive down the uncertainty to be able to estimate the story.
- *Technical spikes* – research technical approaches, e.g. build vs. buy, performance.
- *Functional spikes* – get feedback on how the user shall interact with the system, prototyping.

Spike Example

User Story:

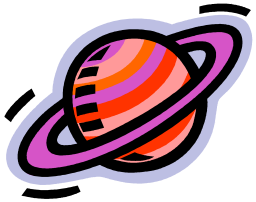
As a physician,
I want to send HL7 data about the patient to RIS,
so that I can be prepared for screening.

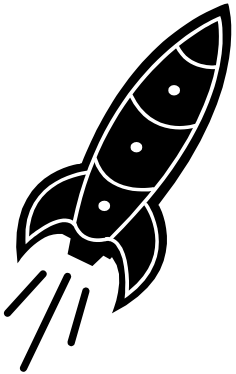
What is HL7?



Be able to explain to the team the structure and required fields of HL7 for transferring data to RIS, so team can estimate the story (2 days).

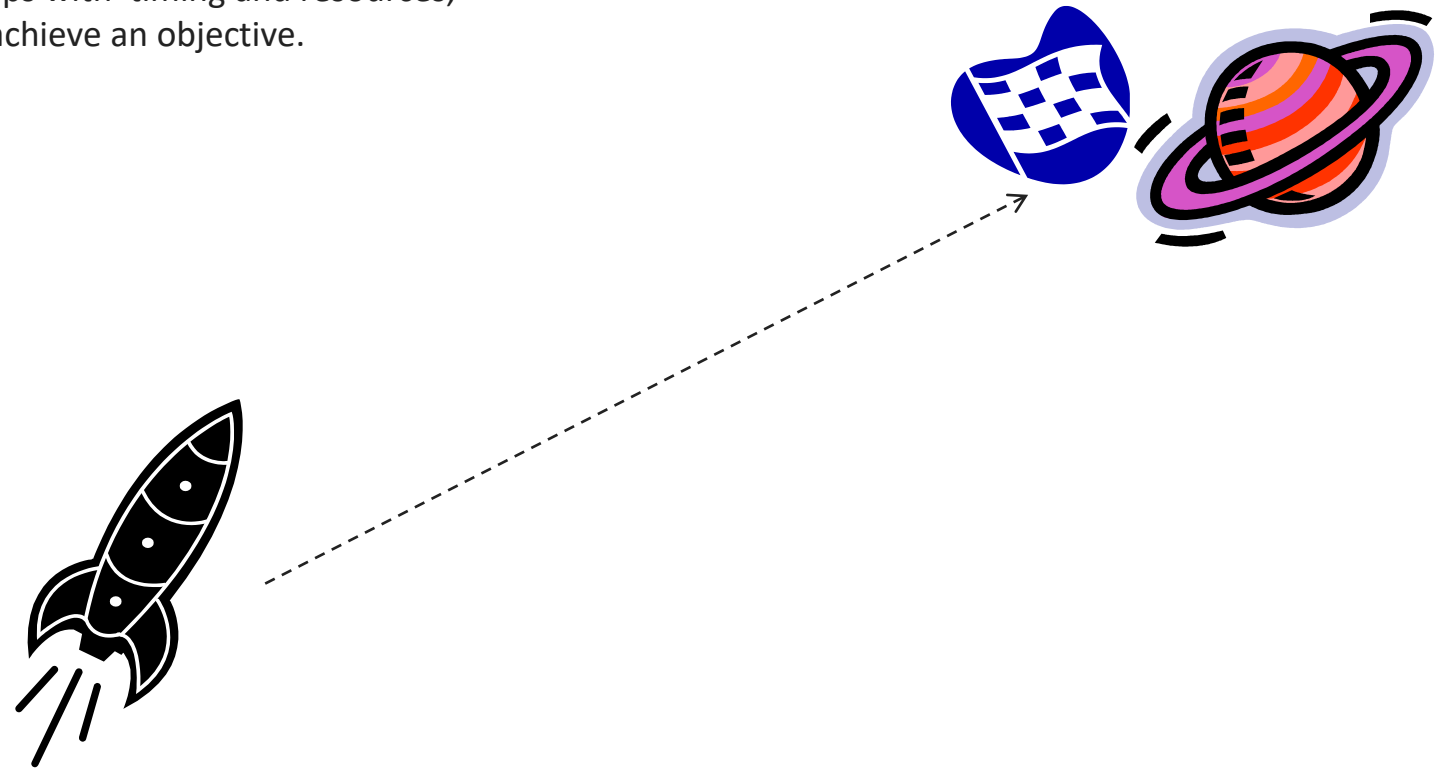
