How a design project can be managed

Wearable technology and functional wear

Autumn 2023

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Contents of this short lecture

If you would draw a **diagram** of a design project, what would it look like?

What diagrams have others created of design projects?

What has this to do with your project in this course?

How does that relate to the learning diaries in this course?

Exercise (5 min)

Using your experience and knowledge about design projects, what kind of a drawing would best describe it?
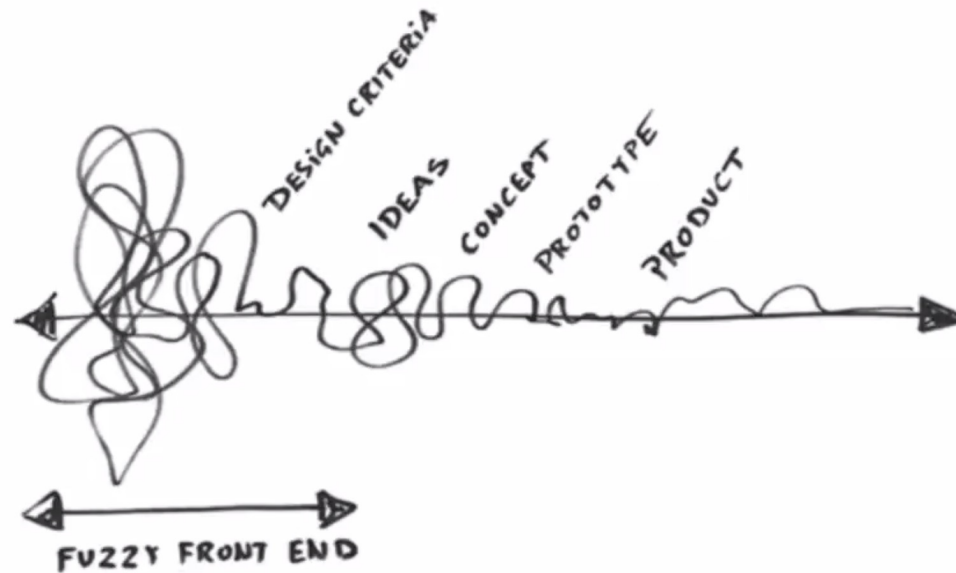
Discussion:

A look at some of the drawings

How would these projects be described:
Chaotic? Orderly? Linear? Messy?

Some drawings from design research

Sanders & Stappers:

Sanders, E. B.-N. & Stappers, P. J. (2008). Co-creation and the new landscapes of design. CoDesign, 4(1), 5–18. https://www-tandfonline-com.libproxy.aalto.fi/doi/full/10.1080/15710880701875068

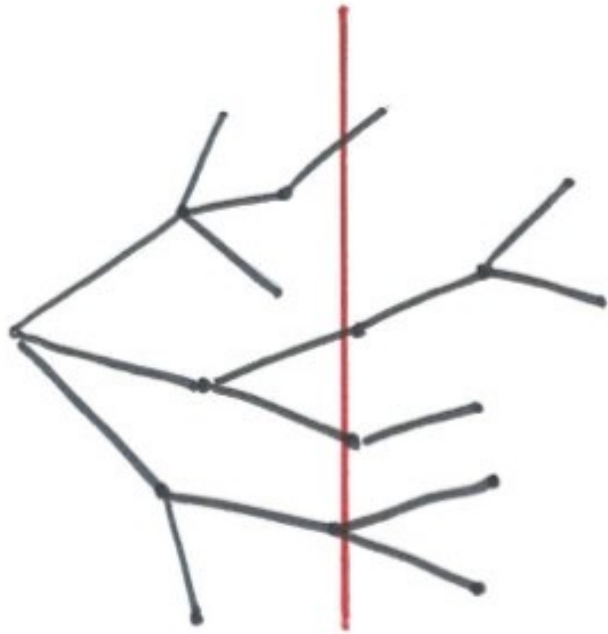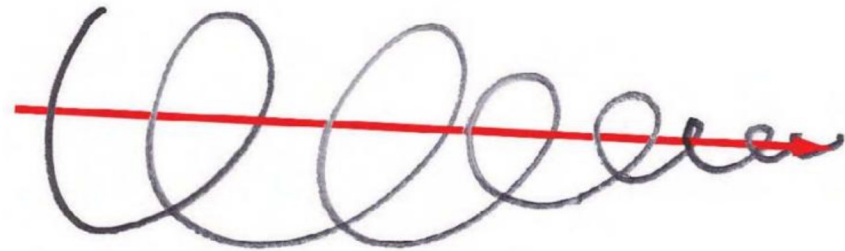## Design Council:

Design Council (2005). Eleven lessons: Managing design in eleven global brands: A study of the design process. https://www.designcouncil.org.uk/sites/default/files/asset/document/ElevenLessons_Design_Council%20(2).pdf
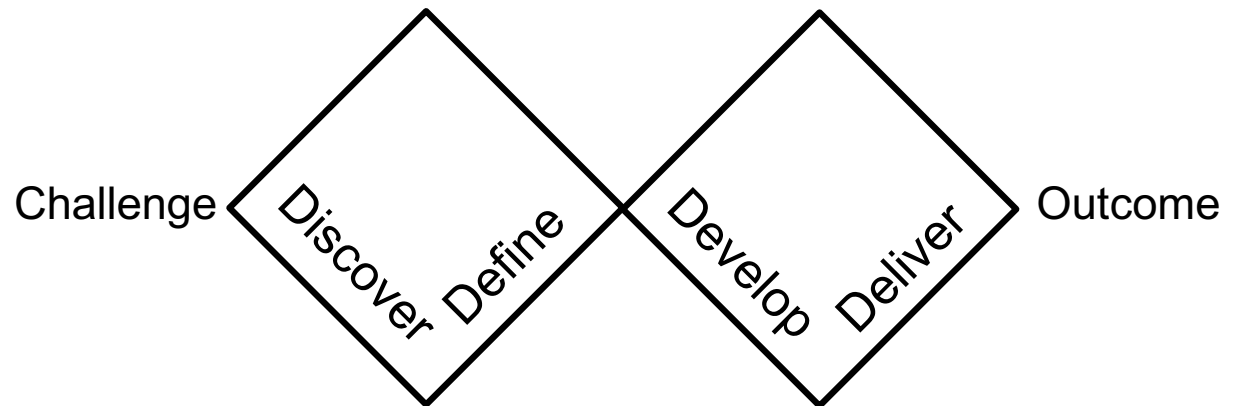
Two drawings from design practice
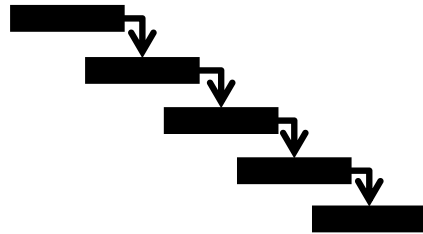

"branching exploration and comparison"

"Iterative incremental refinement"

Buxton, B. (2007). Sketching User Experiences: Getting the Design Right and the Right Design.
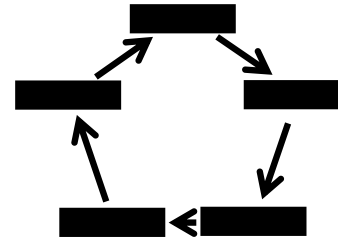San Francisco, CA: Morgan Kaufmann.
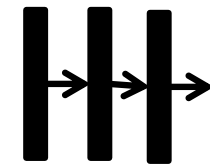
Some drawings from software design

No process
("cowboy
coding")

