Project Setup

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AMOS A02

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Scrum Roles

Product owner

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

Software developer

- Holds overall responsibility for design and implementation of product
- Estimate complexity ("size") of product features to be implemented
- Organizes and allocates design and implementation tasks

Scrum master

- Holds overall responsibility for following Scrum properly
- Is responsible for tracking and resolving impediments
- Is responsible for team and process improvement

Tools Overview

The planning document (Google Sheets)

Used by everyone

The feature board (GitHub project)

Used predominantly by the product owner

The code repository (GitHub code repository)

Use predominantly by the software developer

The impediments backlog (GitHub project)

Used by the Scrum Master

The Flowers Project Example



[show | tell] — [signup | login | configure]

Praise it! About This website is to 0 10 show, discuss, and 9 praise photos! 0 8 0 7 **Photo Filter** 0 6 Click to toggle filter! 0 5 0 4 0 3 Filter! 0 2 0 1 Community Or skip it. It is Wahlzeit! Who/what/where is that? Click to show/hide description!

Tell a friend about this photo: http://localhost:8585/x1ac6.html — Send Email to the owner of this photo! Please help keep this community site clean! Flag photo as inappropriate if necessary.

This website is to show the best in photos!

1. Project Management

There is no Scrum Project Manager

Scrum teams are self-organizing

In (AMOS) practice, product owners also often play project managers

The Planning Document

The planning document serves

- To document and coordinate basic structural information
- To collect all materials that don't go easily into the repository

See also the Flowers example planning document

Table of Contents

| # | Artifact Name | Artifact Purpose |
|----|--------------------------------|--|
| 1 | Project data | Provides basic project data |
| 2 | Project team | Shows project team |
| 3 | Role assignments | Tracks role assignment |
| 4 | Team contract | Shows team contract |
| 5 | Product goal | Provides product vision and project mission |
| 6 | Product glossary | Provides domain terminology of project |
| 7 | Mid-project release tracking | Tracks mid-project release sprints |
| 8 | Final project release tracking | Plans and tracks final project release sprints |
| 9 | Definition of done | Provides decision criteria for "done" |
| 10 | Documentation | Provide links to documentation of product |
| 11 | Bill of materials | Lists all third-party components |
| 12 | Planning poker | Provides simple tool for planning poker |

1. Project Data

Please fill in the data as needed and as you see fit

Please do not protect the online team meeting

2. Project Team

Please provide your name and GitHub id

Please use only one GitHub id during the semester

3. Role Assignments

Please fill in the roles people play in a given week (sprint)

We strongly encourage to do this once at the start of the project

The release manager is responsible for ensuring that the software can be demoed

The GitHub Repository

Almost all work takes place in the project's GitHub repository

Please create and provide your GitHub id as soon as possible

Project Deliverables

Please provide all deliverables (homework) in the

• **Deliverables** folder of the project's GitHub code repository

Details can be found in the homework instructions

2. Product Owner / Feature Board

Backlog Entries (Issue, Work Items, Tickets)

A backlog entry is an

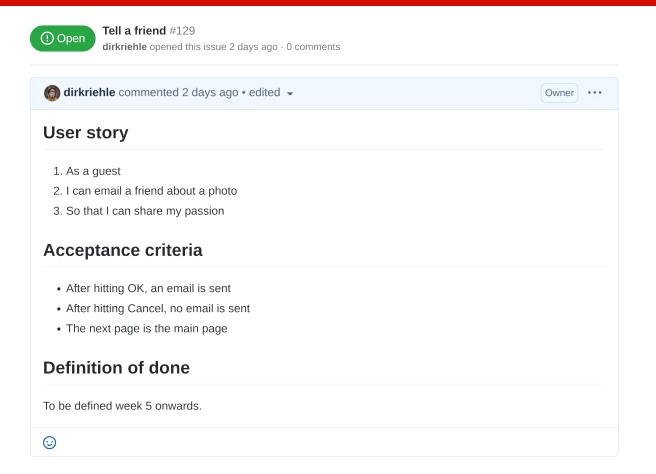
- ideally semantically closed
- task that needs doing

Types of backlog entries

- **Features** (functional and non-functional user requirements)
- Refactorings (behavior-preserving code improvements)
- Bugs fixes (fixes to malfunctioning code)

We use GitHub issues to represent backlog entries

Example Issue Using User Story Format



Issue Templates

Please create a template for feature requests

- The template should contain fields for
 - Short name (already preset as title field)
 - Short description (using user story)
 - Acceptance criteria (to test for fulfillment)
 - Definition of done (from week 5 on)
- Create labels for features sizes
 - Est. size = X for estimated sizes
 - Set during sprint planning
 - Real size = Y for actual size
 - Set during sprint review
 - Use escalating colors

