

# Scrum Overview

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**AMOS C02**

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# Agenda

1. Scrum overview
2. Product owner
3. Software developer
4. Scrum master
5. Core activities

**Scrum**

**(for process practices)**

**XP**

**(for technical practices)**

# 1. Scrum Overview

# Scrum Definition 1 / 2

- An agile method, invented around 1993, 1995
- A rugby situation requiring intense collaboration

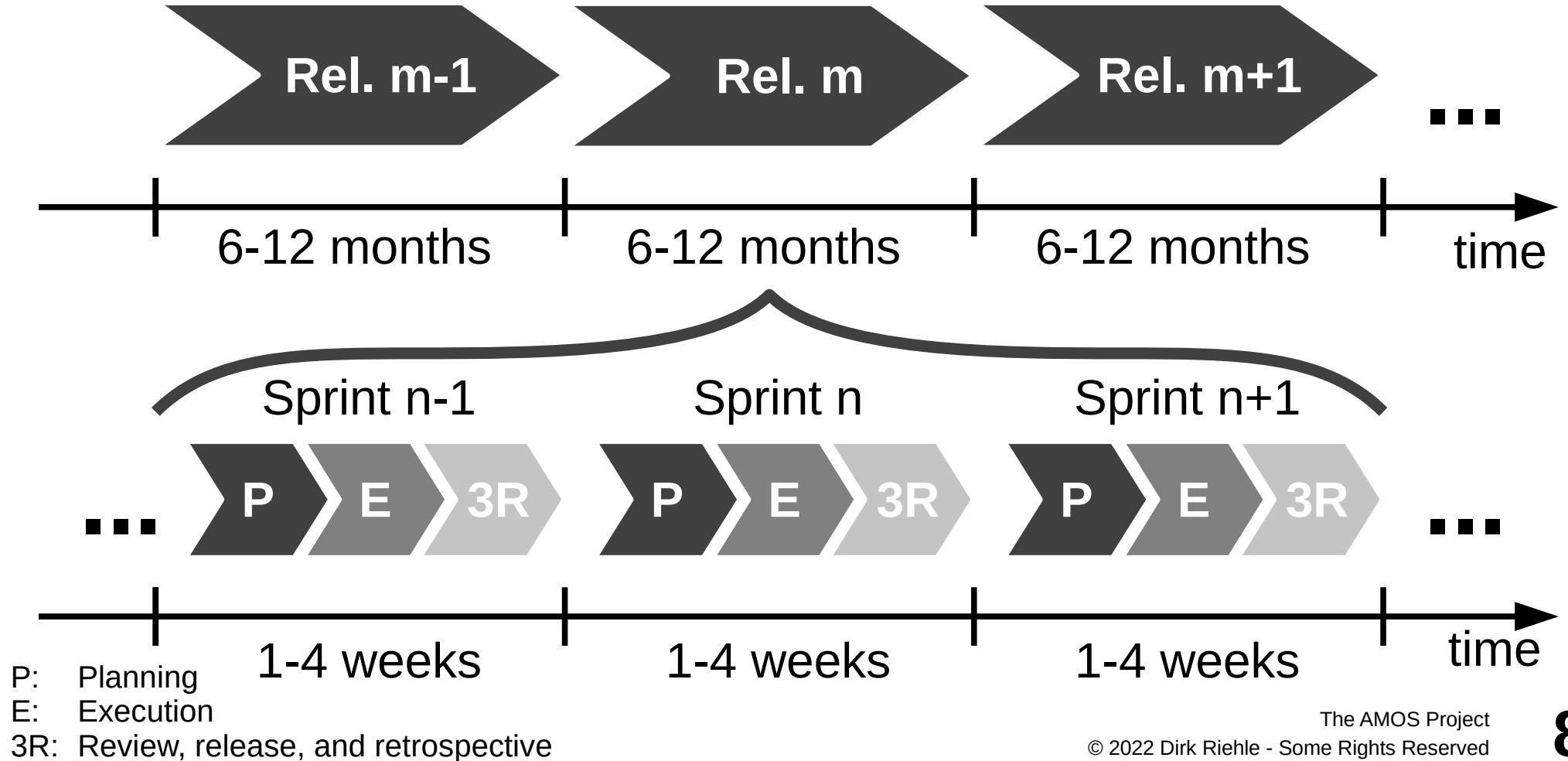


## Scrum Definition 2 / 2 [S04] [C06]

- A (minimal) agile process model
- Independent of software development
- Where definitions sometimes vary (two fathers)