Waterfall
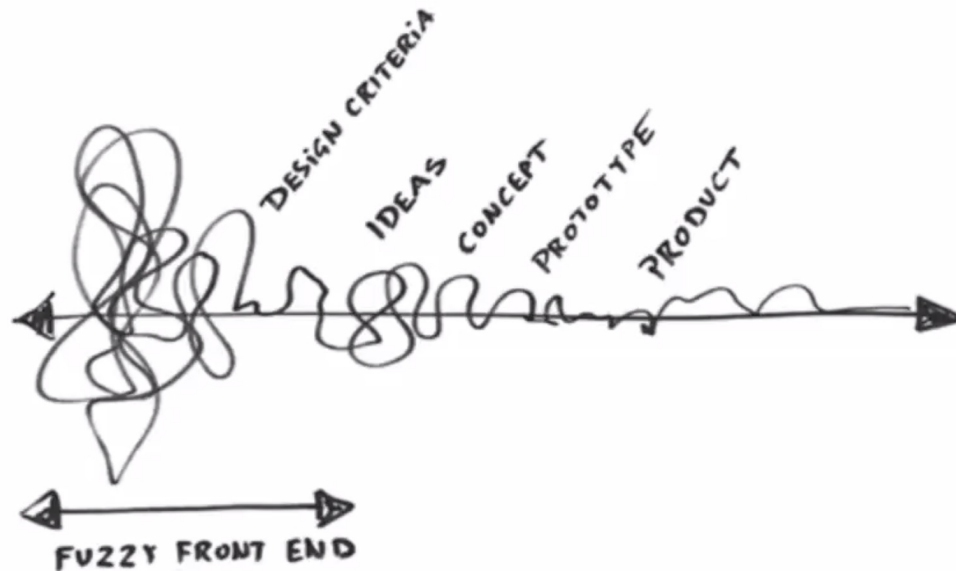"Plan very well,
then follow the
plan"

Iterative waterfall
"Plan and follow the
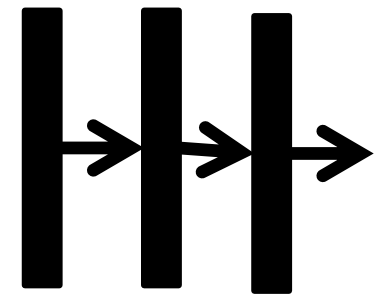plan, but do it in
repeated cycles"

Agile (scrum)
"Set a realistic 1-
week goal, then do
it, then decide the
next goal"

Of the diagrams on this and the previous slide,
which one(s) of these could you use as your
guide in this course?

