

Agile Project Management

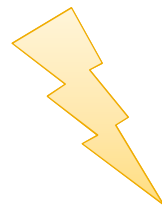
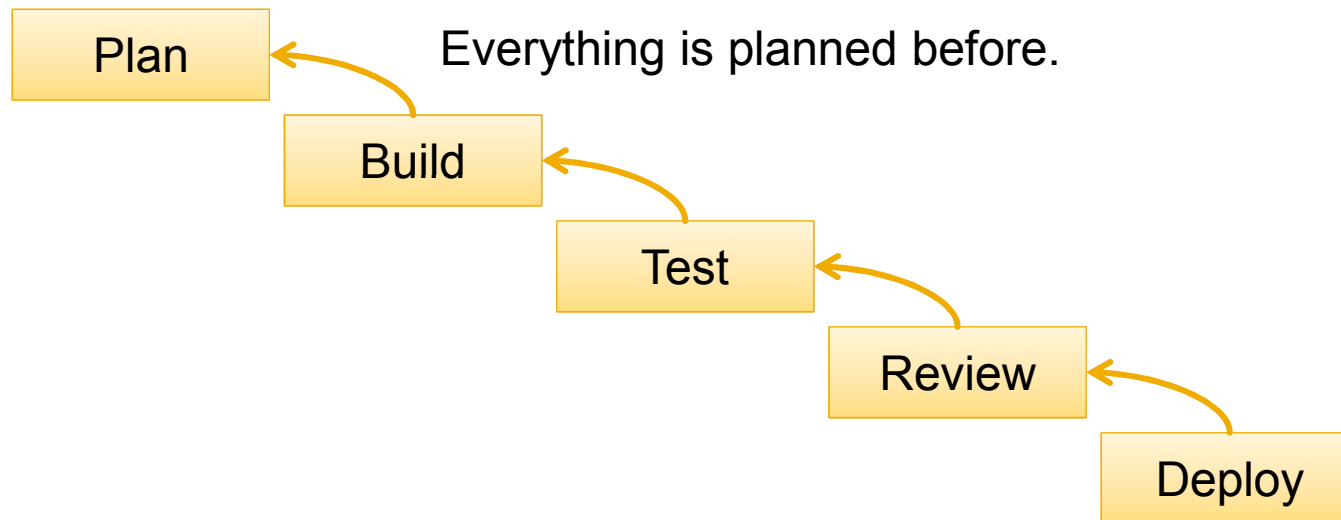
Scrum

Agenda

- Scrum Framework
 - Key Roles
 - Artifacts
 - Ceremonies
 - Sprint
 - Work cycle
- Exercise

Scrum Framework

- Waterfall



Risk of developing the wrong product

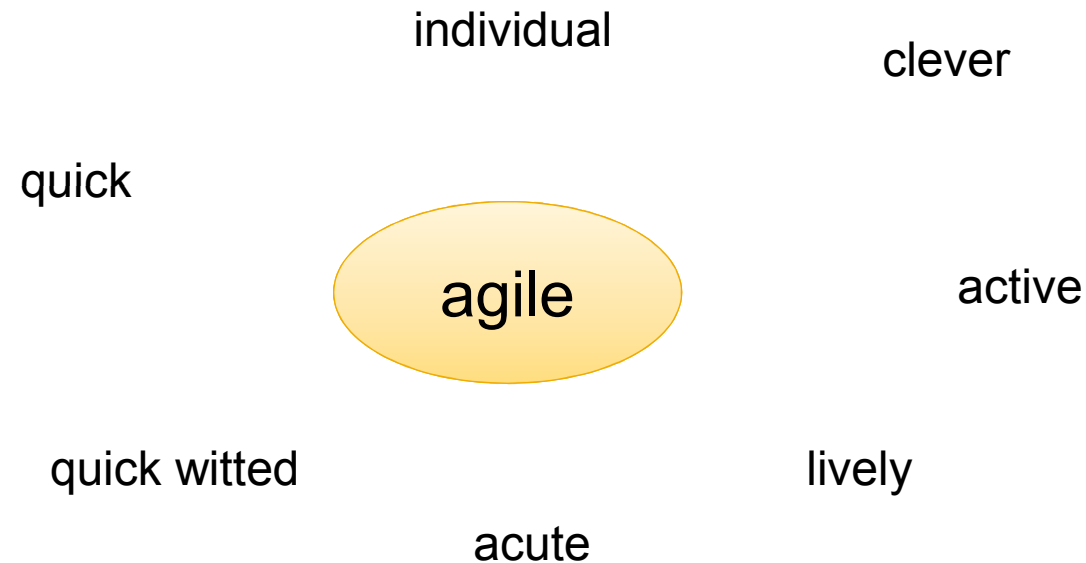
Scrum Framework

- Scrum
 - Rugby (crowd, jam), “Gedränge”
 - Agile software development framework



Scrum Framework

■ Scrum



Planning is based on Knowledge

Scrum Framework

- Scrum
 - Deliver quick solutions
 - Flexible and holistic
 - Self organizing
 - Based on what is known (Empiricism)
 - Teamsize: 3 to 9

Transparency

Inspection

Adaption

Scrum Framework

- Problems to manage
 - Unpredictable changes
 - Customer changes its mind
 - Team member drops out
 - Problem not well enough defined
 - Team is not efficient
 - New technology
 - Market conditions

Scrum Framework

- Scrum
 - Key Roles
 - Artifacts
 - Ceremonies

Scrum Framework

- Key Roles

- Product Owner

- Vision, ideas
 - Defines Backlog

- Team Member

- Multiple roles (Developer, Tester, etc.)