Feel free to add other templates

| Issue: Feature Request | | | | |
|--|--|--|--|--|
| User story | | | | |
| 1. As a {}, 2. I want / need {} 3. So that {} | | | | |
| Acceptance criteria | | | | |
| Criterion 1Criterion 2 | | | | |
| Definition of done | | | | |
| Added after week 5 Always the same | | | | |
| Optional additional items | | | | |
| Issue default title: | | | | |
| Assignees: | | | | |
| Labels: | | | | |

Feature Board (GitHub Project)

A feature board is a slotting system used to

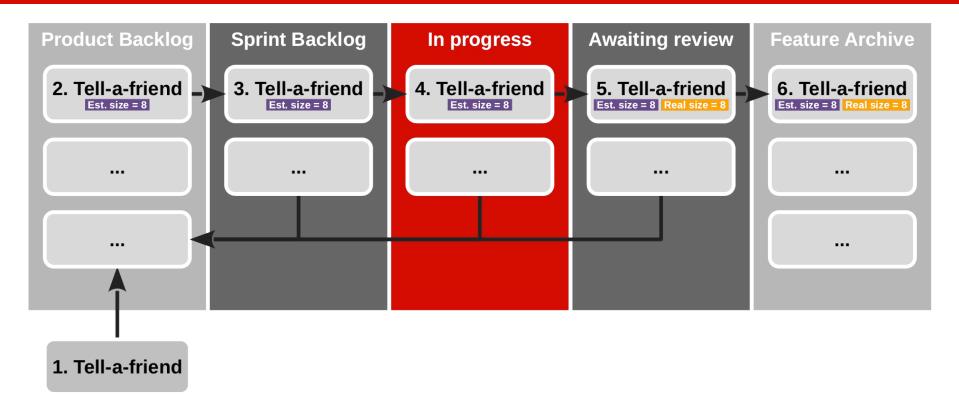
Manage the processing state of backlog entries

Types of slots (work process states)

- Product backlog (needs doing)
- Sprint backlog (ready to be done)
- In progress (being worked on)
- Awaiting review (needs sign-off)
- Feature archive (finished and archived)

Please do not change the feature board's setup

Example Feature Board and Backlog Entries



| 14 Product backlog | + … | 1 Sprint backlog | + … | 2 In progress | + | 1 Awaiting review + | 8 Feature archive | + |
|---|-----|--|-----|--|-----|--|---|-----|
| ① Show next photo #107 opened by dirkriehle Est Size = 8 | | ① Delete photo #121 opened by dirkriehle Est Size = 5 | ••• | ① Select photo #119 opened by dirkriehle Est Size = 5 | | Browse photo portfolio #109 opened by dirkriehle Est Size = 8 Real Size = 8 | ① Upload photo #118 opened by dirkriehle Est Size = 8 Real Size = 8 | |
| ① Rate photo and proceed #106 opened by dirkriehle Est Size = 8 | | | | ① Change photo data #120 opened by dirkriehle Est Size = 3 | ••• | | ① Change password #117 opened by dirkriehle Est Size = 3 Real Size = 5 | ••• |
| ① Show or hide photo caption #108 opened by dirkriehle Est Size = 8 | | | | | | | ① Change basic profile #116 opened by dirkriehle Est Size = 5 Real Size = 5 | |
| ① Create default admin #110 opened by dirkriehle Est Size = 5 |] | | | | | | ① Prompt basic profile #115 opened by dirkriehle Est Size = 5 Real Size = 5 | |
| ① Startup and shutdown scripts #122 opened by dirkriehle Est Size = 3 |] | | | | | | ① Reset password #114 opened by dirkriehle Est Size = 5 Real Size = 5 | ••• |
| ① Reboot and shtudown UI #123 opened by dirkriehle Est Size = 5 | | | | | | | ① Logout #113 opened by dirkriehle Est Size = 3 Real Size = 3 | |
| ① Cold backup and restore #128 opened by dirkriehle Est Size = 8 | | | | | | | ① Login #112 opened by dirkriehle Est Size = 5 Real Size = 5 | |
| ① Flag photo #124 opened by dirkriehle Est Size = 8 | | | | | | | ① Register #111 opened by dirkriehle Est Size = 8 Real Size = 8 | |
| ① View flagged photo queue #125 opened by dirkriehle Est Size = 8 | | | | | | | | -1 |
| Review flagged photo #126 opened by dirkriehle Est Size = 5 | | | | | | | | |
| ① Track repeat offender #127 opened by dirkriehle | | | | | | | | |