PLANNING AND ESTIMATION

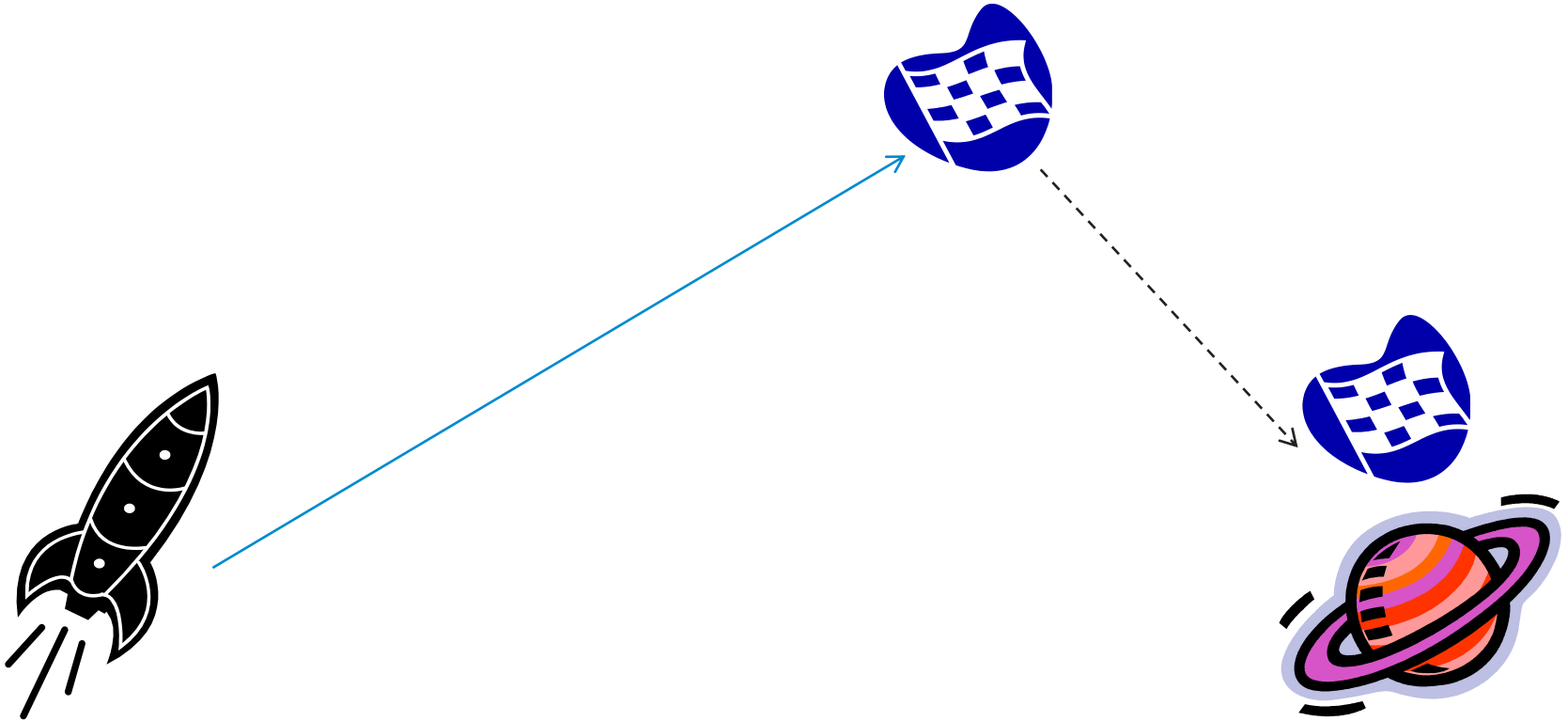


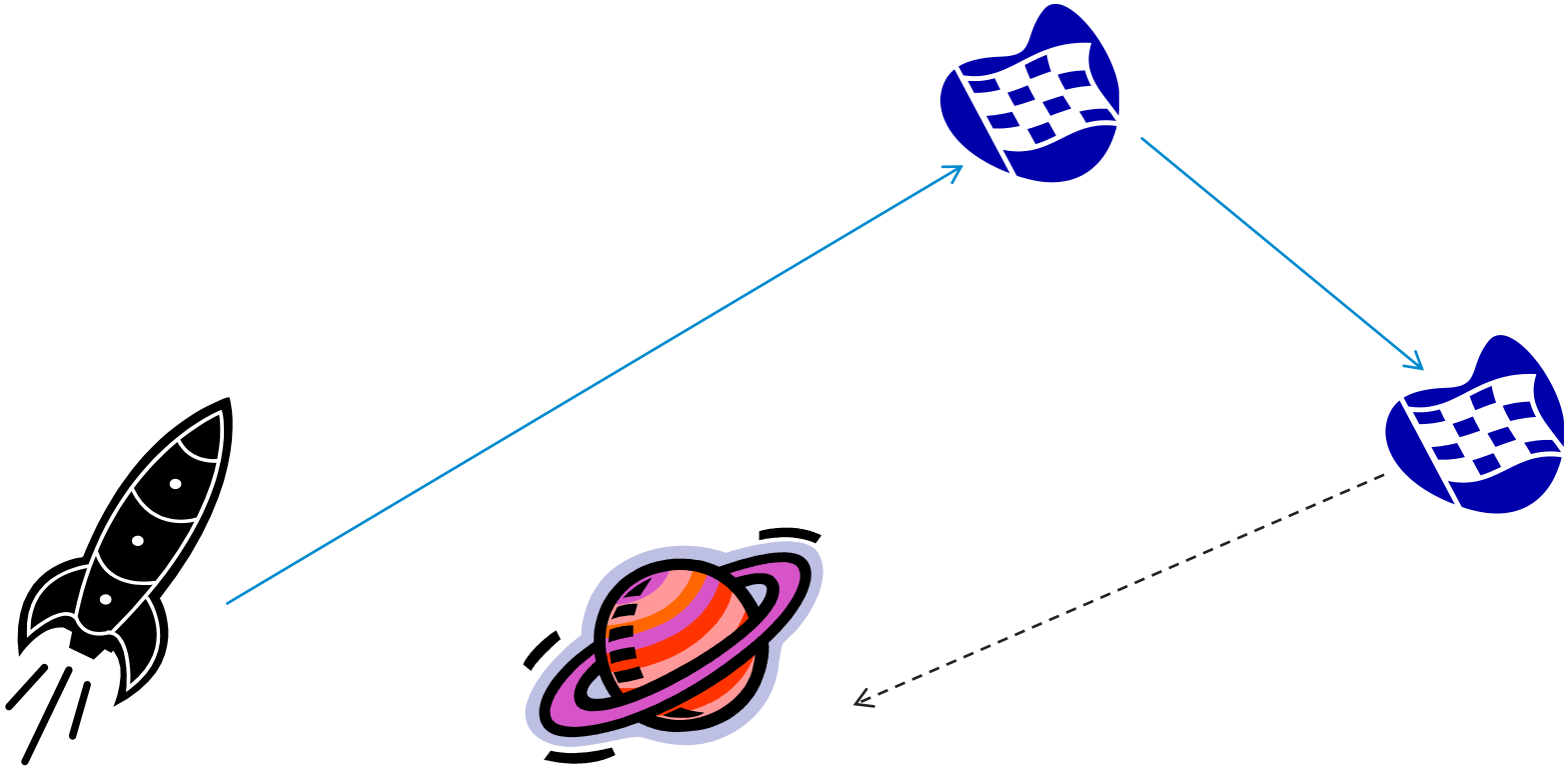


Plan

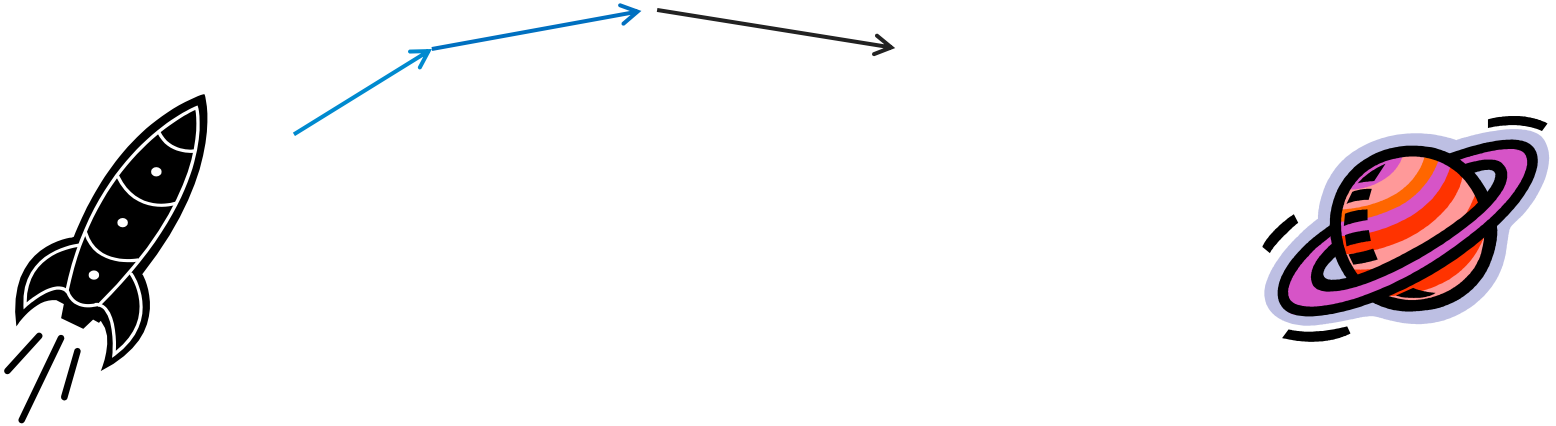
list of steps with timing and resources,
used to achieve an objective.