- Scrum Master

- Work conditions

Scrum Framework

- Artifacts
 - Product Backlog
 - Epics
 - User Stories
 - Prioritized by Owner
 - Features
 - Requirements

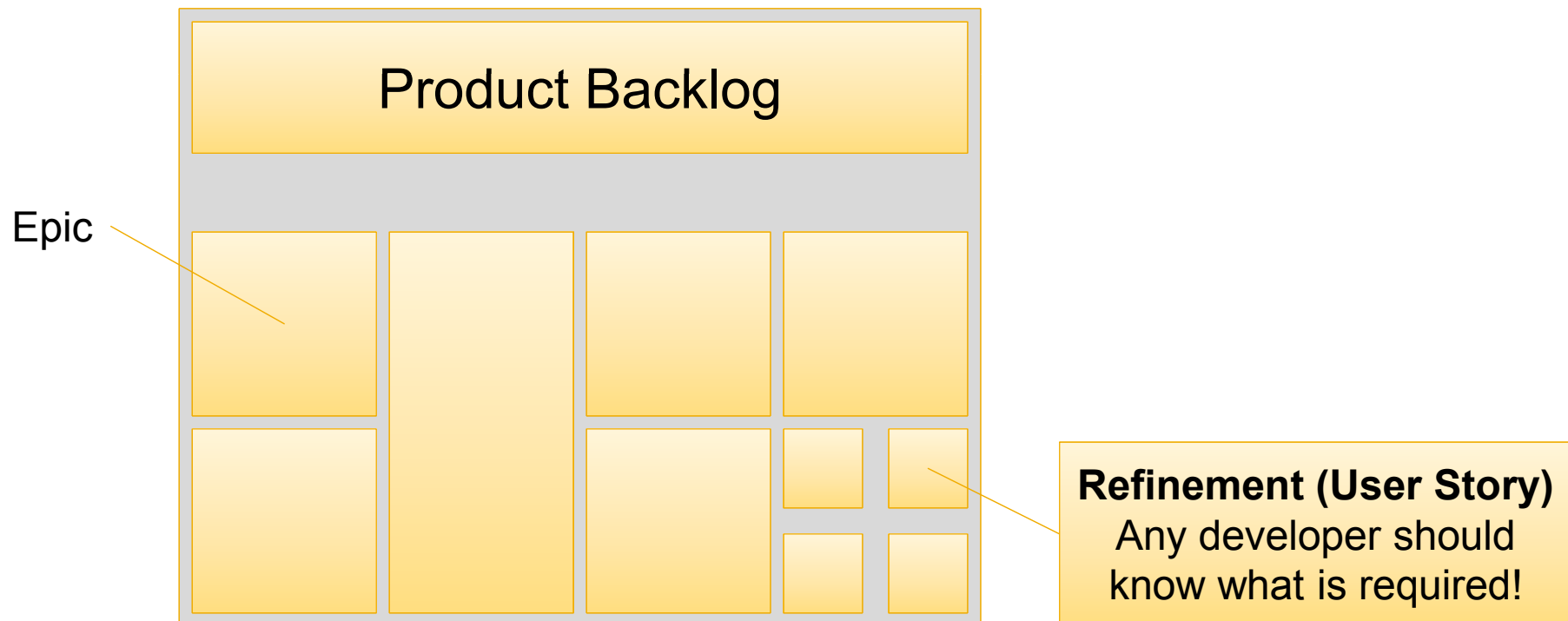
Product Backlog

As a **student** I need to **have access to my professors slides** so that I can **understand what she told us**

As a **professor** I need to **have access to my rooms** so that I can **upload my slides**

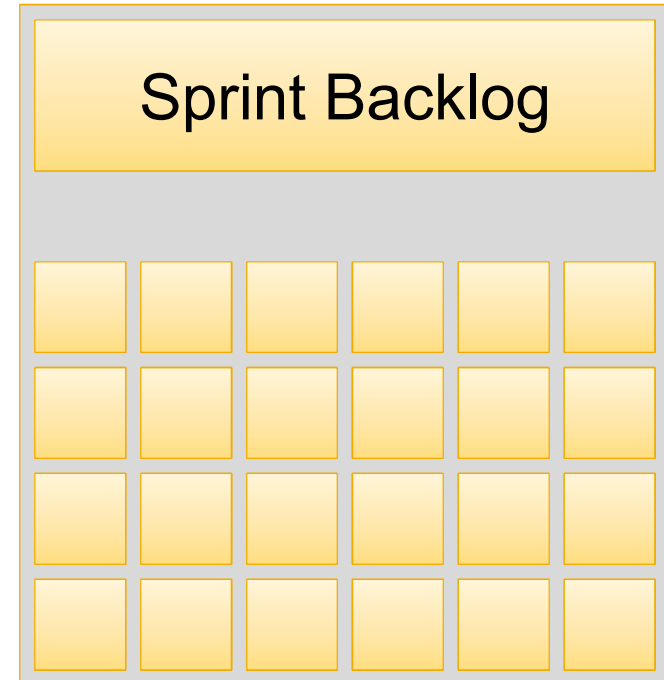
Scrum Framework

- Artifacts
 - Product Backlog



Scrum Framework

- Artifacts
 - Sprint Backlog
 - List of User Stories
 - Enough User Stories for next work cycle
 - Defined by developers