1. Portfolio
2. Product
3. Release
4. Sprint
5. Day

# Scrum Process Overview





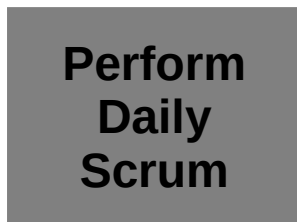
# Scrum Roles, Practices, and Artifacts

## Roles



- Product owner
- Software developer [1]
- Scrum master

## Practices



- Sprint planning
- Daily Scrum
- Sprint review
- Release planning
- ...

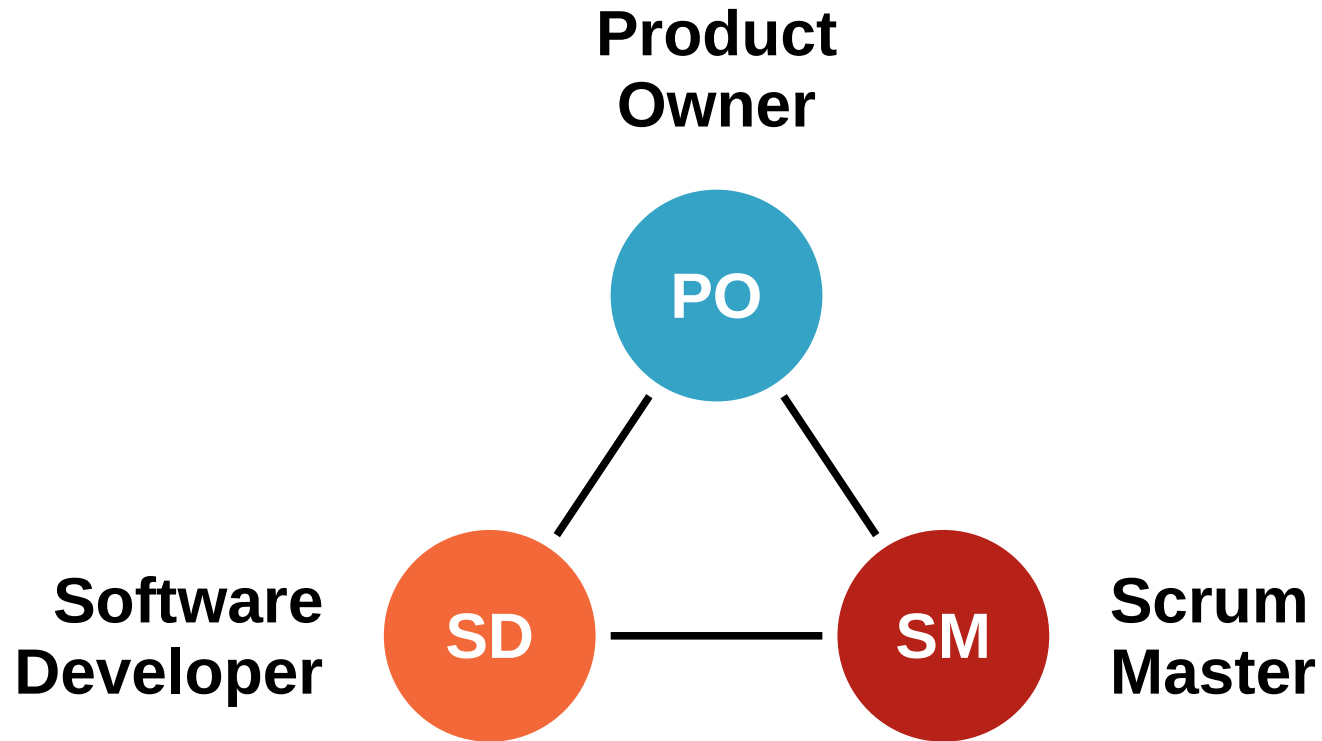
## Artifacts



- Product backlog
- Sprint backlog
- Burn-down chart
- ...