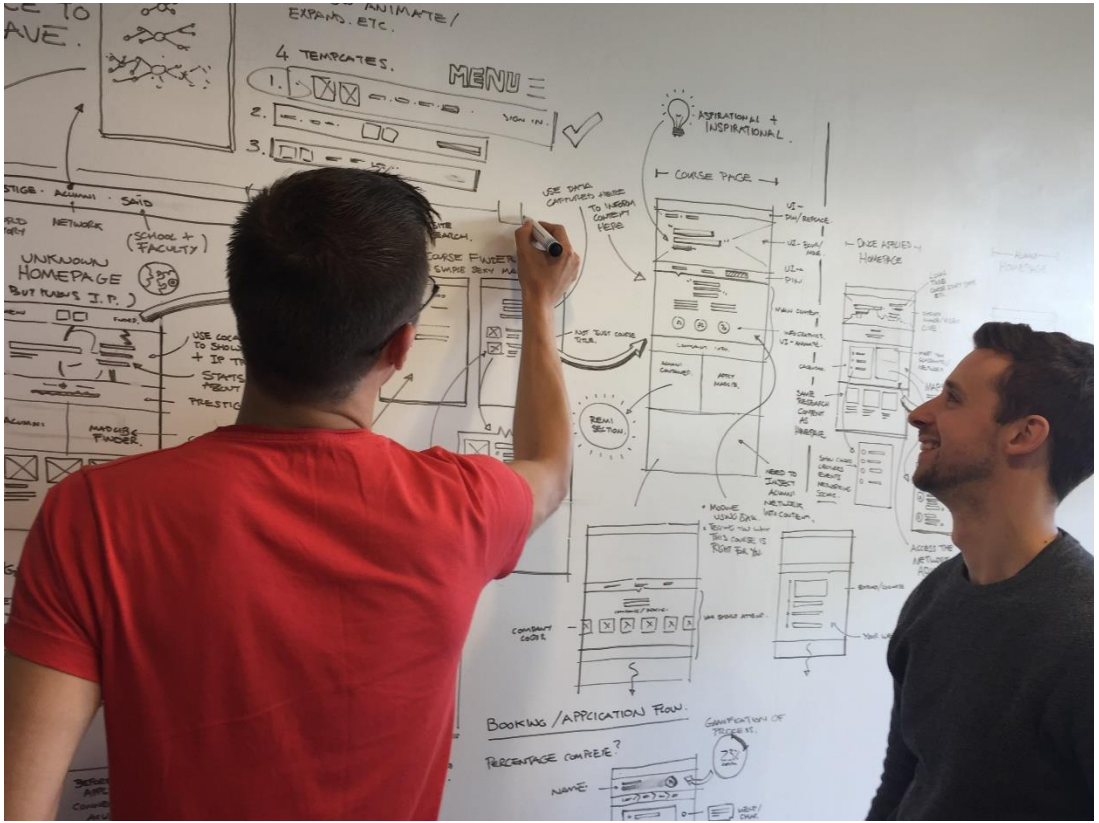




Planning



Estimation


4 TEMPLATES.
MENU
COURSE PAGE
UNKNOWN HOMEPAGE
BOOKING / APPLICATION FLOW.
PERCENTAGE COMPLETE?

Estimation

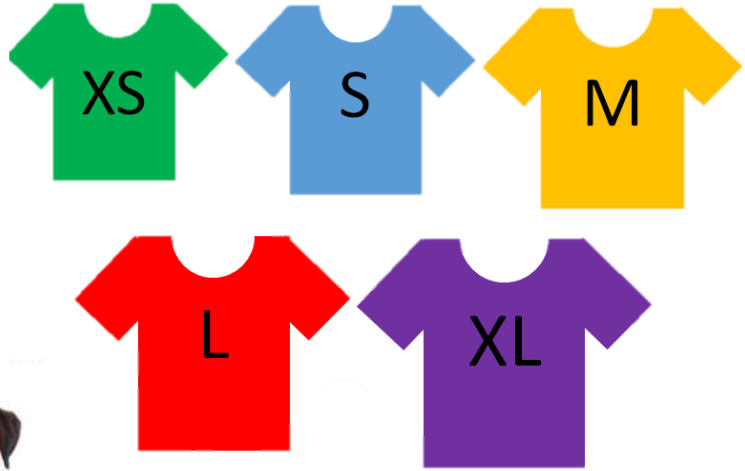
PROBLEMS WITH SOFTWARE ESTIMATES

- Estimating the unknown
- Estimates are optimistic
- Estimated time is always used
- Business rely on estimations heavily

AS THE RESULT…

- Estimates are never correct
- Re-estimation takes a lot of time

Estimating size in story points



Story Points

- A relative term to measure the effort:
  - ➢1, 2, 3, 5, 8, 13, 21
  - ➢X Small, Small, Medium, Large, X Large
- Not related to hours
- Intended to quickly estimate how hard is the task and use the result for planning

Techniques

EXPERT'S OPINION

- Fast
- *Requires cross-functional experts*
- *Prejudiced*

ANALOGY

- Reuse of experience – estimating against similar completed stories
- *Need to have similar tasks*
- *Details are not considered*

DISAGGREGATION

- Splitting to smaller pieces
- *May take a long time*

Planning Poker – How?

Planning Poker®

- An iterative approach to estimating
- Steps
  - Each estimator is given a deck of cards, each card has a valid estimate written on it
  - Customer/Product owner reads a story and it's discussed briefly
  - Each estimator selects a card that's his or her estimate
  - Cards are turned over so all can see them
  - Discuss differences (especially outliers)
  - Re-estimate until estimates converge

