Learning Agility
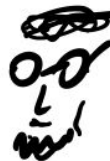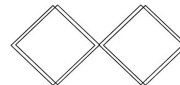
- how to design your own simulation?

Humbly hosted by Jakub Perlak

"When I think about it, I must say that my education has done me great harm in some respects. This reproach applies to a multitude of people – that is to say, my parents, several relatives, individual visitors to our house, various writers, a certain particular cook who took me to school for a year, a crowd of teachers (whom I must press tightly together in my memory, otherwise one would drop out here and there – but since I have pressed them together so, the whole mass crumbles away bit by bit anyhow), a school inspector, slowly walking passers-by; in short, this reproach twists through society like a dagger."
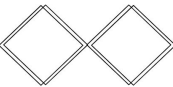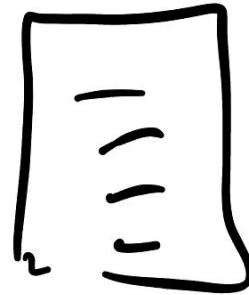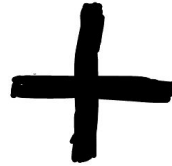
Diaries

FRANZ
KAFKA
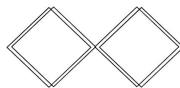
It will be an interactive session!

You will need:

Why we bother?

"Nothing fires up the brain like play" (from McKeown "Essentialism")

Affective Neuroscience: The Foundations of Human and Animal Emotions, "**One thing is certain, during play, animals are especially prone to behave in flexible and creative ways**." Jaak Panksepp (from McKeown "Essentialism")


"If you want creative workers, give them enough time to play". **John Cleese**
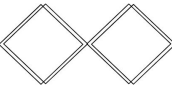
If you are still not convinced…

Teamwork training conducted in the **simulated environment** may offer an **additive benefit** to the traditional **didactic** instruction, enhance **performance**, and possibly also **help reduce errors** (Lateef, 2010)

"Learning is the process whereby knowledge is created through the **transformation of experience**" (**Kolb**, 1984)

REFLECT

EXPERIENCE

THEORY

PRACTICE

FEELING

DOING

WATCHING

THINKING
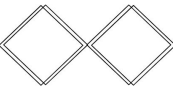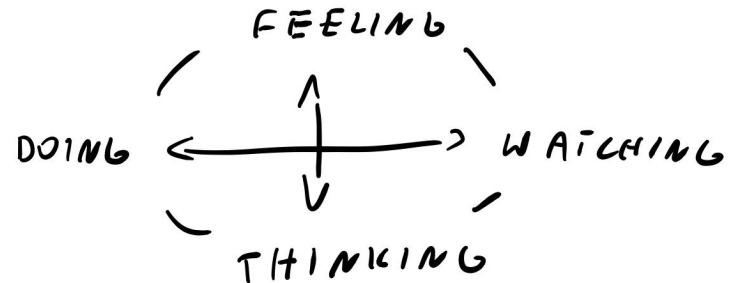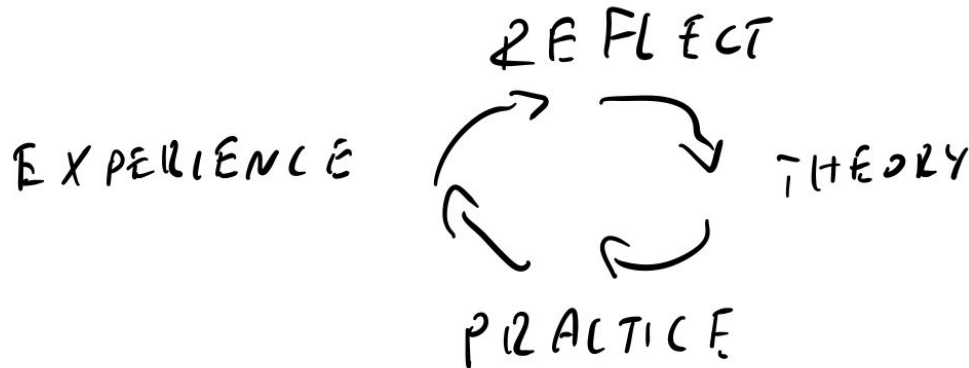
One more slide…