Synonyms

| Scrum | AMOS | GitHub | Other |
|-----------------|-----------------|--------|-------------------|
| Backlog entry | Backlog entry | Issue | Work item, ticket |
| Backlog entry | Feature | Issue | |
| Backlog entry | Refactoring | Issue | |
| Backlog entry | Bug fix | Issue | |
| User story | User story | | |
| Product backlog | Product backlog | | |
| Sprint backlog | Sprint backlog | | |

2. Software Developer / Code Repository

Git User Setup

Please use only one account and one email address and stick to it

Please configure your name and email address for your local repository

Please make sure this is the same information as on github.com

```
dirk@host$ git config -local user.name "Dirk Riehle"
dirk@host$ git config -local user.email "dirk@riehle.org"
```

Git Commit Sign-off

Please sign-off on your commits as your work using -signoff

This will add your name and email address to the commit message

```
dirk@host$ git commit -m "Fixed issue #123" --signoff
```

Pair Programming

If you are pair programming, make sure you document this in your commits

Add "Co-authored-by:" to commit message and using the correct email address

Double-check the syntax (otherwise co-authorship will not be recognized)

```
dirk@host$ git commit -a -m "Fixed problem Co-authored-by: Stefan Buchner
<stefan.buchner@fau.de>"
```

Please find more information on GitHub

The AMOS Project Licenses

For source code, we use the MIT license

See https://opensource.org/licenses/MIT

For other data, we use the CC BY 4.0 license

See https://creativecommons.org/licenses/by/4.0/

License and Copyright Declaration in Files

Please use the REUSE SOFTWARE [1] format to declare license and copyright

```
// SPDX-License-Identifier: MIT
// SPDX-FileCopyrightText: 2010-2021 Dirk Riehle <dirk@riehle.org>
// SPDX-FileCopyrightText: 2019 Georg Schwarz <georg.schwarz@fau.de>
```

Open Source Governance

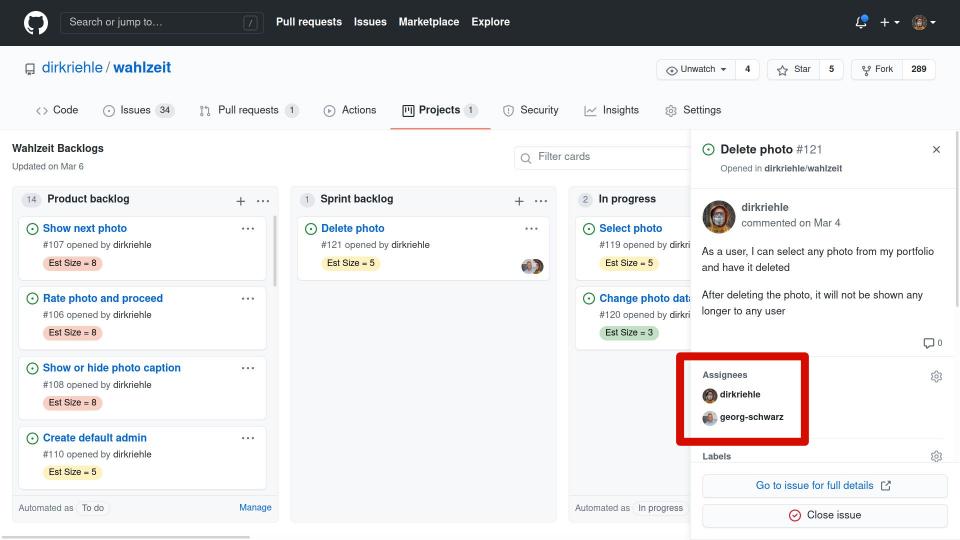
Do not add copyleft-licensed libraries to your project

- May make later desired license change difficult, including proprietary use
- Check with teaching team whether library is OK

Follow these rules of thumb on license choice

- OK: Permissive licenses (MIT, BSD, Apache)
- May be OK: Weakly protective (a.k.a. "weak copyleft")
- Usually not OK: Strongly protective (a.k.a. "reciprocal" or "copyleft")
- Never OK: Non-software licenses, no license

Professionals (i.e. companies) use code scanners to check



4. Scrum Master / Impediments Backlog

Impediments Backlog (GitHub Project)

The impediment backlog is a slotting system used to

Manage the processing state of project impediments

Impediments are non-technical problems that are

Holding the team and project back



Thank you! Any questions?

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