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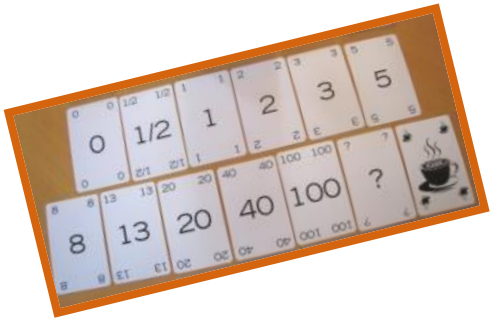
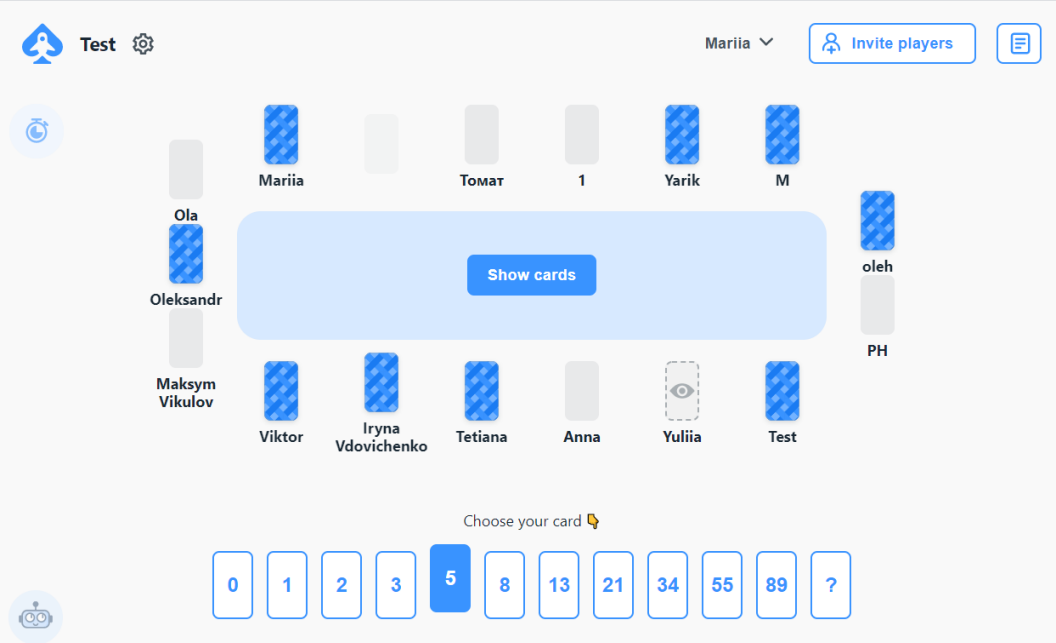


Interaction

HTTPS://EPA.MS/FEPP



Planning Poker – example

- PO reads and explains the user story, first round

- Second round

- Third round

Planning Poker – when?

1) Before the 1st sprint – estimating initial set of stories.

2) During backlog refinement sessions.

3) Planning sessions

PO, SM and Team are playing.

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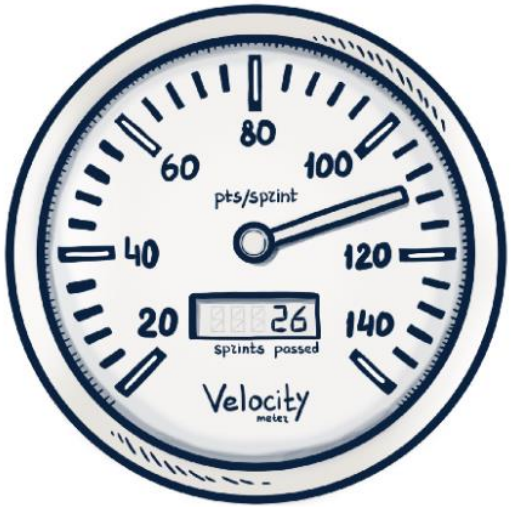
Planning Poker – why?

- **Multiple expert opinions**.
- The people that estimate **will do the work.**
- Discussion brings **justification** and more accurate estimate.
- **Details are discovered**.
- It is **time boxed.**
- It is **fun**.