"Educational situation"... **is about creating a space [together] for intentional cognitive activity" -** Jacek Jac Jakubowski.
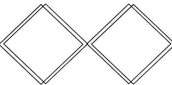
- Environment and space
- Dialogue and empathy
- Emotion, personality, internal mental models

- Reason behind it and goal

- Act and experience - do, say, think…
- Experiential learning like a child

- Sense of belonging, relations
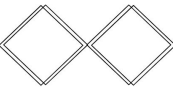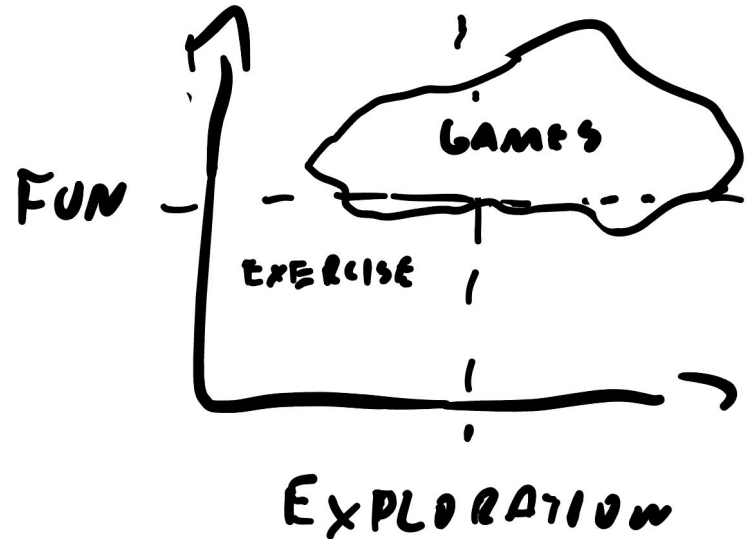- Whole person engagement and contact, respect
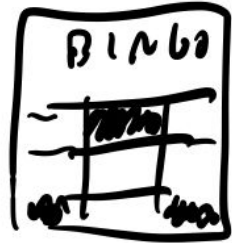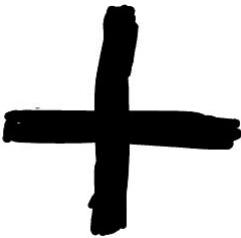
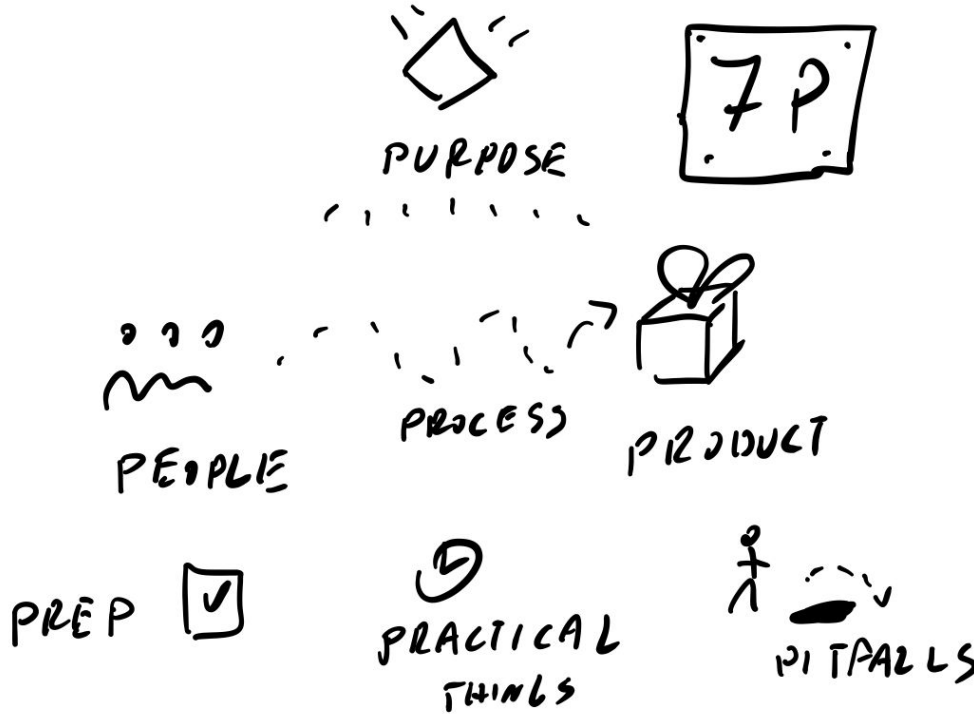SAFTY

COMMUNITY   PURPOSE

ACTIVITY

Simulation vs Game

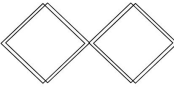**Simulation** - controlled environment for learning models of behavior and roles in specific process.