Suggestion for this course
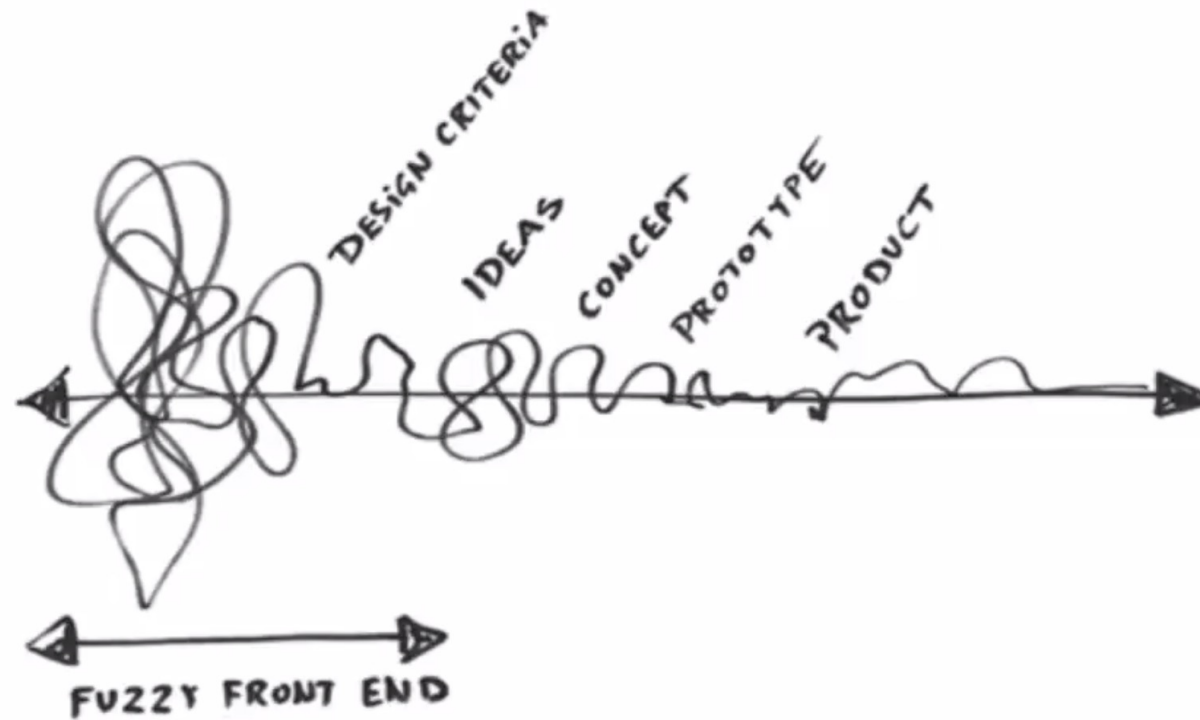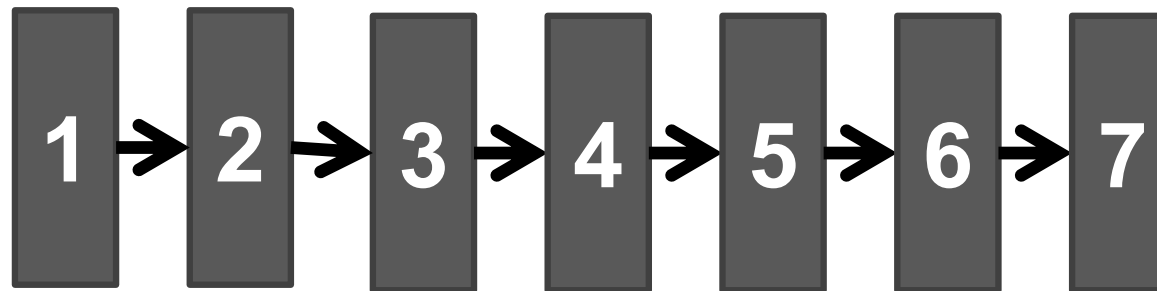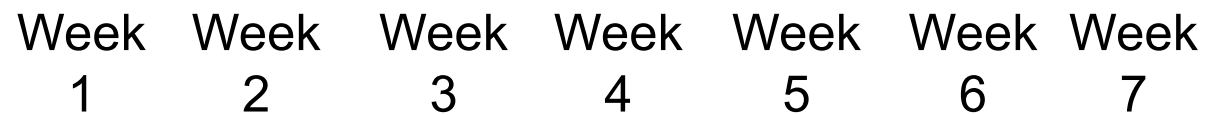

Sanders & Stappers   Agile (scrum)

The project's framing

DESIGN CRITERIA
IDEAS
CONCEPT
PROTOTYPE
PRODUCT

FUZZY FRONT END

"Sprints"