[1] Originally “team members”

# Scrum Roles and Responsibilities



# Committed vs. Involved (Scrum Lore)

- **Committed**

- Product owner
- Software developer
- Scrum master

- **Involved**

- Customer
- Marketing manager
- Sponsor / funder
- Others ...

## 2. Product Owner

# Product Owner

- Holds **overall responsibility** for the product being developed
- Provides
  - **product vision,**
  - **product requirements**
- **Plans** and helps plan **development**
- **Tracks progress**

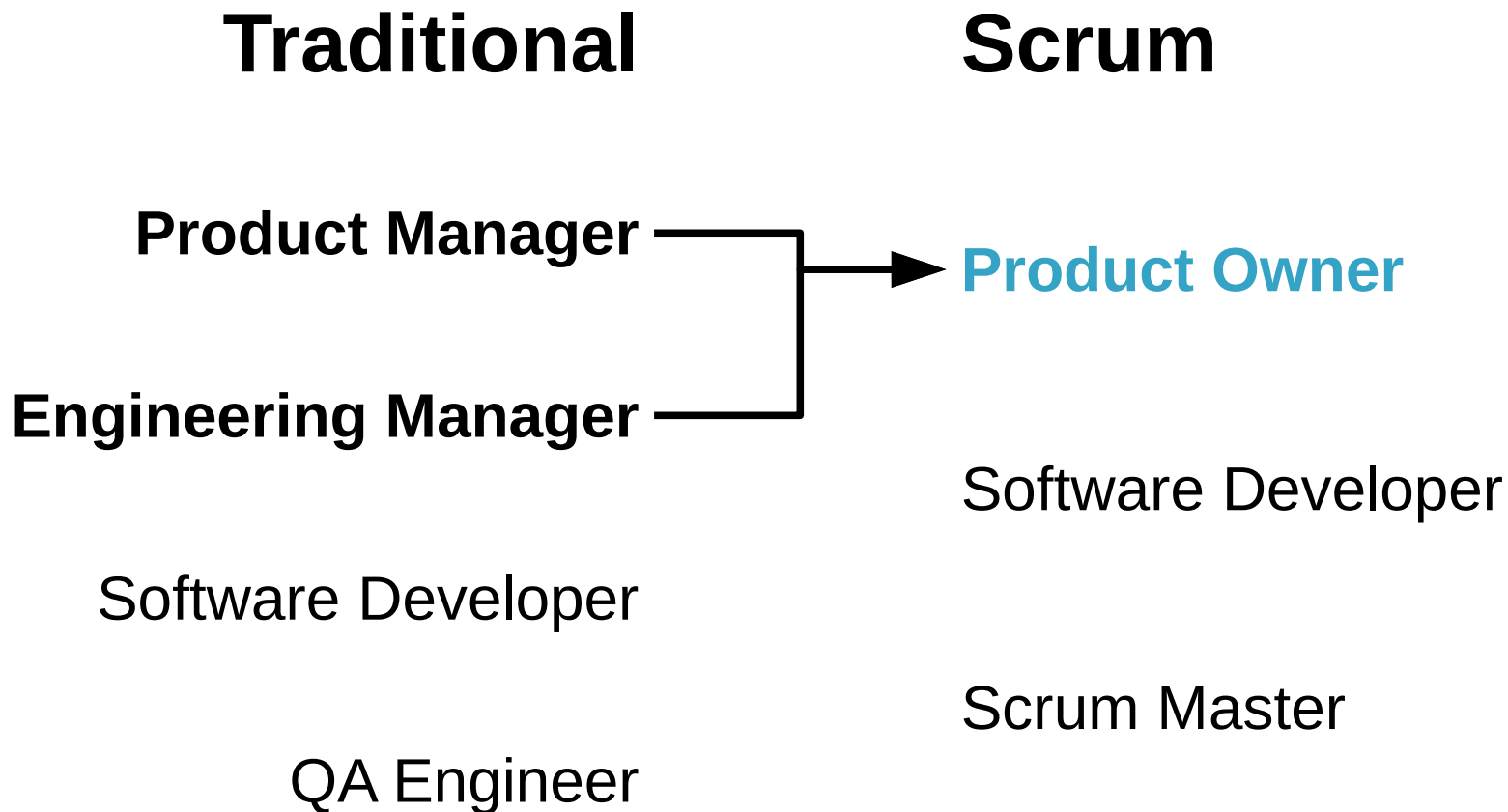
1. Opportunity Assessment
  2. Product Specification
- 

