

Project Crash Course

Prof. Dr. Dirk Riehle

Friedrich-Alexander University Erlangen-Nürnberg

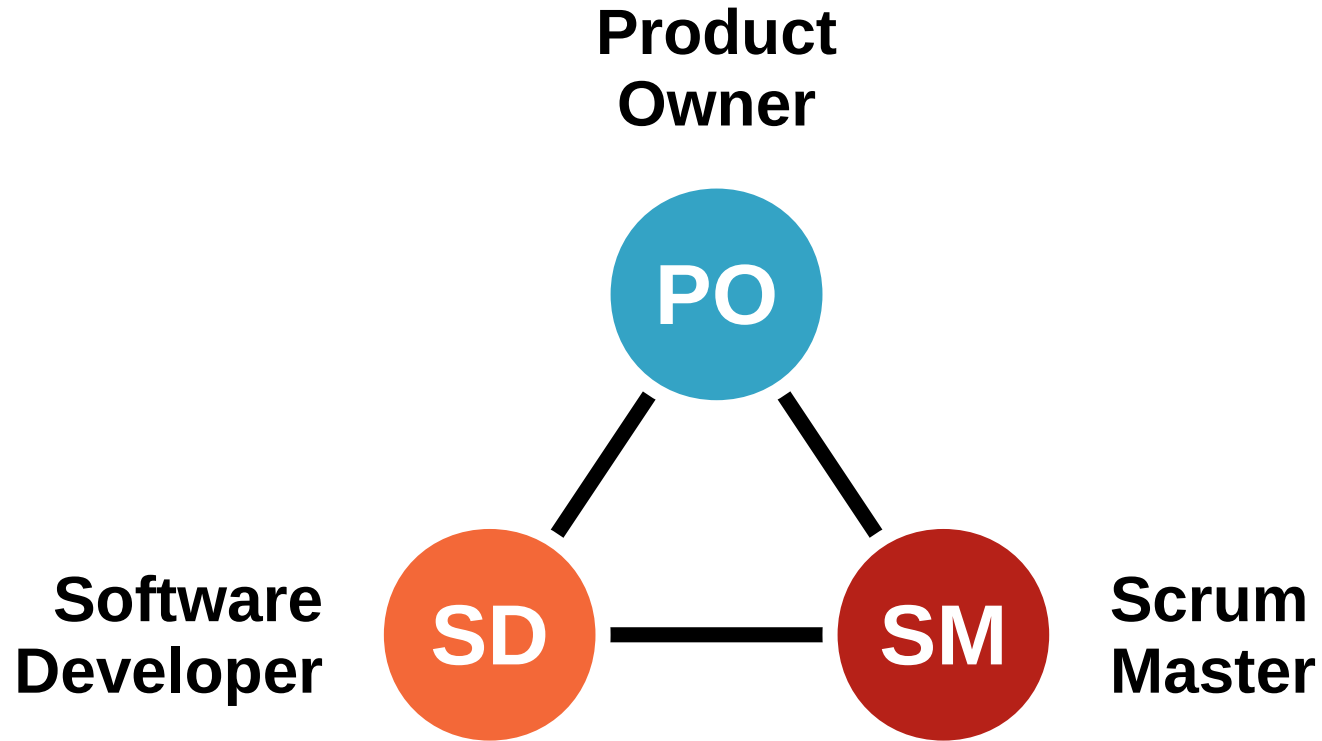
AMOS B01

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To deliver useful software at the end of the project that can be developed further.