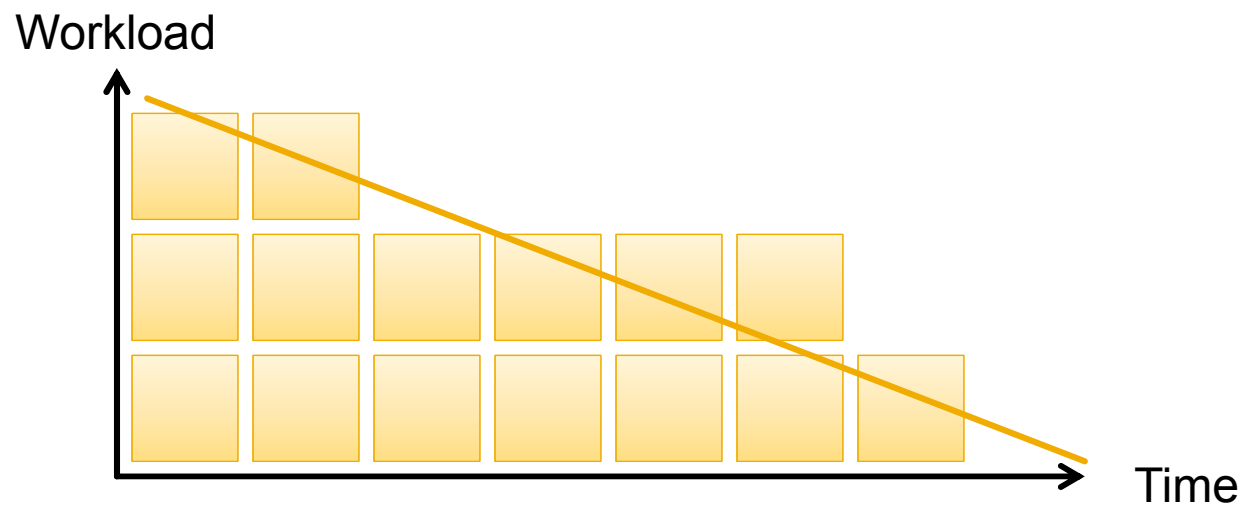


Scrum Framework

■ Artifacts

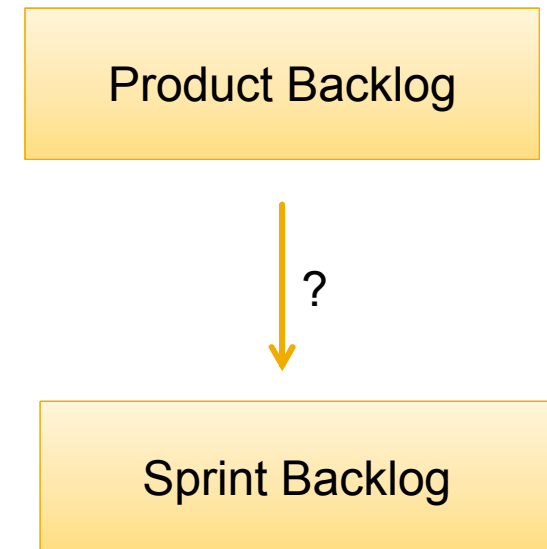
■ Burndown Chart

- Visualizes workload and progress
- Available for one sprint and whole project



Scrum Framework

- Ceremonies
 - Sprint Planning
 - Planning Poker
 - Estimation: what can be done
 - Team chooses User Stories

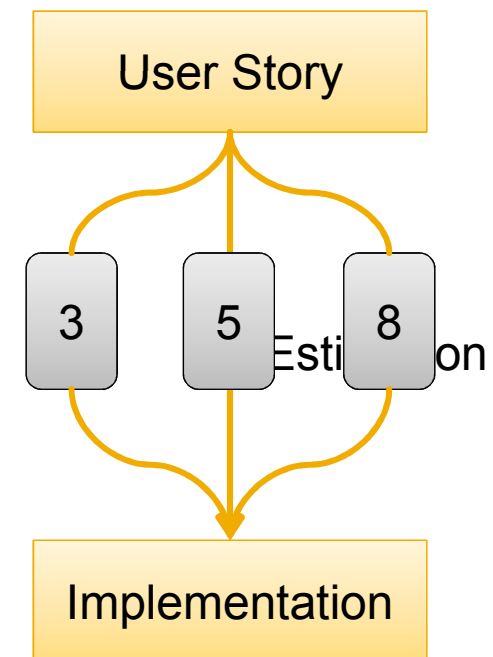
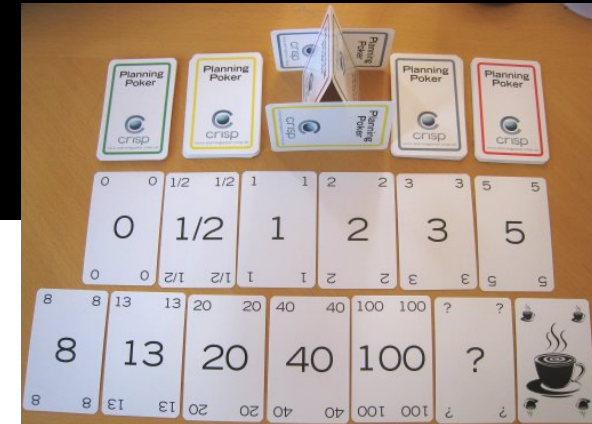


Scrum Framework

■ Ceremonies

■ Planning Poker

- Team members receive a set of cards
- Estimation for every User Story
- Lowest and highest Estimation will be discussed
- Played until nearly equal

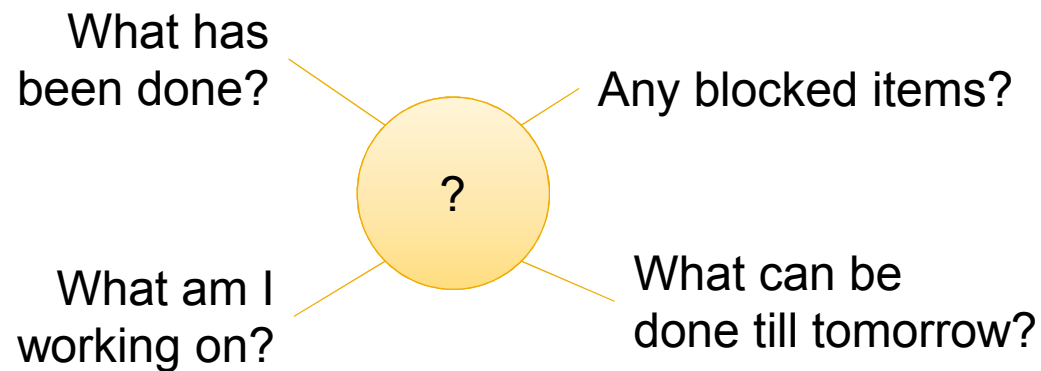


Scrum Framework

■ Ceremonies

■ Daily Scrum

- 15 min standup meeting
- No discussions!