3. Development Planning

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4. Progress Tracking

# Traditional to Scrum Role Mapping (Recap)



# Product Owner Processes and Artifacts

Processes	Artifacts
Opportunity Assessment	Product Vision
Product Specification	Product Glossary Product Backlog Feature Archive
Product Planning	Sprint Backlog Release Plan
Progress Tracking	Burn-down Charts Feature Archive



# Traditional vs. Scrum Product Management

- **Traditional Product Manager**

- Product manager is responsible for product strategy and specification
- Product manager does not interfere with detail development planning
- Product Manager is frequently high-level, delegates product decisions to engineering

- **Scrum Product Owner**

- Product owner is also responsible for product strategy and specification
- Product owner shoulders some of the engineering manager role
- Product owner is very much in the details of planning and tracking development

- **The Scrum product owner mostly matches the technical product manager [1]**

**Scrum is a framework and thus typically enhanced with other roles and responsibilities**

[1] <https://dirkriehle.com/2018/05/23/product-manager-vs-product-owner/>

## **3. Software Developer**

# Software Development Team

- Holds **overall responsibility** for **delivering working software**
  - That provides the **features** the **team committed to delivering**

1. **Architecture Definition**
  2. **Feature Implementation**
- 
3. **Size Estimation**
  4. **Sprint Commitment**

# Traditional to Scrum Role Mapping (Recap)

## Traditional

## Scrum

Product Manager

Product Owner

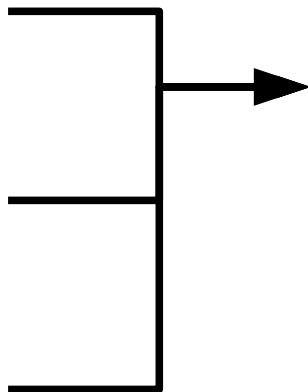
Engineering Manager

Software Developer

QA Engineer

**Software Developer**

Scrum Master



# Software Developer Processes and Artifacts

## Processes

Development Planning

Software Development

Quality Assurance

## Artifacts

Sprint Backlog

Software

Software

## 4. Scrum Master

# Scrum Master

- Holds **overall responsibility** for
  - **Removing non-technical obstacles** from the project's path