- 1. Scrum Process Practices**
- 2. XP Technical Practices**

Scrum Roles



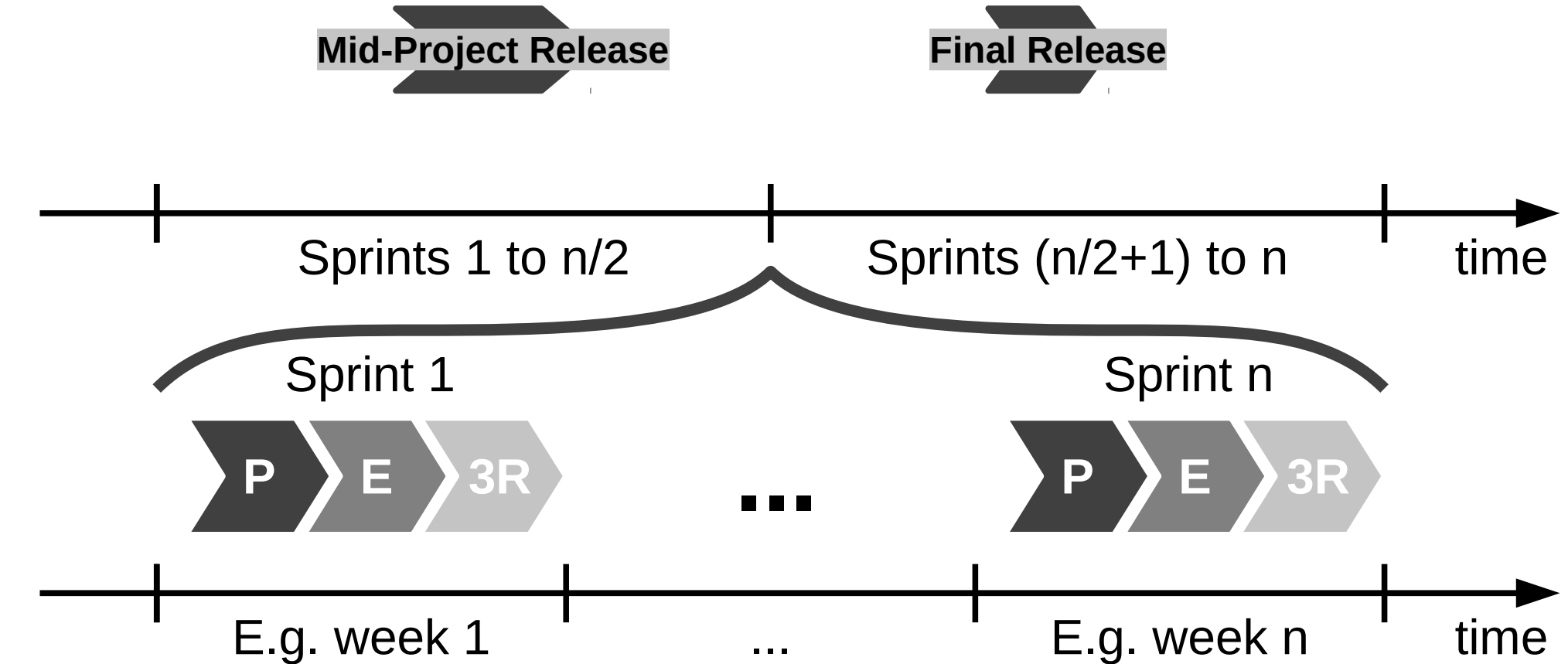
Core (“Committed”) Role Responsibilities

- Definition of **product owner**
 - Holds overall responsibility for the product being developed
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 - Organizes and allocates design and implementation tasks
- Definition of **Scrum master**
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Industry Partner Responsibilities

- Definition of **industry partner**
 - Provides high-level requirements
 - Provides feedback in defined intervals
 - Cf. **Industry Guidance** document