Game - has usually rules, score and effort

How to prepare? 7P + Validation

PURPOSE

7P

PEOPLE

PROCESS

PRODUCT

PREP ☑

PRACTICAL THINGS

PITFALLS

+

BINGO

Agile principles
Values
Elements of framework
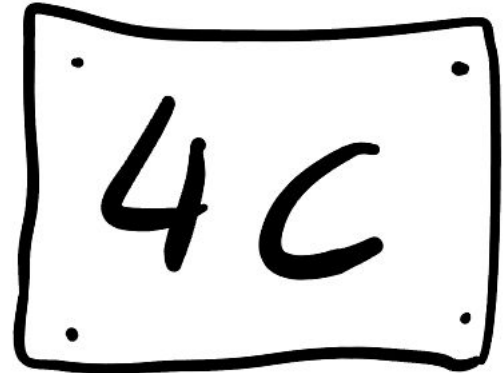…

How to design? 4C

4C is 4-step instructional design and delivery model that is based on how human beings naturally and normally learn

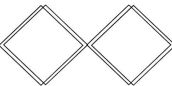1C - **Connections** - to topics and each other

2C - **Concepts** - add what you already know
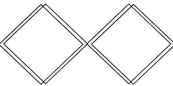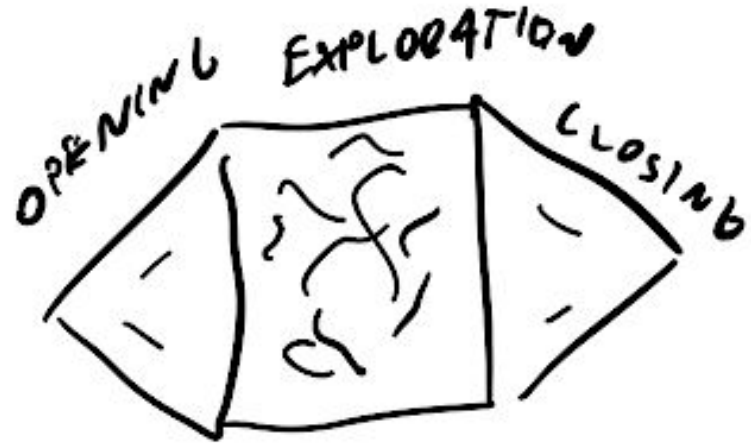
3C - **Concrete Practice** - practice what you learn
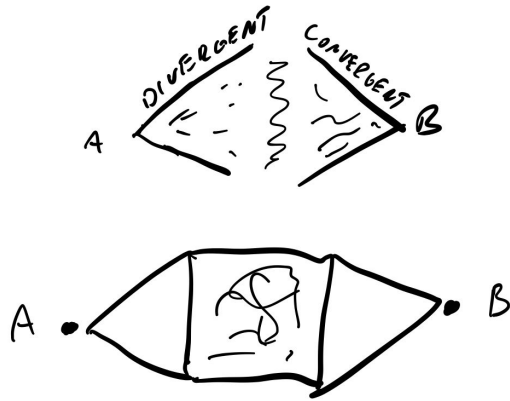
4C - **Conclusions** - learners summarize

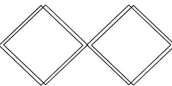# How to design activity? Divergent & Convergent thinking

How to open?

Opening - the <u>benefits</u> are initial enthusiasm and excitement, <u>drawbacks</u> are that people are still in a very new situation and can be resistant.

Goal: allow participant discover how to cooperate with others towards a common goal.

- **Icebreakers**
- **Team building games**

Exploration examples

Exploring - more complex games are possible, simulations that require rules and maybe artifacts. The main challenge here is how to design serious simulations that engage most people.
<mark>Proper simulation of incremental and iterative approaches to problems.</mark>
Here are numerous games for exploration:

- **Ball Point Game** - an iterative process of throwing balls by the team in order to get the highest result, In every iteration the team is reflecting their strategy
- **Paper Airplanes** - building paper airplanes in iterative mode, trying to improve the result of how many the team can build
- **Piggy Bank Scrum** - simulates an iterative approach for making money, one nice idea here is an element of tossing coins to bring an element of variability in the process
- **Lego** …
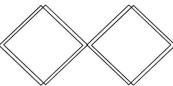
How to close?