Capacity and Velocity

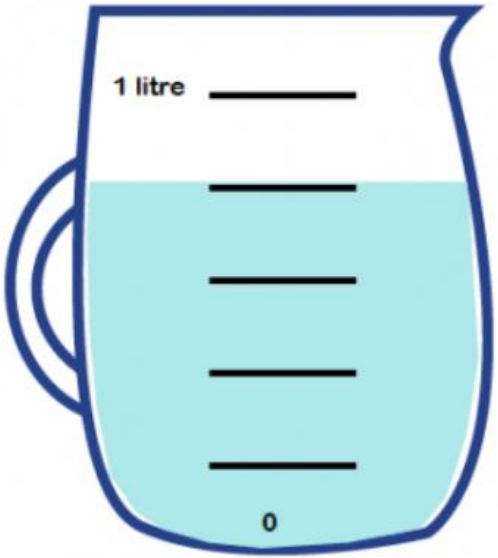
- **Velocity** – number of story point completed during previous sprint

Experience

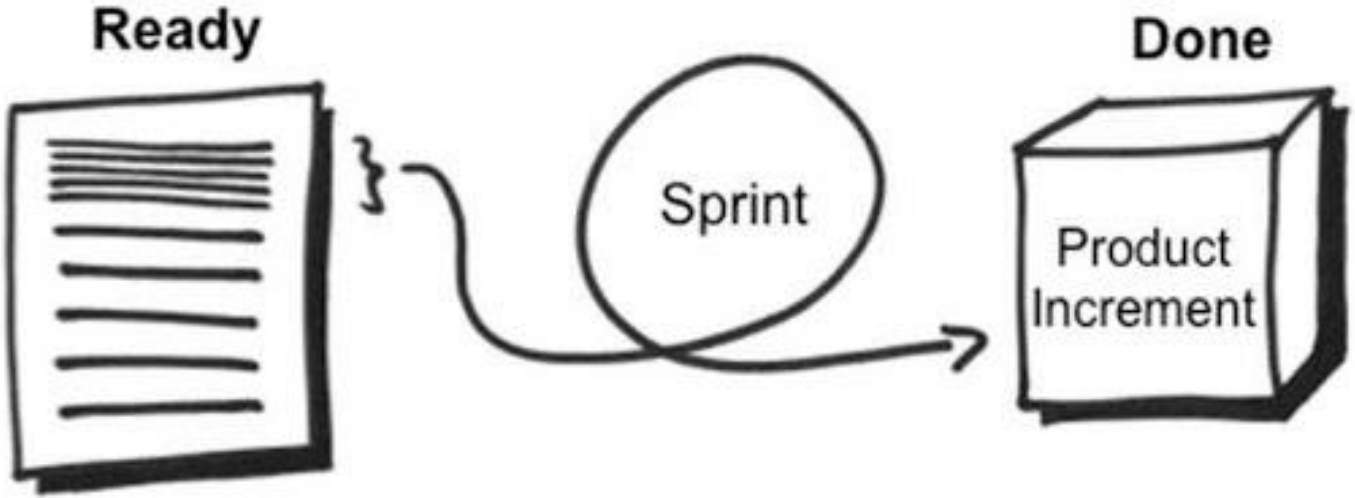


- **Capacity** – number of ideal hours available during next sprint

Forecast



Definition of ready and Definition of done



Cancelling the Sprint. Abnormal Termination.

Sprints may be cancelled early, i.e. before the time-box expires.

Only by the Product Owner

Prefer adjusting Sprint Scope

A Sprint would be cancelled if the Sprint Goal becomes obsolete

- Reasons to cancel may include changes in competition, business, or technology feasibility.

After a Sprint cancellation, re-plan the Sprint.

Scrum Events Quick Reference

Event	Inspection	Adaptation	Who Attends	Time-box for 1 Month
Sprint Planning	Product Backlog	Sprint Goal, Forecast, Sprint Backlog	Scrum Team	8 hours
Daily Scrum	Progress toward Sprint Goal	Sprint Backlog	Development Team	15 minutes (always)
Sprint Review	Increment, Sprint, Product Backlog	Product Backlog	Scrum Team Stakeholders	4 hours
Sprint Retrospective	Sprint	Actionable and committed improvements	Scrum Team	3 hours

Every element of Scrum serves empiricism.

THANK YOU!