

# Team and Tools

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**AMOS B01**

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# Agenda

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## 1. Team formation

- a. Student roles
- b. Team contract
- c. Team logo and T-shirt

## 2. Project tools

- a. Planning document
- b. Feature board
- c. Code repository
- d. Imp-squared backlog

## 3. Team coordination

- a. Stand-up emails
- b. Happiness index

# **1. Student Roles**

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# The AMOS Scrum Team [1]



# Scrum Roles

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## Product owner

- Holds overall responsibility that the software is valuable (to customers)

## Software developer

- Holds overall responsibility for design and implementation of the software

## Scrum Master

- Holds overall responsibility for continuous process improvement

# Additional Roles

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## Release manager

- Holds overall responsibility that a demo is ready for review

# There is no Scrum Project Manager

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Scrum teams are self-organizing

# First Industry Partner Meeting

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You should have a first meeting with your industry partner as soon as possible

- Team members in general participate to learn about project
- Product owners participate to gather requirements
- Software developers participate to ask technical questions

After the first team meeting you should still try to regularly meet the industry partner

- As many team members should participate as is sensible and possible



## **2. Team Contract**

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# Team Contract

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A team contract is

- A contract between team members on how to conduct the project

Its main components are

- Goals and rewards
- Norms and sanctions

# Goals and Rewards

Goals are what the team hopes to achieve; there are several categories:

- Learning objectives, for example,
  - To ensure that all team members understand the course material
- Interpersonal relationship objectives, for example,
  - To foster an atmosphere of mutual respect and learning
- Functional objectives, for example,
  - To have efficient team meetings

Rewards are how you celebrate intermediate or final achievements

- Let's have cake!

# Norms and Sanctions

Norms are rules for expected behavior; there are several categories:

- Meeting norms, for example,
  - Is being late to a team meeting acceptable?
- Working norms, for example,
  - How will we make decisions?
- Coordination norms, for example,
  - Who keeps meetings on track?
- Communication norms, for example,
  - How to communicate outside of team meetings?

Sanctions are what to do if norms are violated

- Sing a song to the team or do ten push-ups

# One-Time Deliverable: Team Contract

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Please discuss and agree on a team contract (in planning document)

Try to finish this during the first team meeting

### **3. Team Logo and T-shirt**

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# Team Logo

A team logo is just that, a logo that

- Represents your team and project

The logo will be used in different places

- On your team T-shirt
- In the GitHub documentation
- In your final demo and report
- Wherever you see fit



# Team Logo Design

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Get started with collaboratively design the team logo during the team meeting

Continue on your self-chosen communication channels

Final execution (graphics) may be delegated to one person



# Team T-shirt

Create a team T-shirt design using your logo

- You can add your logo and one text

Submit your team T-shirt preferences

- Color, size, form



# One-Time Deliverable: Team Logo / Team T-Shirt

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Please create the team logo and T-shirt design and submit your preferences

## **4. Planning Document**

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# The Planning Document

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The planning document serves to

- Document basic project information
- Collect all materials that don't go easily into the repository
- Coordinate work on this less frequent information

See also the [Flowers example planning document](#)

# Table of Contents

| #  | Artifact name (tab in spreadsheet) | 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

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

Please do not protect the online team meeting

## 2. Project Team

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Please provide your name and GitHub id

Please **use only one GitHub id** during the semester

### 3. Role Assignments

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

Please finish this during the first team meeting



## 4. GitHub IDs

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

Please create and provide your GitHub id as soon as possible

# Project Deliverables

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Please provide all deliverables (homework) in the

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

Details can be found in the homework instructions

# Regular Deliverable: Planning Document

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Please initialize your planning document and keep it up-to-date

# Terms (The GitHub Terminology Mess)

| Scrum            | AMOS                   | GitHub               | Other             |
|------------------|------------------------|----------------------|-------------------|
| Project          | <b>Project</b>         | Repository           | –                 |
| Backlogs [1]     | <b>Backlogs</b>        | Project [2]          | –                 |
| Kanban board [3] | <b>Feature board</b>   | Project              | –                 |
| Backlog item [4] | <b>Backlog item</b>    | Item, also issue [5] | Work item, ticket |
| –                | <b>Code repository</b> | Code                 | –                 |

[1] Backlogs can be of different types: Product backlog, sprint backlog

[2] The columns of a GitHub project represent the different backlogs + states of work

[3] Scrum proper does not know kanban boards, but agile in general acknowledges them

[4] Backlog items can be of different types: Feature [6], refactoring, bug fix

[5] Terms vary throughout the GitHub user interface

[6] Features should be presented using the user story format

## **5. Feature Board**

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# Feature Board (GitHub Project)