Closing - The benefits are that people get to know each other and can build on learning from previous phases, a drawback is potentially tiredness. The main challenge is how to link experience to everyday life or problems we try to solve. Like:
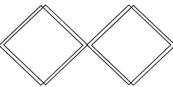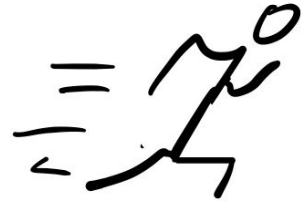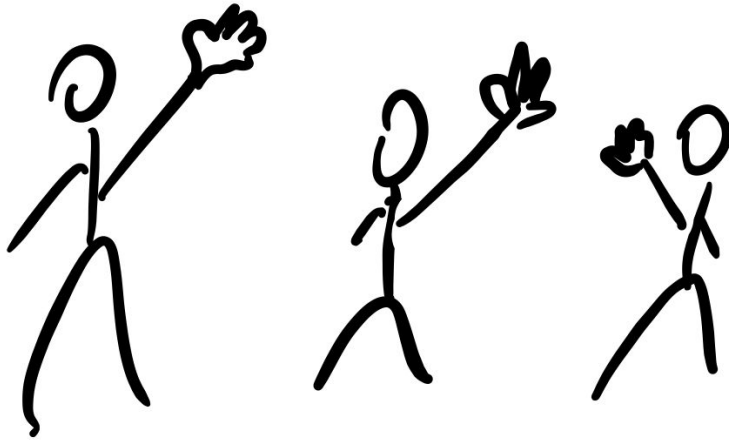
- **"Agile bingo**" we experience something that links to our practices.
- 2 learnings + 1 surprise
- Share real life connections
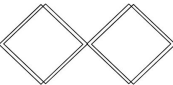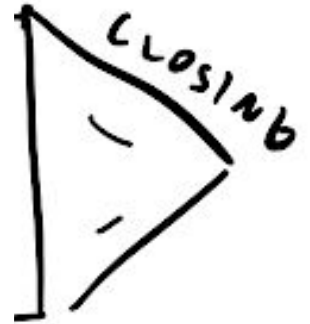
Practice time

Volunteers…

Ball Point Game

Pass as many balls by the team

Iteration plan

- Plan 2 min
- Build 2 min
- Review 2 min
- Reflect 1 min
- Again…

Rules for Playing

- Everyone is part of one team.
- Each ball must have air-time.
- Each ball must be touched at least once by every team member. No cheating :)
- Balls can't be passed to your direct neighbor to your immediate left or right.
- Each ball must return to the same person who introduced it into the system.
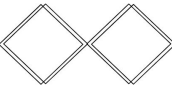
Agile Airplanes

Create as many high quality paper planes that can fly a given distance

Iteration plan

- Plan 2 min
- Build 2 min
- Review 2 min
- Reflect 1 min
- Again…

Rules for Playing

- Only one person can make one fold at a time.
- Every person need to make at least one fold.
- The planes must be built and tested in 2 min.
- Only planes that fly the given distance are counted.
- Have one person in the team be the counter.
- No crush and ball making cheats :) at this time.
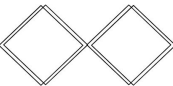
Agile Principles Bingo

1. Our highest priority is to **satisfy the customer** through early and **continuous delivery of valuable** software.
2. **Welcome changing requirements**, even late in development. Agile processes harness change for the customer's competitive advantage.
3. **Deliver working software frequently**, from a couple of weeks to a couple of months, with a preference to the shorter timescale.
4. **Business people and developers must work together** daily throughout the project.
5. Build **projects around motivated individuals**. Give them the environment and **support they need, and trust them** to get the job done.
6. The most efficient and effective method of conveying information to and within a development team is **face-to-face conversation.**