Scrum Framework

- Ceremonies

- Sprint Review

- At end of Sprint
 - Ensure that
 - Everything is done (implemented)
 - AND tested
 - DoD
 - Showcase work to Product Owner

Scrum Framework

- Ceremonies
 - Sprint Retrospective
 - Team efficiency
 - What can be improved?

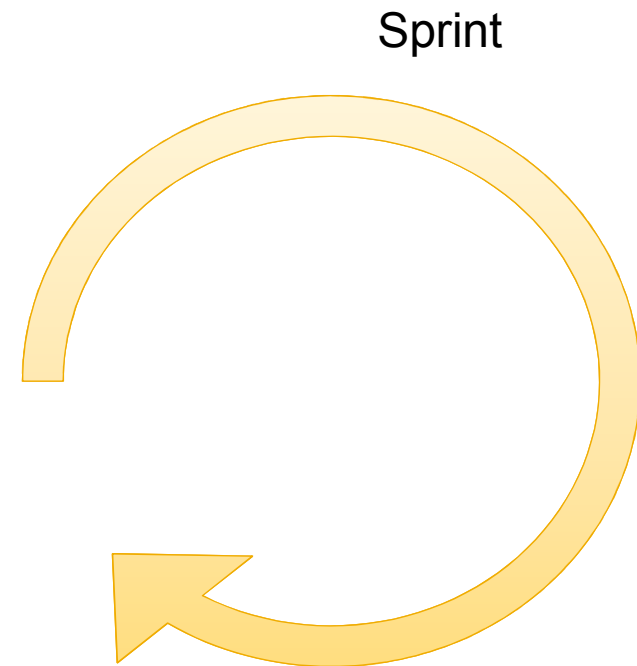
Scrum Framework

■ Sprint

■ Work cycle

- Always same length
- 1 to 4 weeks
- No changes on Sprint Backlog!
- Team is not disturbed

Product Owner is able to
cancel a Sprint
(can be planned and restarted)