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A feature board is a slotting system used to

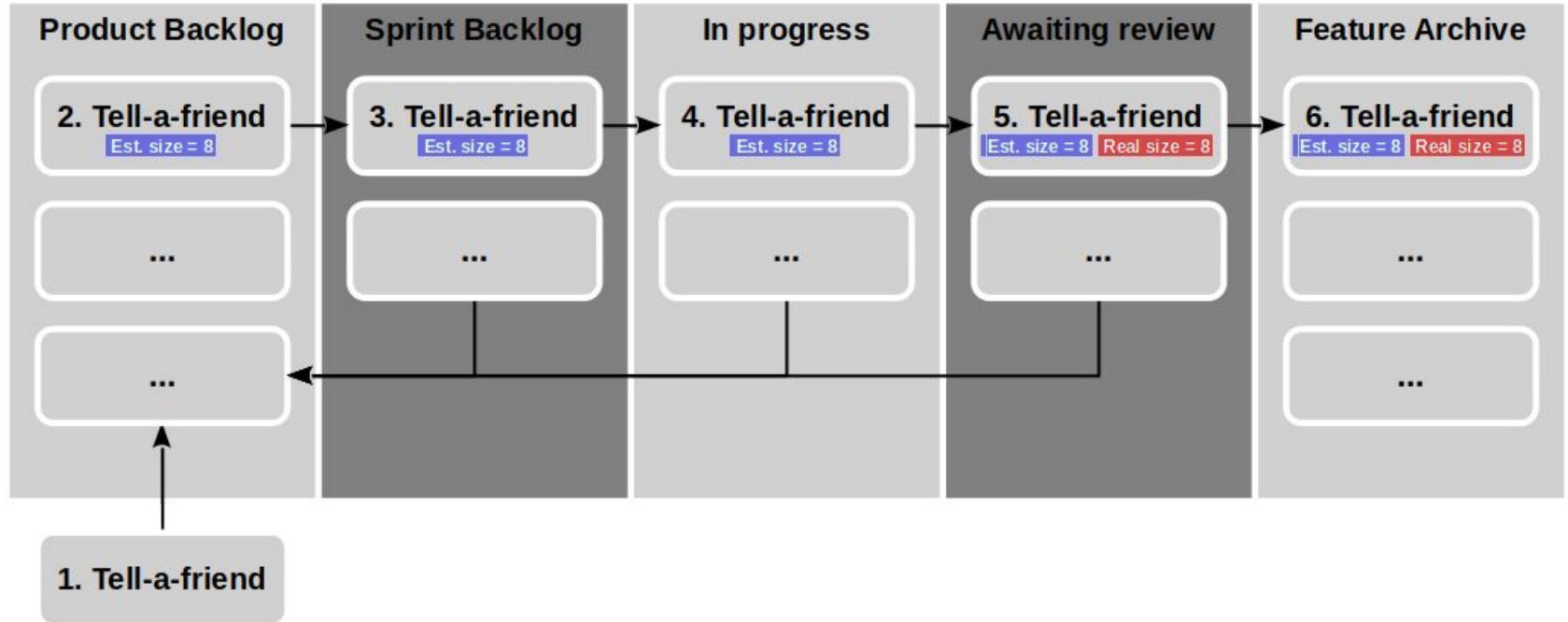
- Manage the processing state of backlog items

Types of slots (work process states, represented by columns)