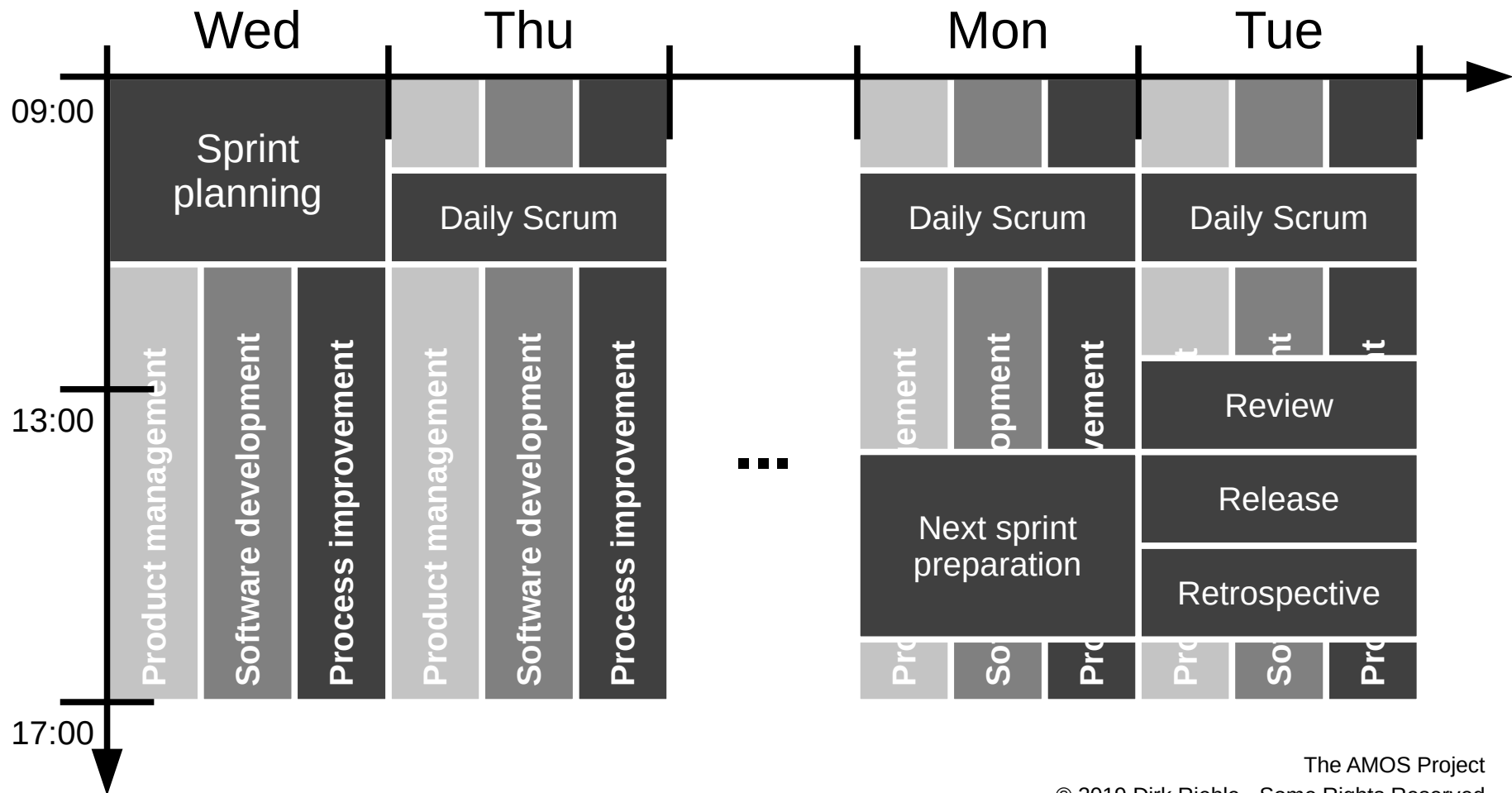
Overall Project Time-Line



Time-boxed Sequence of Releases

- Definition of **release**
 - A named, identifiable, consistent, and useful snapshot of the software and related relevant artifacts
- Definition of **sprint release**
 - A release used to gather feedback from industry partner to help steer the project (every week)
- Definition of **project release**
 - A release used to deploy for production (twice during the semester: mid-term and at end of semester)

The Scrum Sprint (Conceptualization)



Project Schedule

- See Course index → Course schedule
 - For date ↔ course week mapping
- See Course deliverables slide deck
 - For deliverables due for a course week

Other Role Responsibilities

- Definition of **review and release manager**
 - Prepares the product for review session
 - Releases the product after agreement

Wahlzeit

[[show](#) | [tell](#)] — [[signup](#) | [login](#) | [configure](#)]

About

This website is to show, discuss, and praise photos!

Photo Filter

[Click to toggle filter!](#)

Filter!

Community

[It is Wahlzeit!](#)



Who/what/where is that?

[Click to show/hide description!](#)

Praise it!

- ☐ 10
- ☐ 9
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- ☐ 7
- ☐ 6
- ☐ 5
- ☐ 4
- ☐ 3
- ☐ 2
- ☐ 1

Or [skip](#) it.

a friend about this photo: <http://localhost:8585/x1ac6.html> — Send to the owner of this photo!

Please help keep this community site clean! photo as inappropriate if necessary.

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Product Vision [1] and Project Mission

- **Product vision**

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- The mission of the AMOS project is to enhance the Wahlzeit software with a mobile cross-plattform app, available both on Android and iPhone. To achieve this, the current domain model interface needs to be refactored into a REST-based API to be used by all user interfaces, whatever the modality.

[1] See <http://goo.gl/pOazTZ>

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The Tell-a-Friend Feature



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Tell a friend!

	From Email Address:	<input type="text" value="max@muster.com"/>
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Quality Criteria for Feature Descriptions

Independent: Features should be independent of each other.

Negotiable: A feature is man-made, not cast in stone.

Valuable: Every feature should have business value.

Estimatable: A feature should be precise so that size can be estimated.