7. **Working software is the primary measure of progress**.
8. Agile processes promote **sustainable development**. The sponsors, developers, and users should be able to maintain a constant pace indefinitely.
9. **Continuous attention to technical excellence** and good design enhances agility.
10. **Simplicity**--the art of maximizing the amount of work not done--is essential.
11. The best architectures, requirements, and designs emerge from **self-organizing teams**.
12. At **regular intervals, the team reflects** on how to become more effective, then tunes and adjusts its behavior accordingly.
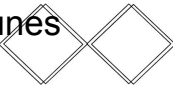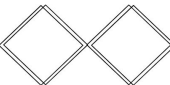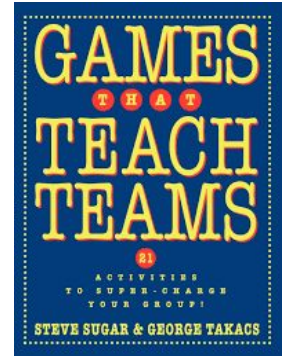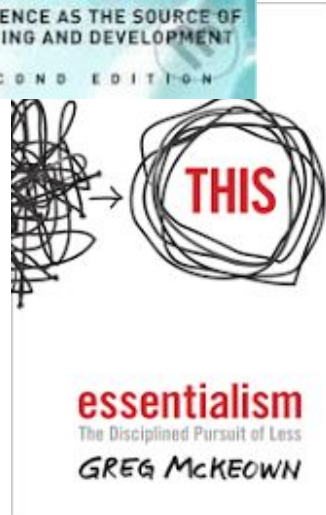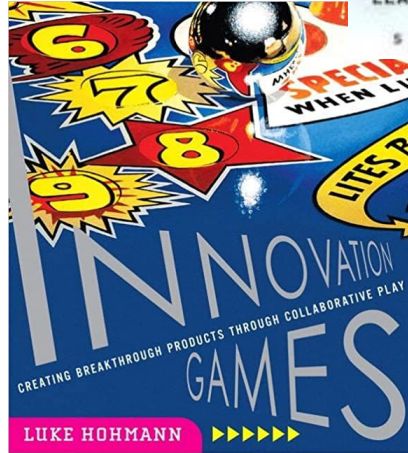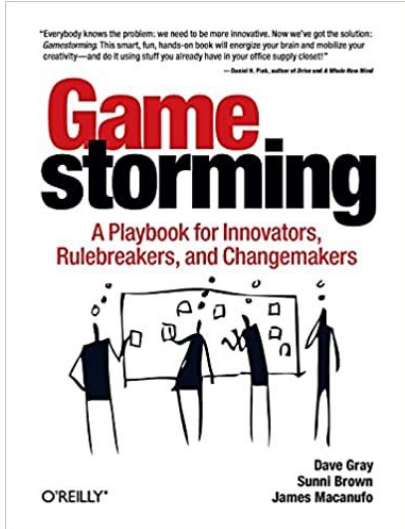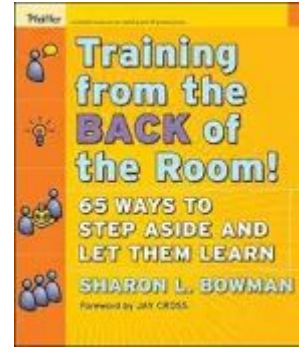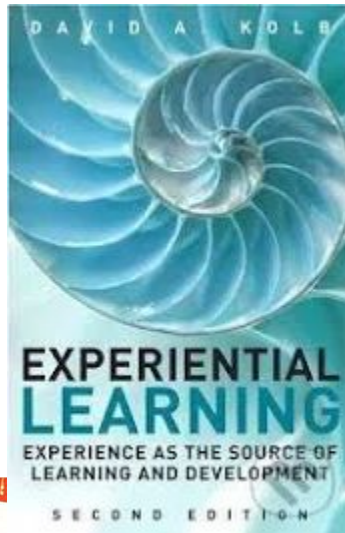
Your toolbox from now
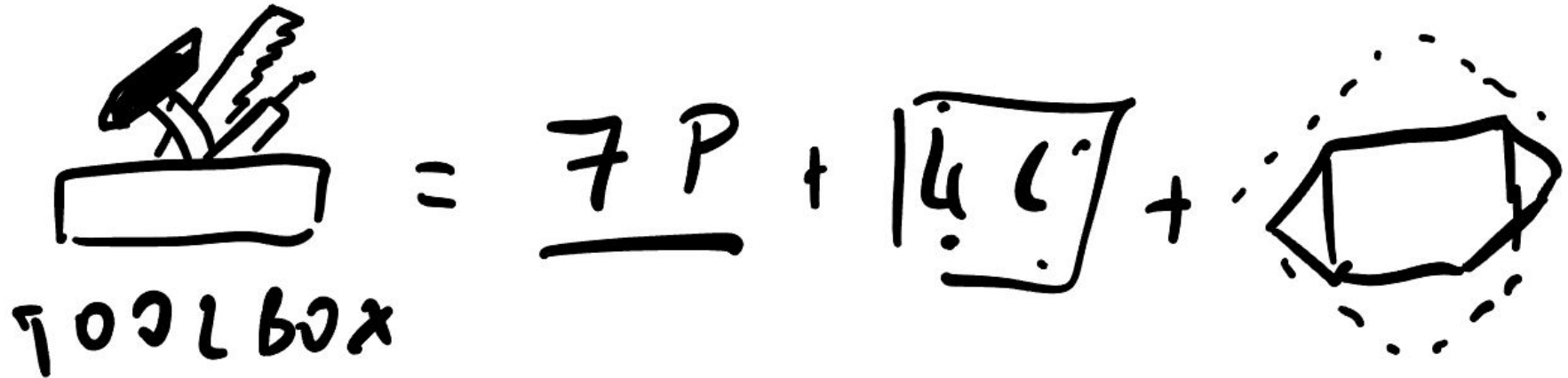
"Tell me and I forget. Teach me and I remember. Involve me and I learn" Benjamin Franklin
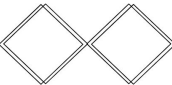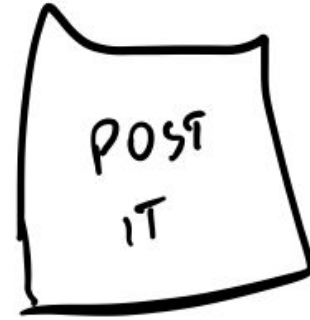
Inspirations