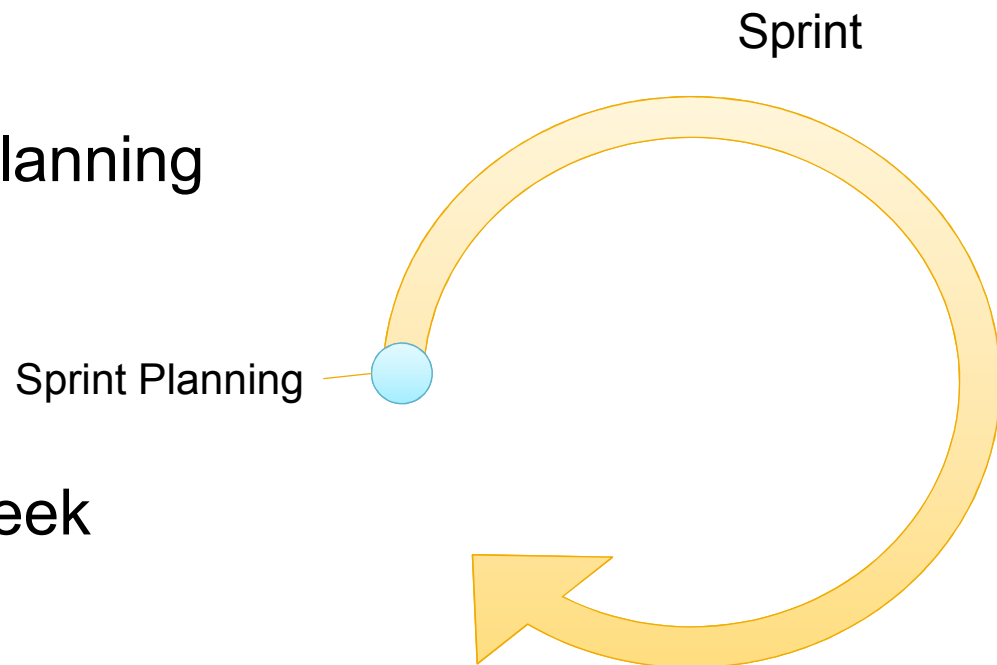


Scrum Framework

■ Sprint

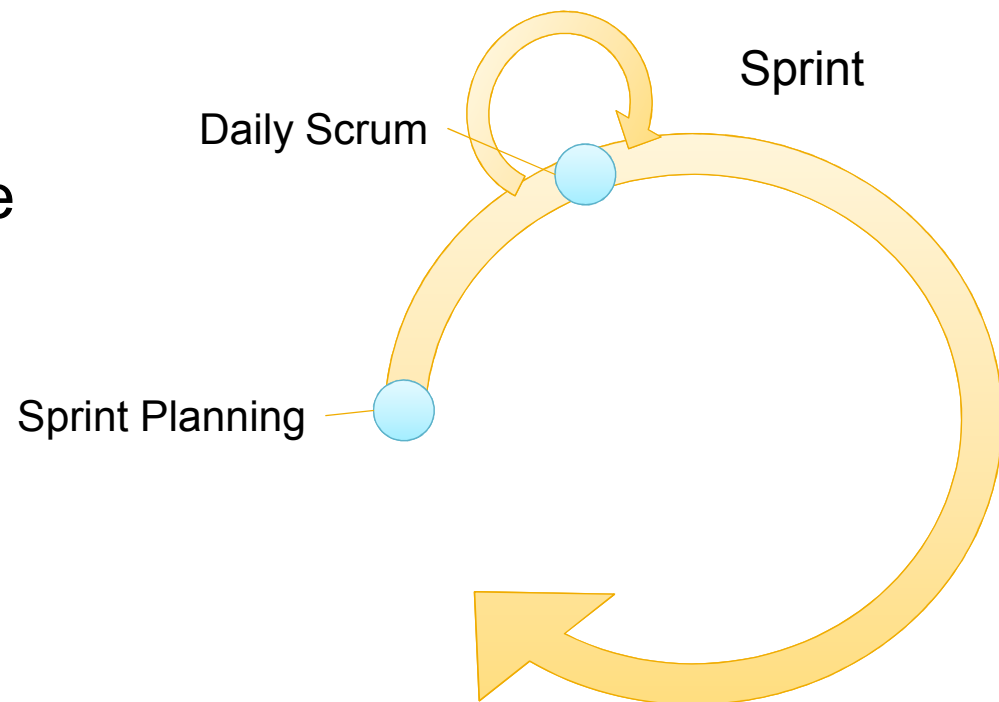
■ Work cycle

- Starts with Sprint Planning
- Planning Poker
- Sprint Backlog
- Time limit:
45min per Sprint week



