

# OHJELMISTOKEHITTÄJIEN KILTA

**A business perspective on teaching**

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## A business perspective on teaching

1. Identify the need
2. Reverse engineer the solution
3. Discuss the role of companies in doing so

**NB:** Thought-provoking content! Conversation starter.

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AI specialist

Production manager  
Talent acquisition

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I'm interested in product development, AI and data-science, and digital technology. I have a PhD in quantitative sciences and am experienced in teaching for undergraduate and postgraduate degrees both in Brazil and Finland.

I am currently involved with professional software development and digital product design.

**Curious.**

Studying

Teaching

Supervising

Recruiting

Managing

# WHAT?

Expertise

Enable digitalization

Modern software experience

Business understanding

Problem solving

Value creation

# WHY?

Design thinking

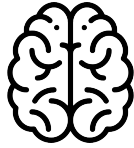
Multidisciplinarity

Processes and tools

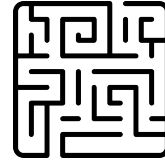
Tech stack

# HOW?

Analytical  
thinking and  
innovation

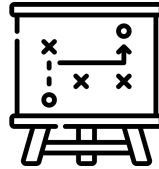


Critical thinking  
and analysis



Active learning  
and learning  
strategies

Creativity,  
originality and  
initiative



Resilience, stress  
tolerance and  
flexibility



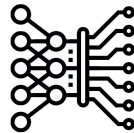
Complex  
problem solving

Technology  
design and  
**Programming**



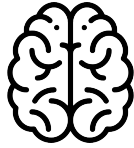
Leadership  
and social  
influence

Reasoning,  
systematization  
and ideation

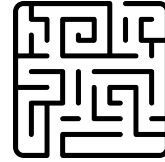


Technology use,  
monitoring  
and control

Analytical  
thinking and  
innovation

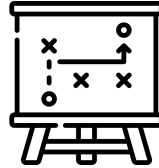


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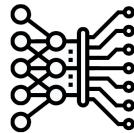
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Technology use,  
monitoring  
and control

As a recruiter,  
I search for:

**Curiosity**, clear  
**communication**,  
systematic and **systems**  
**thinking**, and basic  
**understanding of**  
**business** logic.

+

Technical and  
soft skills

How do we create modern learning environments to educate problem-solvers?

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That can identify and solve  
valuable real-world problems

Lifelong learner, growth mindset

Listening, writing, speaking,  
and coding

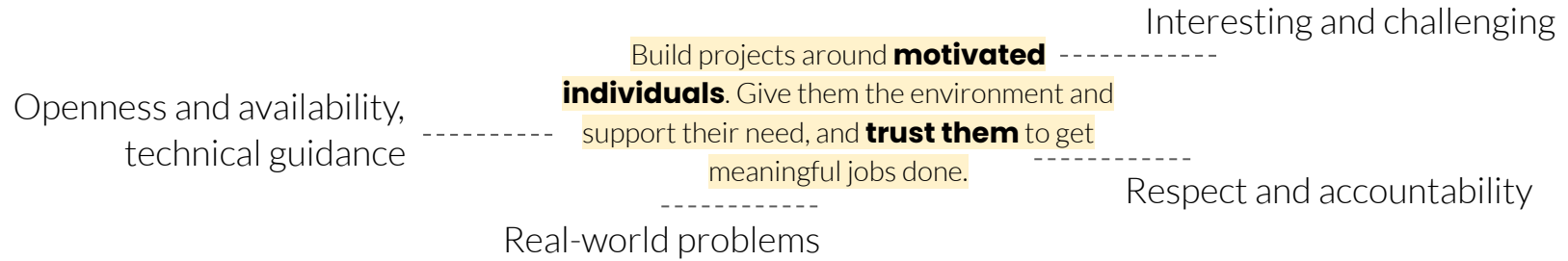
Value generation

**Curiosity**, clear  
**communication**,  
systematic and **systems**  
**thinking**, and basic  
**understanding of**  
**business** logic.

-----  
Complex intercorrelated systems

Build projects around **motivated individuals**. Give them the environment and support their need, and **trust them** to get meaningful jobs done.





- Let them do independent work
- But show paths, actively guide
- Challenge them to raise the bar
- But be realistic as in real life
- Make them explore uncomfortable places

## Interesting and challenging

Build projects around **motivated**

**individuals**. Give them the environment and support their need, and **trust them** to get meaningful jobs done.

## Openness and availability, technical guidance

- Domain-specific theory
- CS and programming theory
- Guide by example
- Support on what they are missing
- Boost their qualities
- Offer state-of-the-art paths

## Real-world problems

- Offer challenges as they appear in life.
- Present cases, not problems
- Let them identify the problem
- Let them create the solution
- Let them showcase the value

## Respect and accountability

- Trust that interested people commit to work
- Provide honest and transparent feedback
- Help them to organize work
- Stimulate them to act as self-organizing teams
- Ask questions, feelings and desires

The problem with the **YouTube** tutorial teacher.

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Feeling of usefulness

Sense of belonging

Commitment to do meaningful work

“This past week I think I can speak for everyone in my class that it was very educational, helpful and a fun course.”



The memory card game developed by group 3

“I am very pleased about this course and it didn’t leave me a feeling that it was not useful. I learned a lot of new things that surely will come handy in workplace. I wish you a good summer!”

“The course exceeded my expectations. I learned a lot more on the topic but also about group work, group dynamics and different ways to work on a group project. It was nice to know more of the work-related requirements of a job-applicant and tips how to get a job in the field of software engineering. This course as the last of the spring left me good impressions and a motivation to learn more during the summer and in the fall!”

“This was the last course of the year, and it was a great way to end the first year of studies. It gave more insight into the daily life of a software developer than all our other courses so far. I hope that these kinds of group project elements are implemented in our other programming courses.”

“I honestly think that this week was the best course of the first year. It was so informative, well-structured and those coding projects were challenging but easy enough to get it done in one week. If real professional software developing life is like this miniature project, I definitely going to like it and hopefully I will get job like this after the graduation.”



### Product Owner

Responsible for maximizing the value of the product.



### Scrum Master

A coach that facilitates and monitor the sprint process.



### Development team

The specialists doing the work.



### Sprint planning

At the start of a sprint (2-4h)



### Daily stand up

Once a day (15 minutes)



### Sprint review

At the end of a sprint (1-2h)



### Retrospective

At the end of a sprint (45m)



### Backlog refinement

Throughout the sprint



### Not a school

Not a place to teach the basics



### Small budget

i.e., little time to invest



### Profit Organization

Focus on being profitable



### Difficult to commit

Not everyone in an organization will take part

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