Small: A feature should be small enough for one iteration.

Testable: A feature should have testable success criteria.

Flowers Planning Documents

- See <http://goo.gl/FRfym>

Product Backlog and Product Backlog Entry

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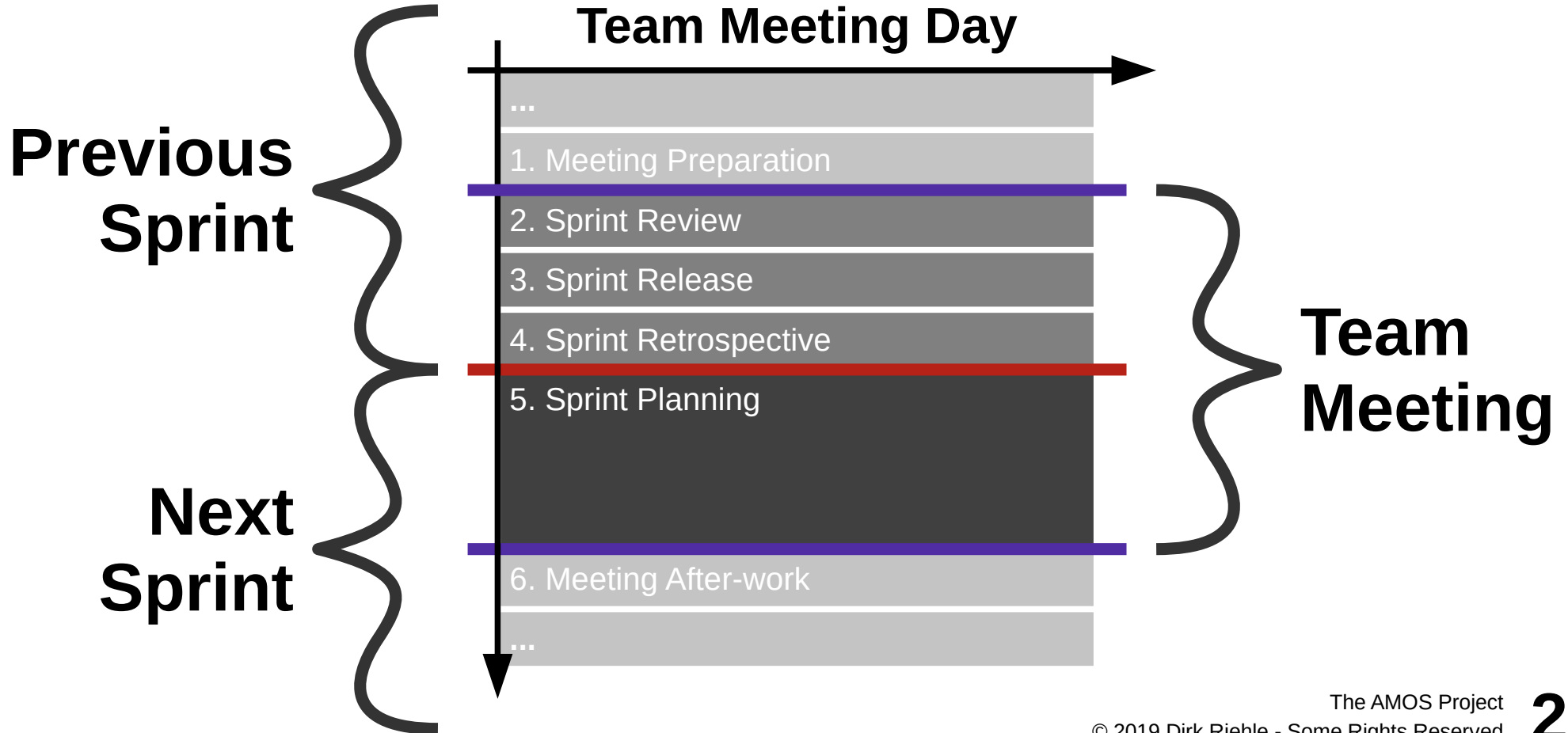
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The AMOS Team Meeting



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 - Ensure that product backlog is ready for sprint planning
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2a. Sprint Review

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 1. Check-out fresh code base using release candidate tag
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 - Walk through sprint backlog feature by feature
 1. Ask developer to demo current feature
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 4. If successfully implemented, move feature to feature archive
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- **Software developer**
 1. Demo feature as requested by product manager
 2. Answer questions about feature design and implementation