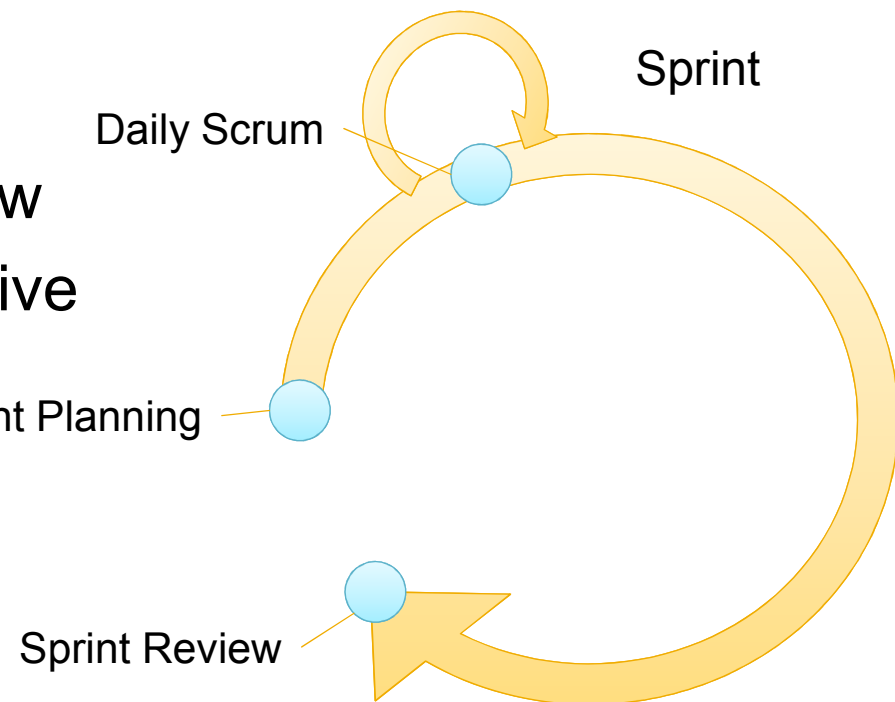
Scrum Framework

- Sprint
 - Work cycle
 - Daily Scrum routine
 - 15min each day
 - Overview



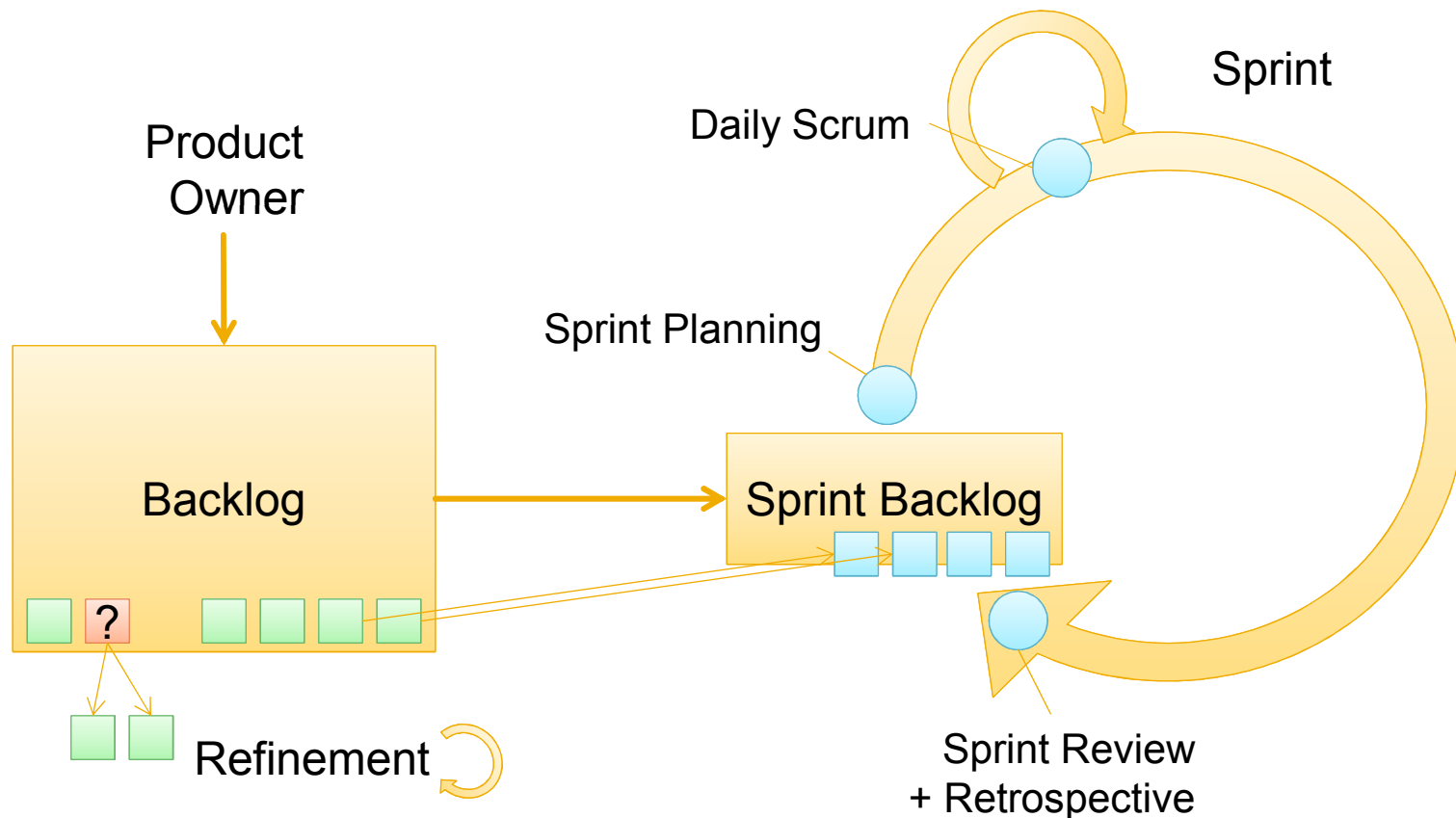
Scrum Framework

- Sprint
 - Work cycle
 - Ends with Sprint Review
 - (additional) Retrospective



Scrum Framework

■ Scrum



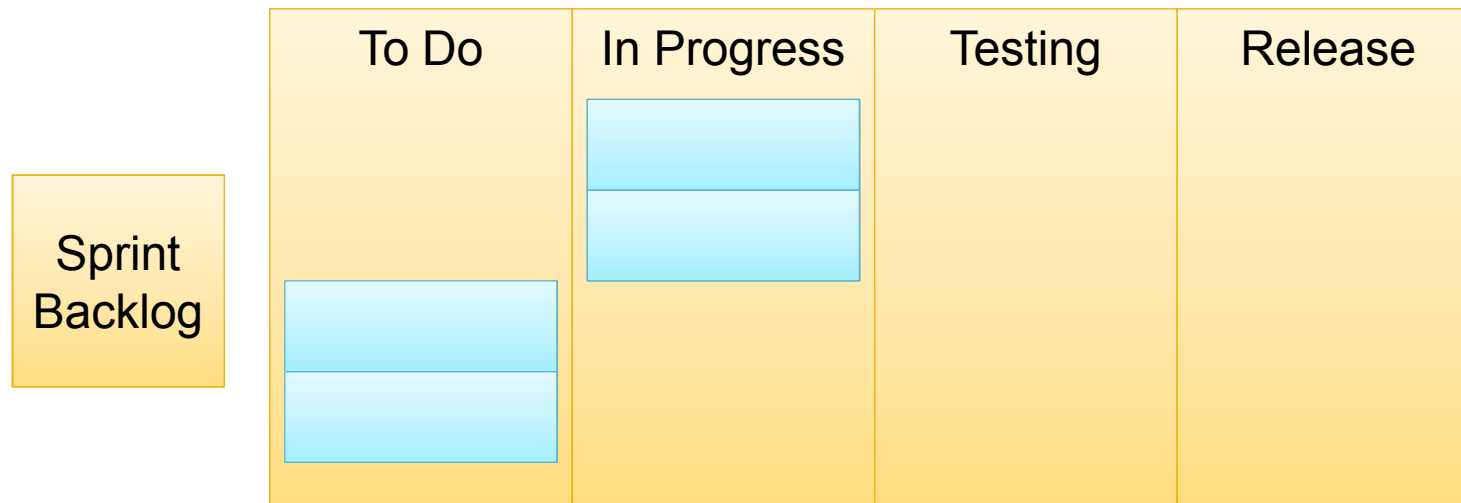
Scrum Framework

- Scrum
 - Agile Board



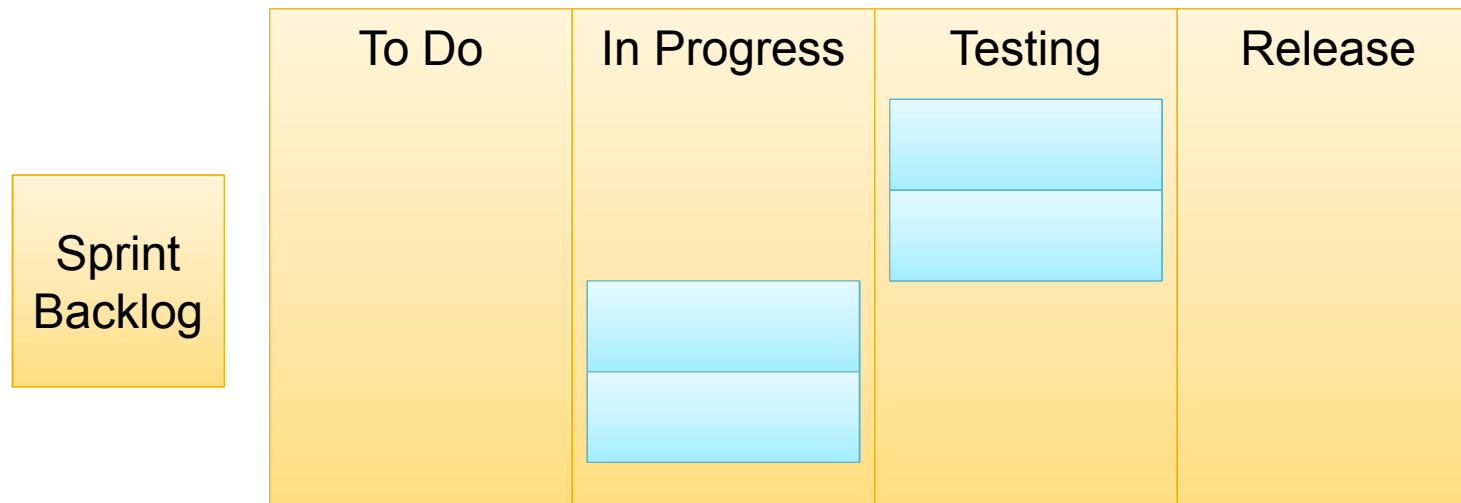
Scrum Framework