# Traditional to Scrum Role Mapping (Recap)

## Traditional

Product Manager

Engineering Manager

Software Developer

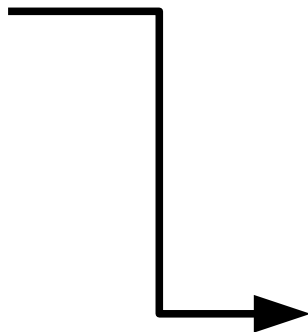
QA Engineer

## Scrum

Product Owner

Software Developer

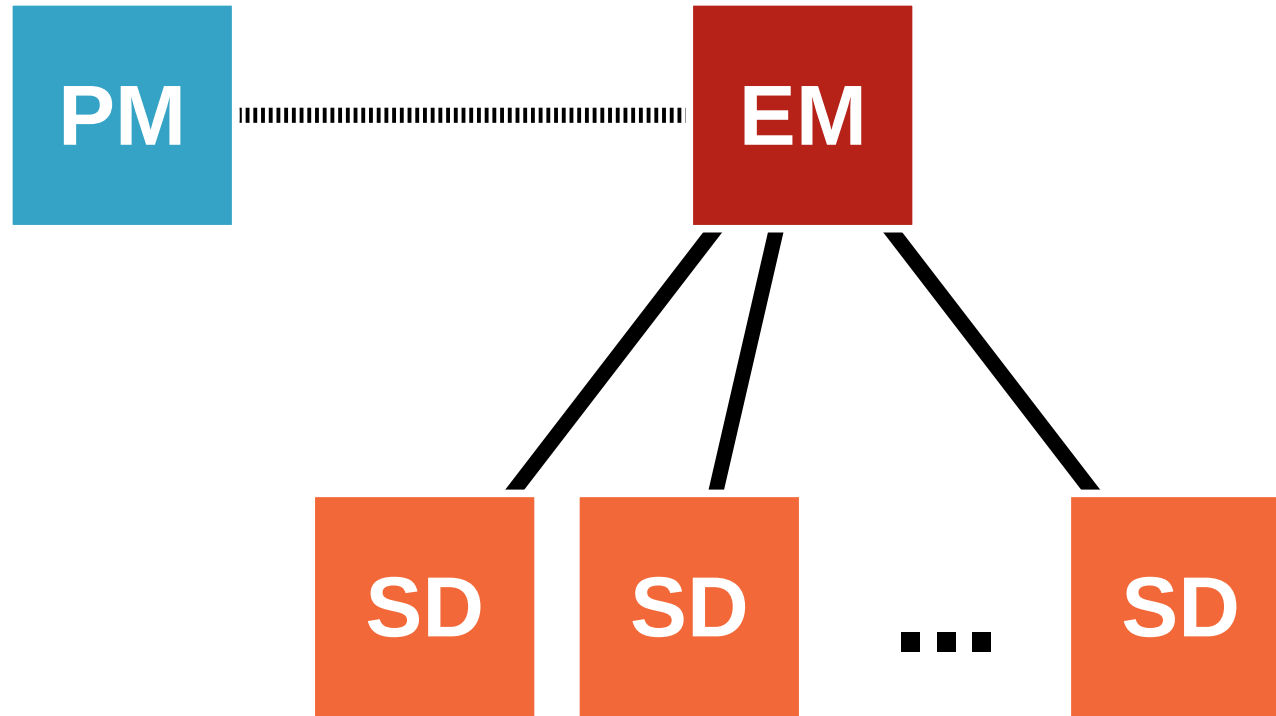
Scrum Master



# Scrum Master Processes and Artifacts

Processes	Artifacts
Process Facilitation	Impediment Backlog
Process Improvement	Impediment Backlog

# Line Reporting (vs. Roles)



PM      Product Manager  
EM      Engineering Manager  
SD      Software Developer

## 5. Core Activities

# Scrum Sprints (Iteration)

- A sprint is Scrum's iteration; it is an equal-length time-box
- It is a highly structured process with defined feedback points