Flowers Feature Archive

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3. Sprint Release

- This sprint's **product owner**
 - Decide whether release candidate should be released
 - Only in case of significant regression should you not release
 - Consult with software developers if necessary
- This sprint's **review and release manager**
 - If the release candidate is to be released
 1. Deploy sprint release to operations environment
 2. Tag release with **sprint-xx-release**
 - where xx is your sprint number
 - If you maintain a work log (optional)
 - Update work log with release information

4. Sprint Retrospective

1. This sprint's **Scrum master**

- Review this sprint's impediments
 - Report on progress
 - Review remaining problems

2. Next sprint's **Scrum master**

- Make roll call as to new impediments
 - Take note of people's impediments
 - Allow everyone to make a suggestion
- Note impediments in impediments backlog

3. Everyone

- Answer to happiness index

5. Sprint Planning

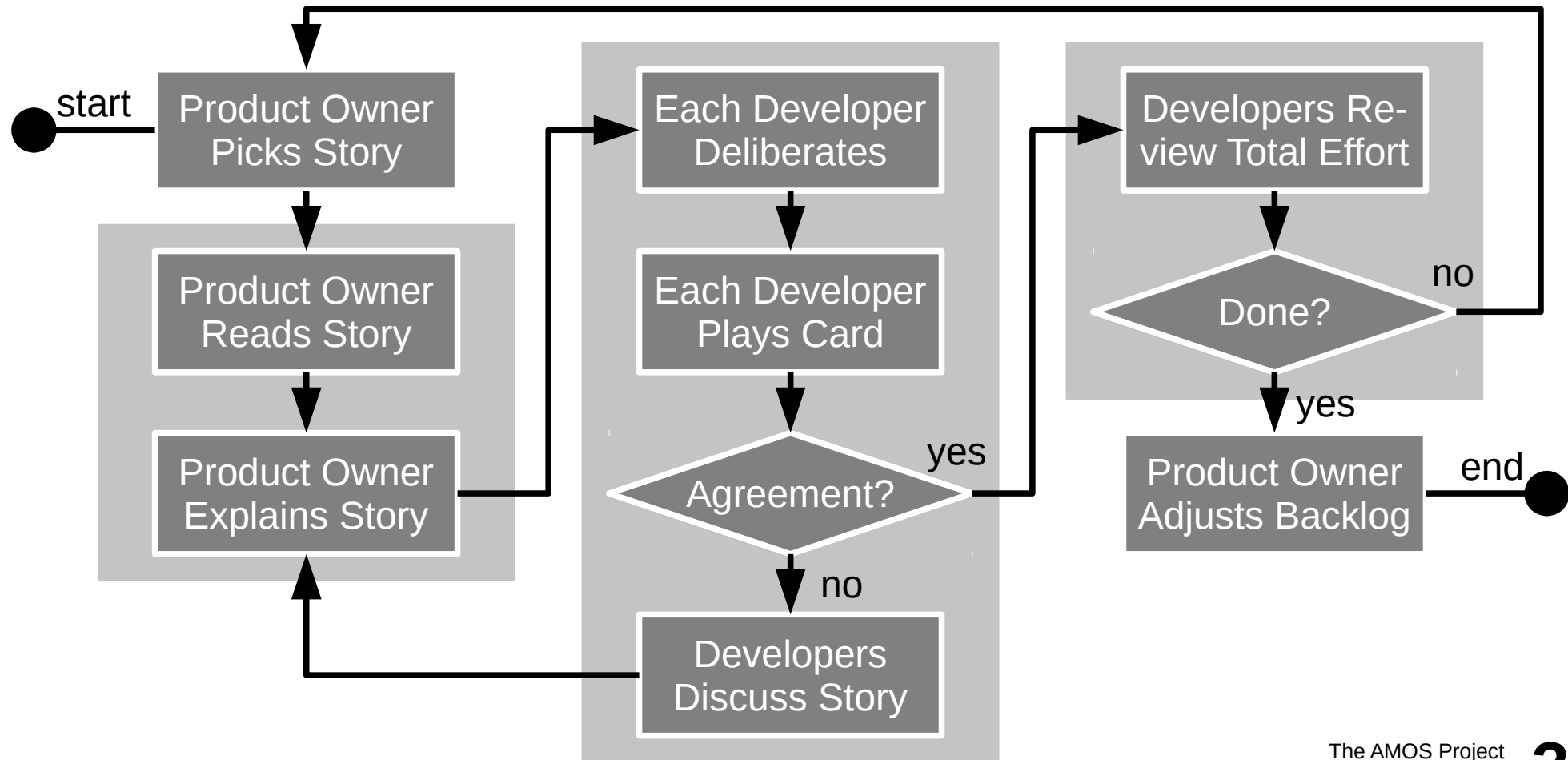
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 1. Reprioritize backlog items, if necessary, on-the-fly
 2. Work through top-prioritized backlog items one-by-one until finished
 - For each product backlog item, explain it, ask developers to estimate and commit
 - You are finished, if the team does not want to take on more backlog items
- Software developer
 - Estimate size of each backlog item using planning poker
 - After planning, commit to backlog items put into sprint backlog
- Everyone
 - Make sure roles for sprint are clear to everyone