- 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 Items



14

Product backlog

1

Show next photo

#107 opened by dirkriehle

Est Size = 8

1

Rate photo and proceed

#106 opened by dirkriehle

Est Size = 8

1

Show or hide photo caption

#108 opened by dirkriehle

Est Size = 8

1

Create default admin

#110 opened by dirkriehle

Est Size = 5

1

Startup and shutdown scripts

#122 opened by dirkriehle

Est Size = 3

1

Reboot and shtudown UI

#123 opened by dirkriehle

Est Size = 5

1

Cold backup and restore

#128 opened by dirkriehle

Est Size = 8

1

Flag photo

#124 opened by dirkriehle

Est 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

1

Sprint backlog

1

Delete photo

#121 opened by dirkriehle

Est Size = 5

2

In progress

1

Select photo

#119 opened by dirkriehle

Est Size = 5

1

Change photo data

#120 opened by dirkriehle

Est Size = 3

1

Awaiting review

1

Browse photo portfolio

#109 opened by dirkriehle

Est Size = 8

Real Size = 8

8

Feature archive

1

Upload photo

#118 opened by dirkriehle

Est Size = 8

Real Size = 8

1

Change password

#117 opened by dirkriehle

Est Size = 3

Real Size = 5

1

Change basic profile

#116 opened by dirkriehle

Est Size = 5

Real Size = 5

1

Prompt basic profile

#115 opened by dirkriehle

Est Size = 5

Real Size = 5

1

Reset password

#114 opened by dirkriehle

Est Size = 5

Real Size = 5

1

Logout

#113 opened by dirkriehle

Est Size = 3

Real Size = 3

1

Login

#112 opened by dirkriehle

Est Size = 5

Real Size = 5

1

Register

#111 opened by dirkriehle

Est Size = 8

Real Size = 8



# Backlog Items (Also: Issue, Work Item, Ticket)

A backlog item is an

- Ideally semantically closed **task that needs doing**

Types of backlog items

- **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 items

- Either by directly entering them into the GitHub project (the feature board)
- Or by entering them as an issue, also assigning them to the feature board

# Example Issue Using User Story Format



Tell a friend #129

dirkriehle opened this issue 2 days ago · 0 comments



dirkriehle commented 2 days ago • edited ▾

Owner



## User story

1. As a guest
2. I can email a friend about a photo
3. So that I can share my passion

## Acceptance criteria

- After hitting OK, an email is sent
- After hitting Cancel, no email is sent
- The next page is the main page

## Definition of done

To be defined week 5 onwards.




# 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 sprint 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** 

Suggest new feature (using user story)

**User story**

1. As a {},

2. I want / need {}

3. So that {}

**Acceptance criteria**

- Criterion 1
- Criterion 2
- ...

**Definition of done**

- Added after week 5
- Always the same

**Optional additional items**

Issue default title:

Assignees:

Labels:

# Regular Deliverable: Feature Board

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Please initialize your feature board and keep it up-to-date

- For the initial content, meet with your industry partner asap

Commit a screenshot of your feature board

## **6. Code Repository**

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# 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, please make sure you document this in your commits

Add “Co-authored-by:” to commit message and using **the correct email address**

Please 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>  
> Co-authored-by: Dirk Riehle <dirk@riehle.org>"
```

**Each co-authored-by needs to be on its own line to be recognized**

Please find [more information on GitHub](https://github.com)



# The AMOS Project Licenses

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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>
```

[1] See <https://reuse.software/>

# Open Source Governance

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Do not add copyleft-licensed libraries to your project

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

[Pull requests](#) [Issues](#) [Marketplace](#) [Explore](#)[dirkriehle](#) / [wahlzeit](#)[Unwatch](#)

4

[Star](#)

5

[Fork](#)

289

[Code](#) [Issues 34](#) [Pull requests 1](#) [Actions](#) [Projects 1](#) [Security](#) [Insights](#) [Settings](#)

## Wahlzeit Backlogs

Updated on Mar 6

### 14 Product backlog

#### • Show next photo

#107 opened by dirkriehle

Est Size = 8

#### • Rate photo and proceed

#106 opened by dirkriehle

Est Size = 8

#### • Show or hide photo caption

#108 opened by dirkriehle

Est Size = 8

#### • Create default admin

#110 opened by dirkriehle

Est Size = 5

Automated as To do

[Manage](#)

### 1 Sprint backlog

#### • Delete photo

#121 opened by dirkriehle

Est Size = 5



### 2 In progress

#### • Select photo

#119 opened by dirkriehle

Est Size = 5

#### • Change photo data

#120 opened by dirkriehle

Est Size = 3

Automated as In progress

### • Delete photo #121

Opened in dirkriehle/wahlzeit



dirkriehle

commented on Mar 4

As a user, I can select any photo from my portfolio and have it deleted

After deleting the photo, it will not be shown any longer to any user

0

Assignees



dirkriehle



georg-schwarz

Labels

[Go to issue for full details](#)



Close issue

## **7. Imp-Squared Backlog**

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# Imp-Squared (Impediments and Improvements) Backlog

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The imp-squared backlog is a slotting system used to

- Manage the processing state of project impediments and improvements

Impediments are non-technical problems that are

- Holding the team and project back

Improvements are non-technical desires to

- Improve team performance

## Impediments Backlog

Updated 8 minutes ago

[+ Add cards](#)[Fullscreen](#)[Menu](#)

2

To do

+

...

### Cards

Cards can be added to your board to track the progress of issues and pull requests. You can also add note cards, like this one!

Added by dirkriehle

### Automation

[Automatically move your cards](#) to the right place based on the status and activity of your issues and pull requests.

Added by dirkriehle

0

In progress

+

...

0

Done

+

...