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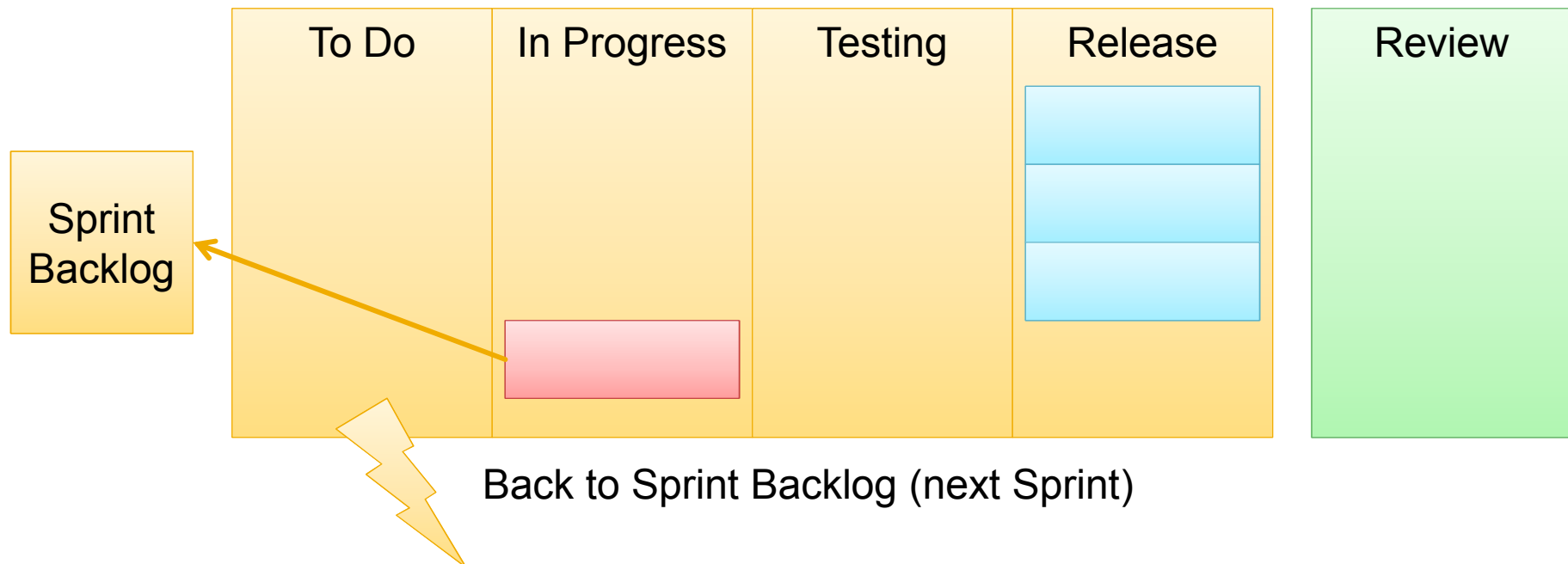
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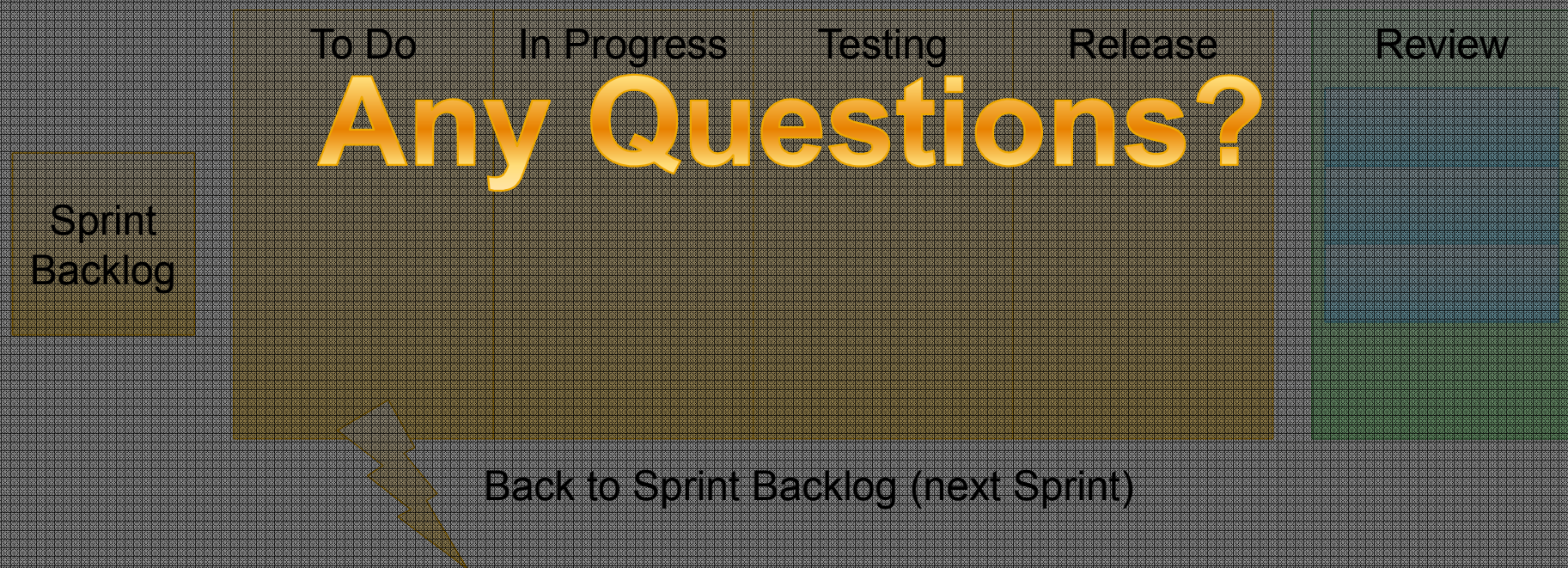
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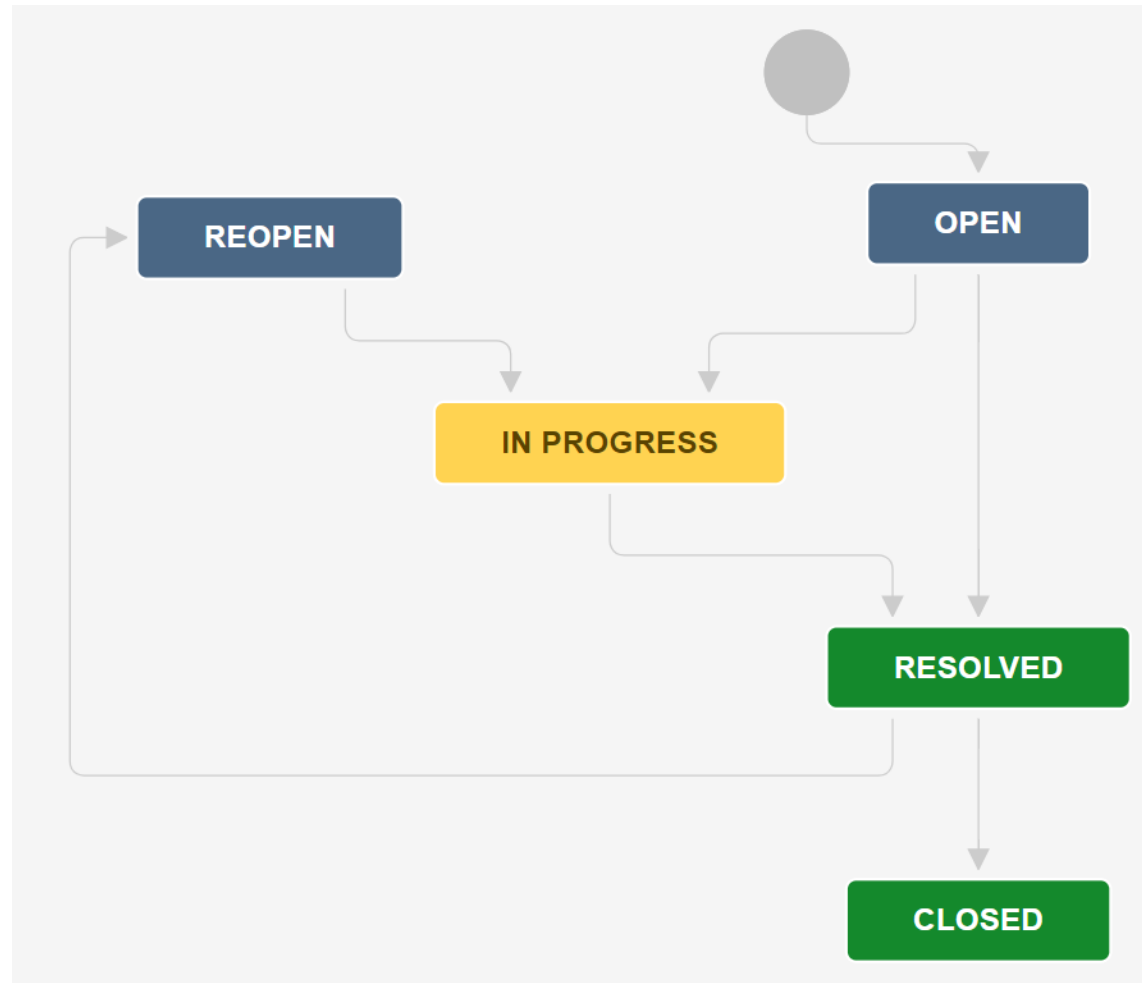


Exercise

- Scrum on Jira

Scrum with Jira

- Workflow
 - Project Settings
 - Issue Types



Sources

■ Content

- <http://www.scrumguides.org/docs/scrumguide/v1/Scrum-Guide-US.pdf>
- <https://www.youtube.com/watch?v=0Nuj-GgEW6o>
- [https://en.wikipedia.org/wiki/Scrum_\(software_development\)](https://en.wikipedia.org/wiki/Scrum_(software_development))

■ Images

- <http://www.implementingscrum.com/images/070806-scrumtoon.jpg>
- <http://sportycious.com/wp-content/uploads/2015/01/A-Beginnerss-Guide-to-the-Basics-of-Rugby-Union-Positions.jpg>
- http://2.bp.blogspot.com/-SfS0bN-1RM/UP03wLmx_pl/AAAAAAAAAX8/FsLLTANiYM/s1600/PlanningPo-ker.jpg