1 → 2 → 3 → 4 → 5 → 6 → 7

Course timeline

Week 1 Week 2 Week 3 Week 4 Week 5 Week 6 Week 7

How should you select the goal for your sprint

| 1 → | 2 → | 3 → | 4 → | 5 → | 6 → | 7 |

Week 1 · Week 2 · Week 3 · Week 4 · Week 5 · Week 6 · Week 7
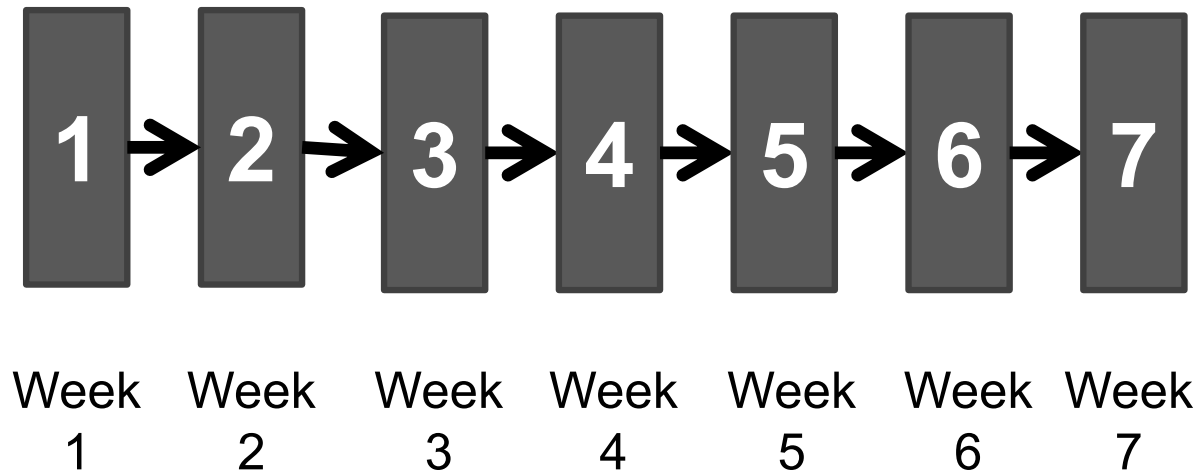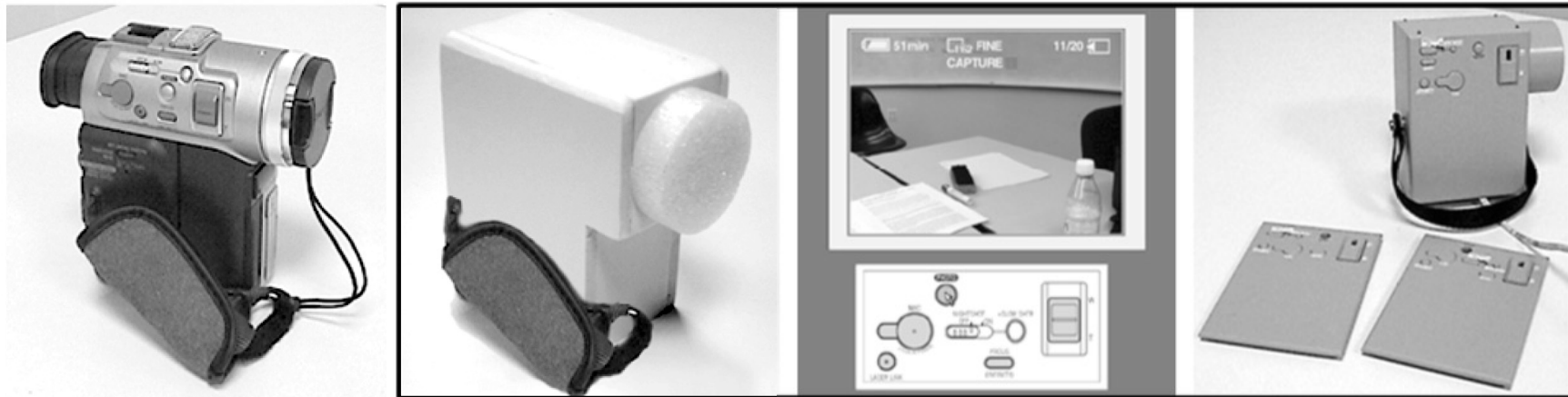
Prioritise goals that have these qualities:

Goals that are **important to the overall success** of the prototype

Goals where you have **little knowledge** on know carry them out

Goals that can **demonstrate the main ideas** in action

Many prototypes about the same project

They help you **filter** different qualities of the final product to your analysis