+ Add column

# Regular Deliverable: Imp-Squared Backlog

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Please initialize your imp-squared backlog and keep it up-to-date

Commit a screenshot of your imp-squared backlog



## **7. Stand-up Emails**

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# Stand-up Emails

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Stand-up emails are a communication mechanism that serves to

- Ensure regular updates about each other's work state / progress

When writing a stand-up email, please consider these three topics

1. What did you get done since you last sent a stand-up email?
2. What are your next steps / plans of work to do?
3. What challenges are you facing?

Separate from the stand-up emails, feel free to

- Have your own communication channels

# Regular Deliverable: Stand-up Emails

Please send stand-up emails using the tool <https://happy-amos.appspot.com/>

- At least twice in total, on different days of the week

## Standup Emails

Done


Finished implementation of login feature

Plans

Will work on UX for user management next

Challenges

Still waiting for the new icon for login!

 Send Email

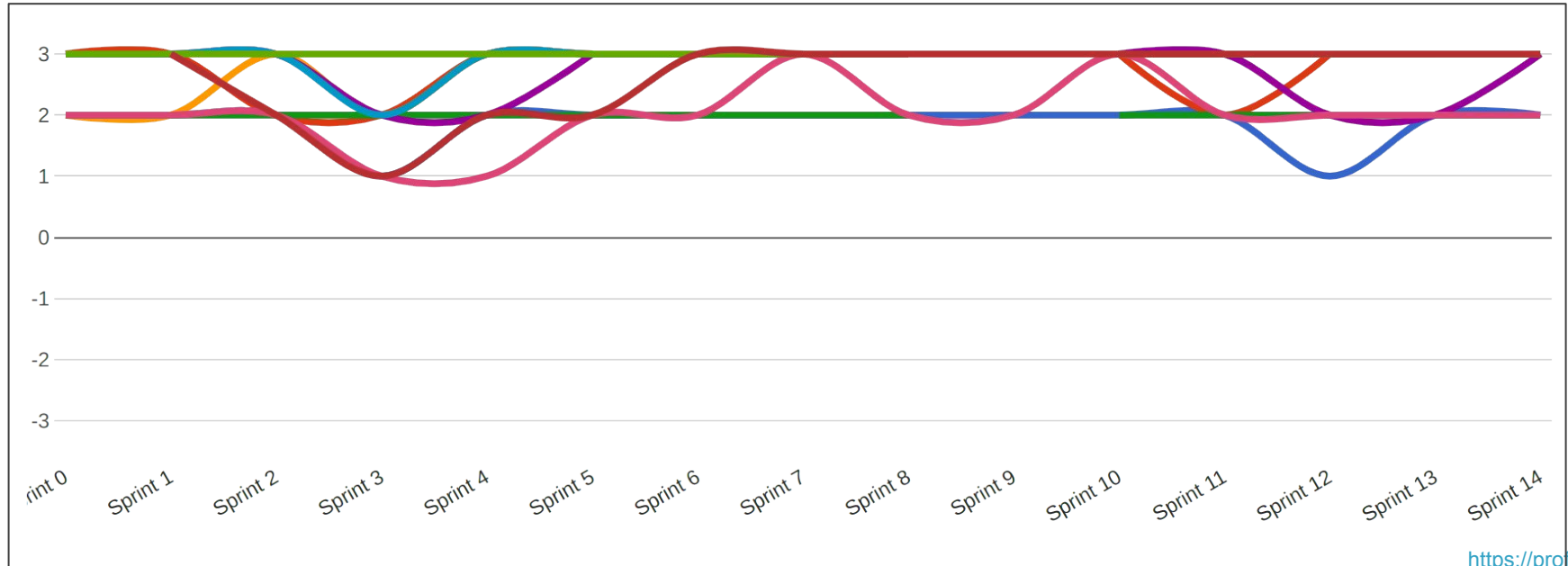
## **8. Happiness Index**

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# Happiness Index (Originally: Emotions Seismograph)

The happiness index shows your team's happiness over time

The resulting picture indicates potential problems early on



# Regular Deliverable: Happiness Index

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Please indicate your happiness using the tool <https://happy-amos.appspot.com/>

- Every team meeting, including the first and last one, until end of day

Your contributions (your happiness) remains anonymous

# Summary

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## 1. Team formation

- a. Student roles
- b. Team contract
- c. Team logo and T-shirt

## 2. Project tools

- a. Planning document
- b. Feature board
- c. Code repository
- d. Impediments backlog

## 3. Team coordination

- a. Stand-up emails
- b. Happiness index

# Thank you! Any questions?

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



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