tastycupcakes.org

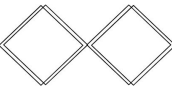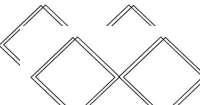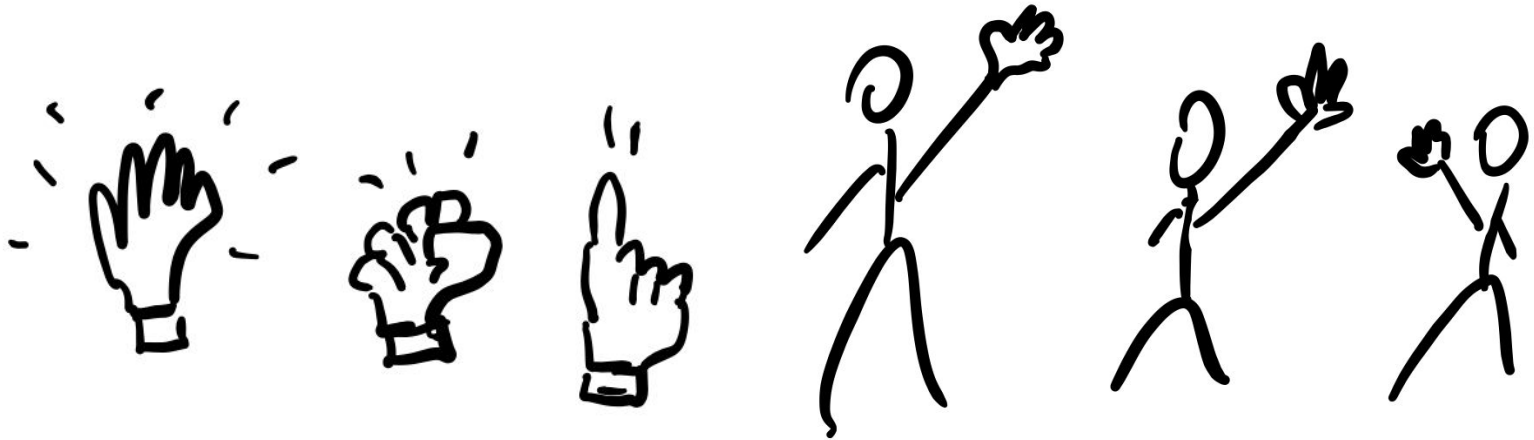# Sticky Reflection

What have you learnt?

What would you improve?

Crowdy feedback

Thanks!

Agile Prague

Play at your own risk!