Story Points

- Story point
 - An arbitrary numeric measure of size of a given feature
- Properties
 - Is a measure of size, not of effort or duration
 - Measured in non-linear increments, forcing choice
 - Is socially agreed upon, depends on team estimation history
 - Is independent of a particular person (and their skills)
 - Is mapped to time using the team's velocity (dev. speed)

Points	Meaning
0	No effort
1	Minimal effort
2	Small effort
3	Medium effort
5	Large effort
8	Very large effort
13	Too large effort

Flow Diagram for Sprint Planning [1]



[1] A simple planning poker cards replacement can be found in the planning documents

6. Meeting After-work

- This sprint's **product owner**
 - Update planning documents to consistent state
 - Clean up product and sprint backlog
 - Ensure feature archive is current
 - Update release plan with actual effort for sprint
- This sprint's **Scrum master**
 - Work on resolving impediments during sprint
 - Document resolutions in impediments backlog

Weekly Checklist for Artifacts

- Planning documents
 - Clean release plan, product backlog, sprint backlog, and feature archive
- Software product
 - Tagged, testable, deployable software code base and product
- Process improvement
 - Impediments documented, discussed; happiness index survey taken

Next Steps

- See Course deliverables slide deck

Thank you! Questions?

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dirk@riehle.org – <http://dirkriehle.com> – [@dirkriehle](#)

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- Contributions
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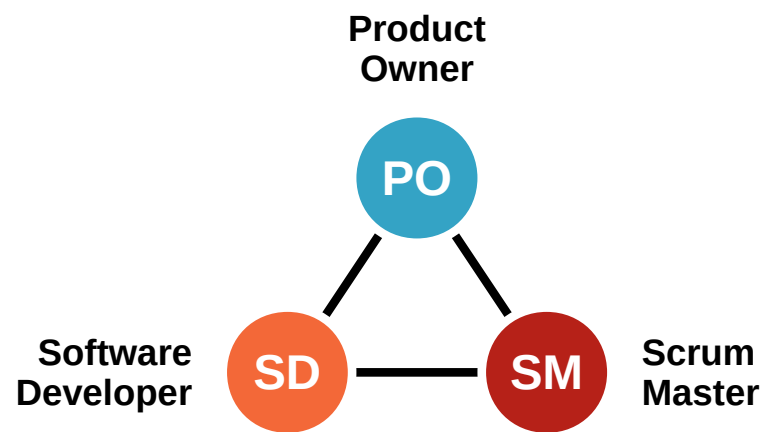
It is Friedrich-Alexander University Erlangen-Nürnberg – FAU, in short.
Corporate identity wants us to say “Friedrich-Alexander University”.