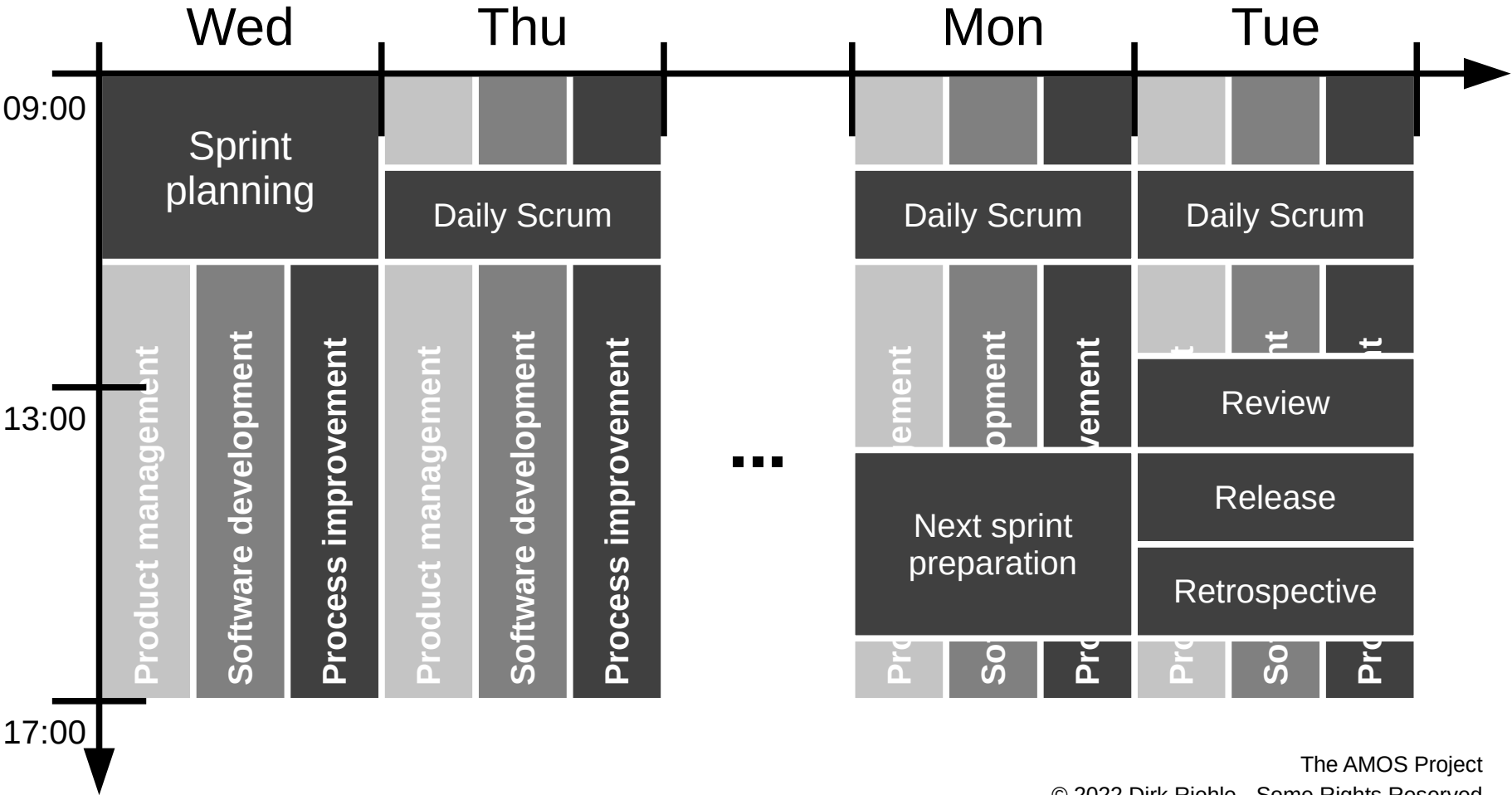


P: Planning

E: Execution

3R: Review, release, and retrospective

# Sprint Structure



- 1. Product management**  
(Product owner)
- 2. Software development**  
(Software developer)
- 3. Process improvement**  
(Scrum master)

# Sprint Planning

- Definition
  - Serves to plan the upcoming sprint's work
  - Involves product owner, software developers, and Scrum master
  - Results in sprint backlog containing the upcoming sprint's work
- Activities
  - Product owner
    - The product owner provides the prioritized list of features
  - Software developer
    - The software developers estimate feature size using planning poker
    - Features keep being added to sprint backlog until there is enough work
    - Software developers breakdown features into tasks, distribute them
  - Scrum master
    - Observes team dynamics



# Sprint Execution

- Definition
  - Serves to evolve product
- Activities
  - Product owner
    - Answers developer questions about features
    - Evolves product backlog, updates release plan
  - Software developer
    - Implement features from sprint backlog
    - Interact with product owner to refine feature specifications
  - Scrum master
    - Learns about process impediments
    - Tries to fix those impediments

# Next Sprint Preparation

- Definition
  - Serves to prepare the upcoming sprint planning meeting
  - Involves product owner and at least one software developer
  - Results in sufficiently comprehensive product backlog
- Activities
  - Product owner
    - The product owner provides the prioritized list of features
    - Includes high-priority bug reports as backlog entries
  - Software developer
    - Provides size estimates for highly prioritized features
    - Adds refactorings for planning consideration

# Sprint Review, Release, and Retrospective

- Definition
  - Sprint review
    - Product owner reviews results
    - Team signs off on finished features
  - Sprint release
    - Stakeholders sign off
    - If so, product is released
  - Sprint retrospective
    - Team reviews process
    - Developers commit to improvements

# Summary

1. Scrum overview
2. Product owner
3. Software developer
4. Scrum master
5. Core activities

# Thank you! Questions?

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