Fully working product

3D form with a hand strap

Screen-based viewfinder and interface panel

3D form with partially working breadboard
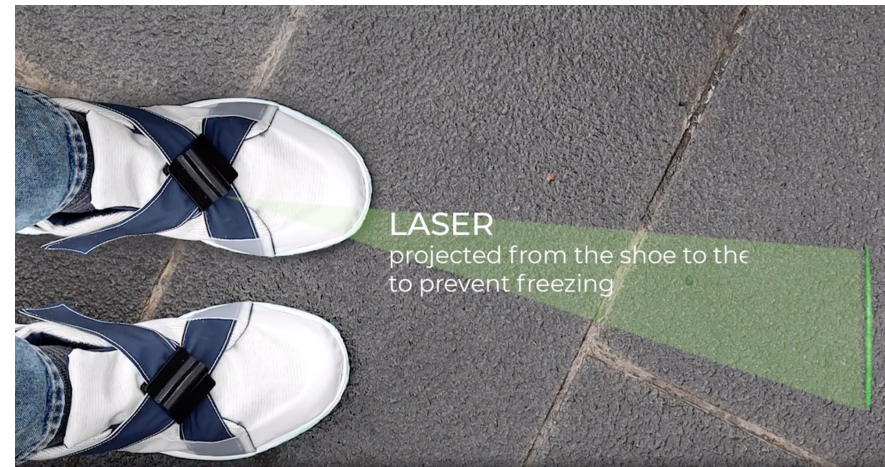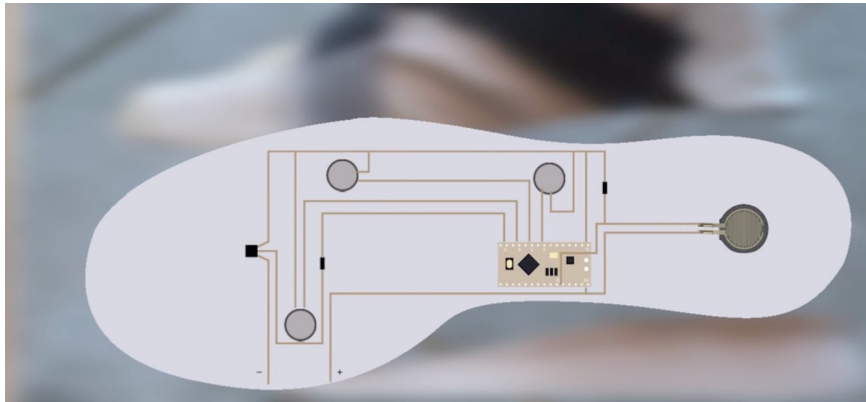
Examining the ergonomic quality

Examining the input-feedback relationship quality

Examining the input layout quality

PAR
-*ki*-
SHO

Multiple prototypes; another example

LASER
projected from the shoe to the
to prevent freezing

Use the learning diary as your tool

| 1 → | 2 → | 3 → | 4 → | 5 → | 6 → | 7 |

| Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 |

Beginning of the week:

1-3 goals that you'll decide to focus on this week

End of the week:

How did you manage to meet your goals?
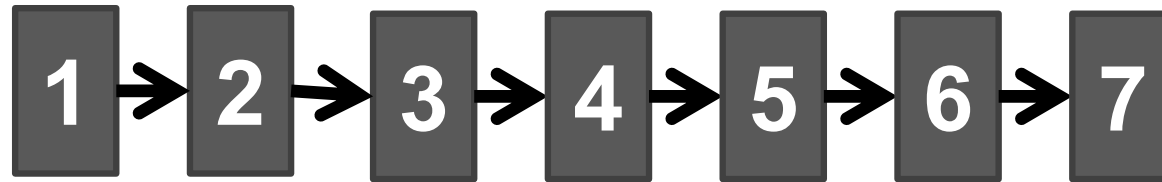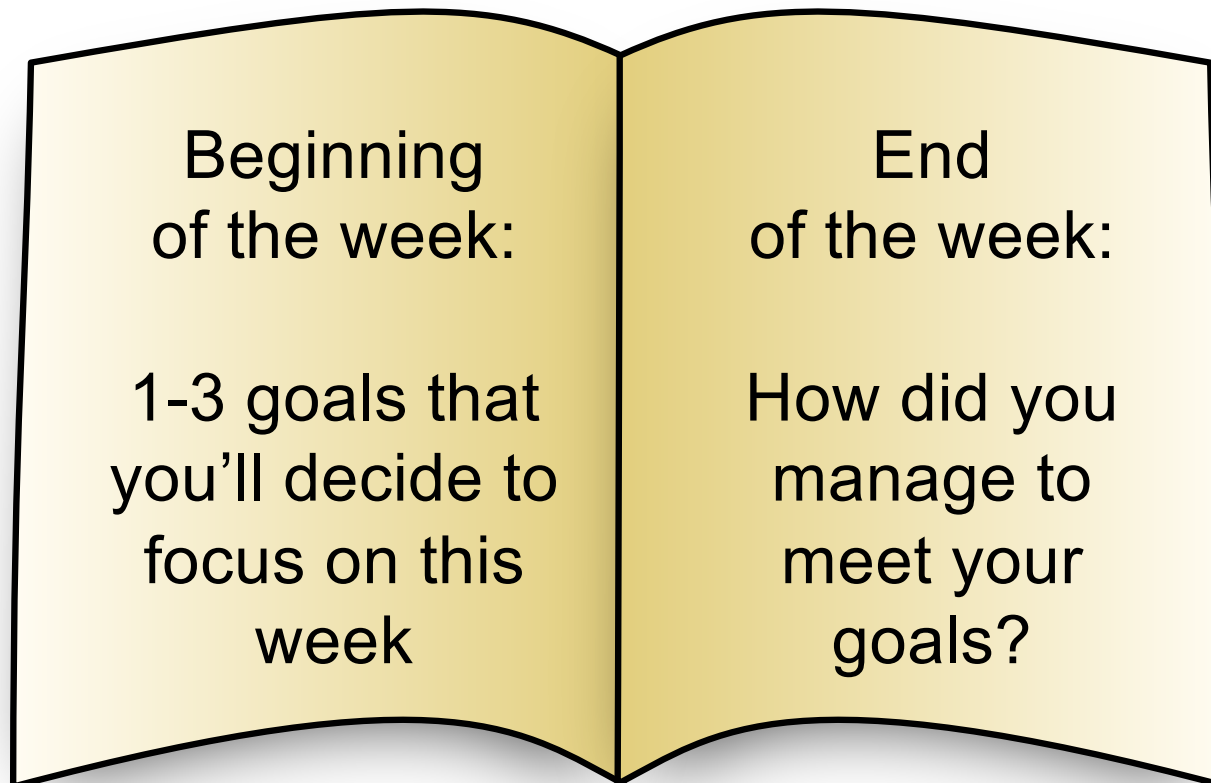
MyCourses instructions on the diary

https://mycourses.aalto.fi/course/view.php?id=36004&section=2

The target length of the learning diary is following:

    Cover page (your name, project name)

    For each of the 7 weeks of the course, max 2 pages of content

    References and/or appendices

What we would like you to write about from each of the weeks:

    Start with you reflection about the 1-3 challenges that lie ahead of you. It would be a good idea to write this part in the beginning of the week.

    End with your report on how you worked on these challenges and what outcomes you reached. If you ended up working on different tasks than you had planned, that is fine: you can tell what changed your mind.

It is **not important** to report day-by-day what your were doing.

Evaluation:

    Reflections about the goal-setting of the project.

    Learning from each week: including false starts, self-criticism, decisions that you had to change, your changes of plans, new insights that give a new direction to the project, and so on.

Questions and discussion