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Scrum Roles



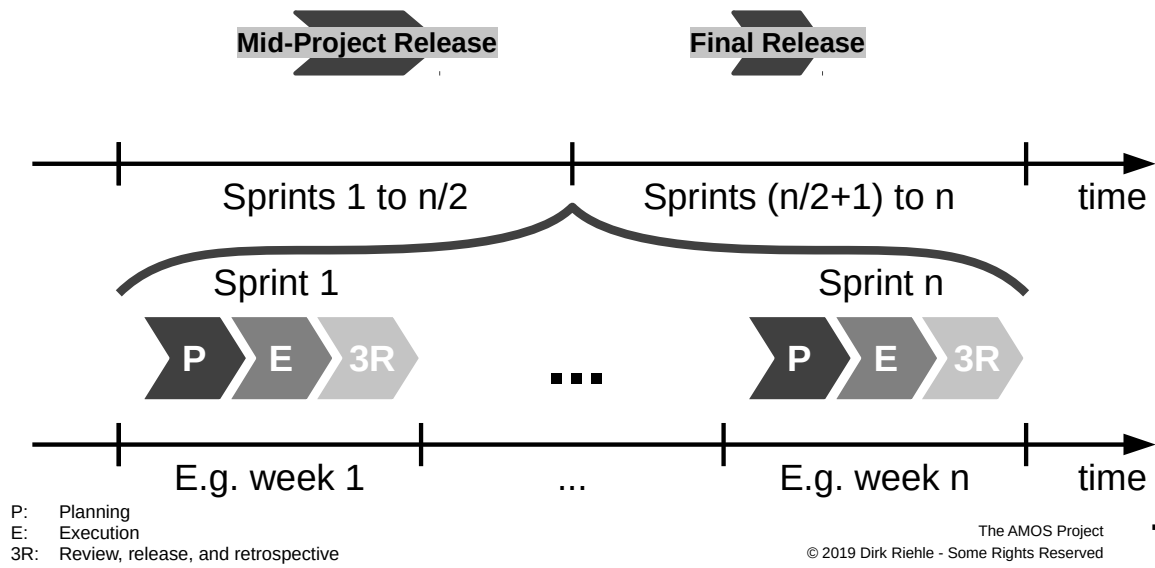
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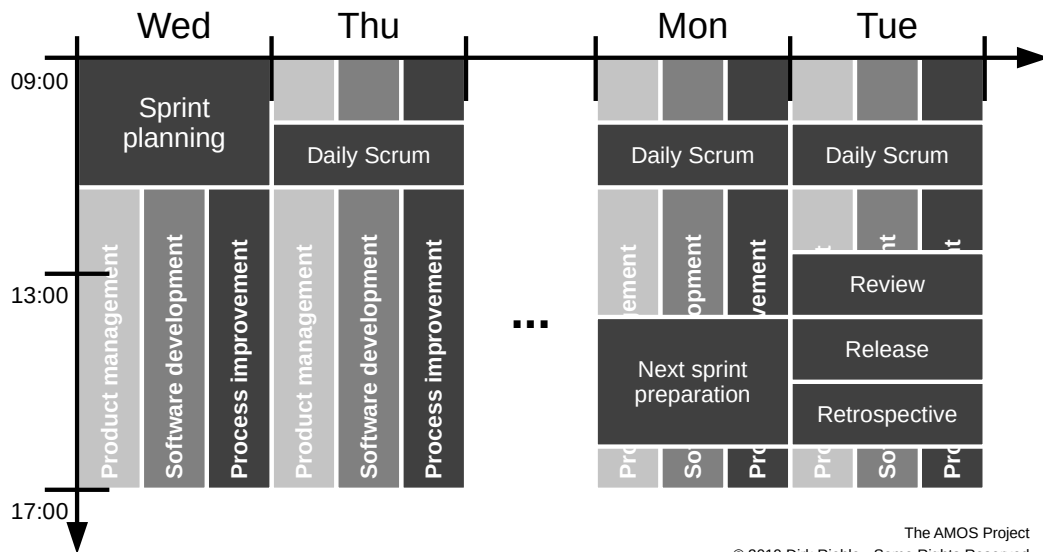
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The Scrum Sprint (Conceptualization)



Project Schedule

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 - For deliverables due for a course week

The main deliverables:

- Initial and mid-term release plan
- Mid-term and final release

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Wahlzeit

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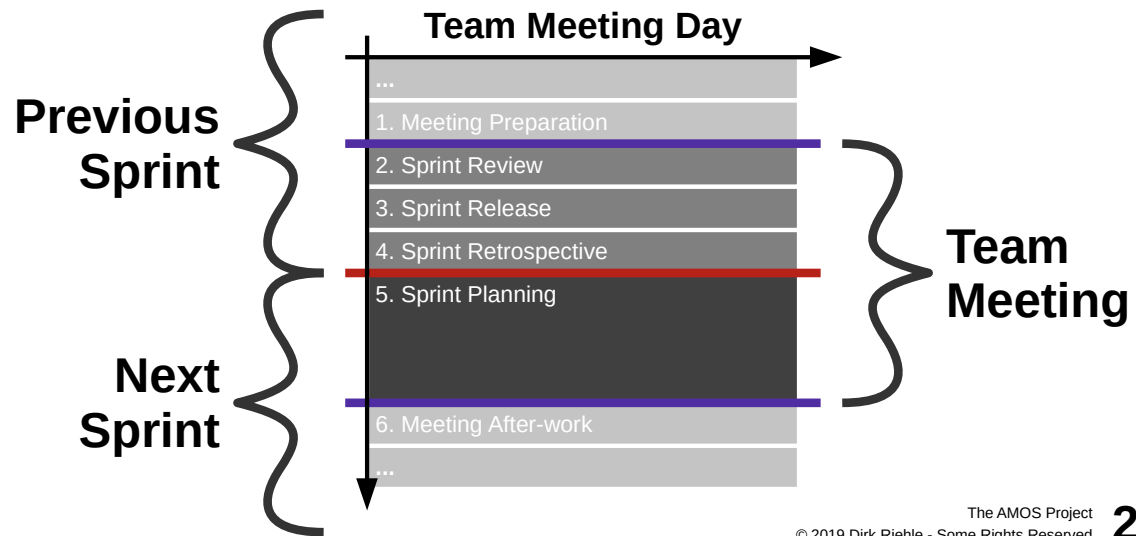
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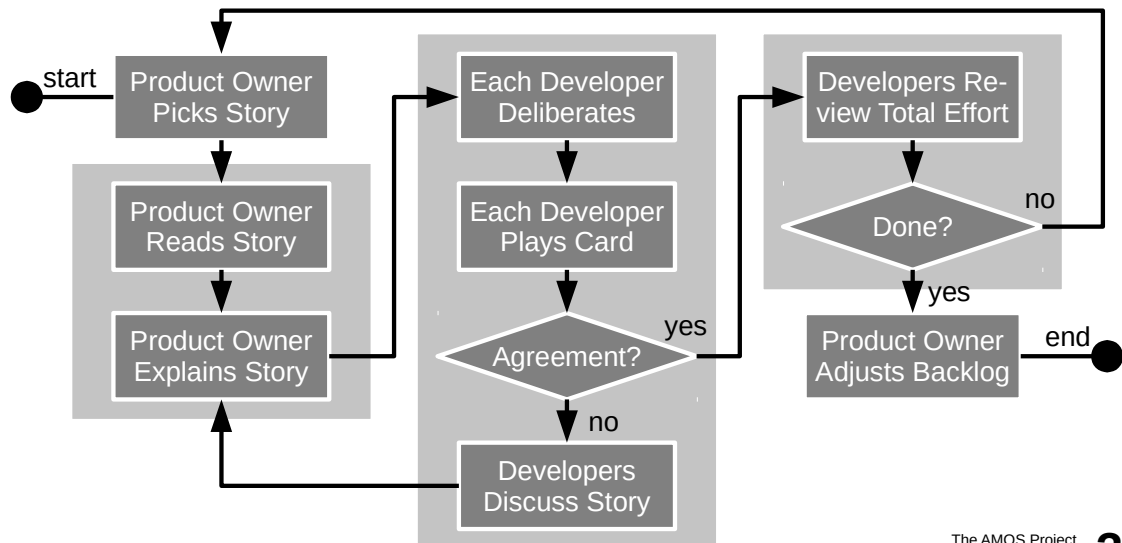
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- Software developer
 - Estimate size of each backlog item using planning poker
 - After planning, commit to backlog items put into sprint backlog
- Everyone
 - Make sure roles for sprint are clear to everyone

Story Points

- Story point
 - An arbitrary numeric measure of size of a given feature
- Properties
 - Is a measure of size, not of effort or duration
 - Measured in non-linear increments, forcing choice
 - Is socially agreed upon, depends on team estimation history
 - Is independent of a particular person (and their skills)
 - Is mapped to time using the team's velocity (dev. speed)

Points	Meaning
0	No effort
1	Minimal effort
2	Small effort
3	Medium effort
5	Large effort
8	Very large effort
13	Too large effort

Flow Diagram for Sprint Planning [1]



[1] A simple planning poker cards replacement can be found in the planning documents

6. Meeting After-work

- This sprint's **product owner**
 - Update planning documents to consistent state
 - Clean up product and sprint backlog
 - Ensure feature archive is current
 - Update release plan with actual effort for sprint
- This sprint's **Scrum master**
 - Work on resolving impediments during sprint
 - Document resolutions in impediments backlog

Weekly Checklist for Artifacts

- Planning documents
 - Clean release plan, product backlog, sprint backlog, and feature archive
- Software product
 - Tagged, testable, deployable software code base and product
- Process improvement
 - Impediments documented, discussed; happiness index survey taken

Next Steps

- See Course deliverables slide deck

Thank you! Questions?

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DR

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