

**CS-C2130 & CS-C2140 & CS-E4910  
Software Project 1 & 2 & 3**

**Software Project and Quality Award Gala**

**3.5.2023**

# Agenda

- 16:15 Welcome and Summary of the course, Jari Vanhanen
- 16:35 Demos
  - Team 5 - Mafy
  - Team 7 - Beamex
  - Team 8 - Komu Homes
- 17:35 Announcing the Winner of the Quality Award, Niina Jones/Accenture
- 17:45 – 19:30 Project Gala

# Educational Goals:

## After this course you should

- **understand the common challenges** involved in sw development
- be able to **apply Scrum and suitable work practices and tools** in your projects
- be a **better programmer**
- have improved in many **academic skills** applicable anywhere

Use this course as an opportunity for learning! Think about your personal learning goals and make decisions (project topic, your responsibilities in the team etc.) that support them!

# Educational Goals:

## After this course you should

- understand the common challenges involved in sw development
  - you encountered and often successfully overcame many challenges

Software development is **not just coding**. Organisation and management can be equally important at times.

It's a pity that after the group is working well together, and the project is running smoothly, the course ends. In a software company, the group would presumably continue working together with **established practices**.

I'd say that the biggest event after the last PR was the peer testing session. It surprised me **how much you can benefit from other people outside of the team going through the software** for any spelling mistakes or weird behavior of the software.

# Educational Goals:

## After this course you should

- be able to **apply Scrum and suitable work practices and tools** in your projects
  - **good insights about work practices in the learning diaries**

*I have learned that **Scrum is a good framework** for software projects. Not only does the **project get split up into smaller, more manageable pieces** but also you are constantly **aware of how your team is doing and working**, and you get to **reflect on whether the teamwork could be improved**. This turned out to be important because my team's way of working definitely improved after each sprint.*

**Scrum dailies:** *I have personally become fond of the daily meetings (note. we did not have these every day) we had. These brief check-ins allowed us to **address any roadblocks or issues quickly**, ensuring that we maintain a steady pace and do not get stuck on any particular task for too long. Additionally, the dailies have **promoted a sense of accountability and camaraderie** among team members, fostering a more collaborative work environment.*

*I've found **retros** surprisingly helpful. I see how our way of working is improving and I credit that to the fact that **time is reserved to analyse and discuss what works and what doesn't**. Anytime I'm very frustrated with something, I make a mental note to mention it in the retro and just knowing it will be discussed makes it easier to continue and stay motivated.*

# Educational Goals:

## After this course you should

- be able to **apply Scrum and suitable work practices and tools** in your projects
  - **good insights about work practices in the learning diaries**

**Pull request reviews:** *I strongly believe that implementing a thorough code review process for all pull requests has significantly improved the quality of our codebase. I personally can become fairly blind to my own coding mistakes, so PR reviews have been a great place to **catch some of those bugs** and have **discussion why I chose to implement something the way I did**. PR reviews have also been a great tool to **share knowledge between team members** and learn important skills like code reading and reviewing.*

**Pair programming** has also proved to be a highly effective work method for our team.... Its only negative effect is that it requires the team members to organize the meetings for it or other group work. ... There are many positives, such as, **reduced procrastination, highly increased efficiency, and increased quality of code.**

**Scrum Masters are a great aid for the team** on this course. With two Scrum Masters, in moments of despair - if I may say so - the development team has received much needed help from both of them.

# Educational Goals:

## After this course you should

- be a **better programmer**
  - **you studied new technologies and managed to develop something real**
  - **increased self confidence**

*It might be self-explanatory but the working on the project has really highlighted the importance of actually writing code. I've **improved my coding skills so much during the project due to the simple fact that I'm writing a lot more code than I used to.***

# Educational Goals:

## After this course you should

- have improved in many **academic skills** applicable anywhere
  - **social skills, teamwork, searching for information, note-taking, decision making, presentation skills, time management, independent learning, ...**

*The **team has gotten to know each other** better, which in turn has **strengthened our teamwork**. Working with the client has gotten easier as we have **gathered confidence as a team** and gotten to know the people working for the client better and better.*

*I think a good indicator of how much I've learned from this project is that now looking back at everything we've done, I have my fair share of topics where I think to myself: "**Next time I would want to try to do that differently**".*

*Encountering problems teaches you more than getting an easy ride.*

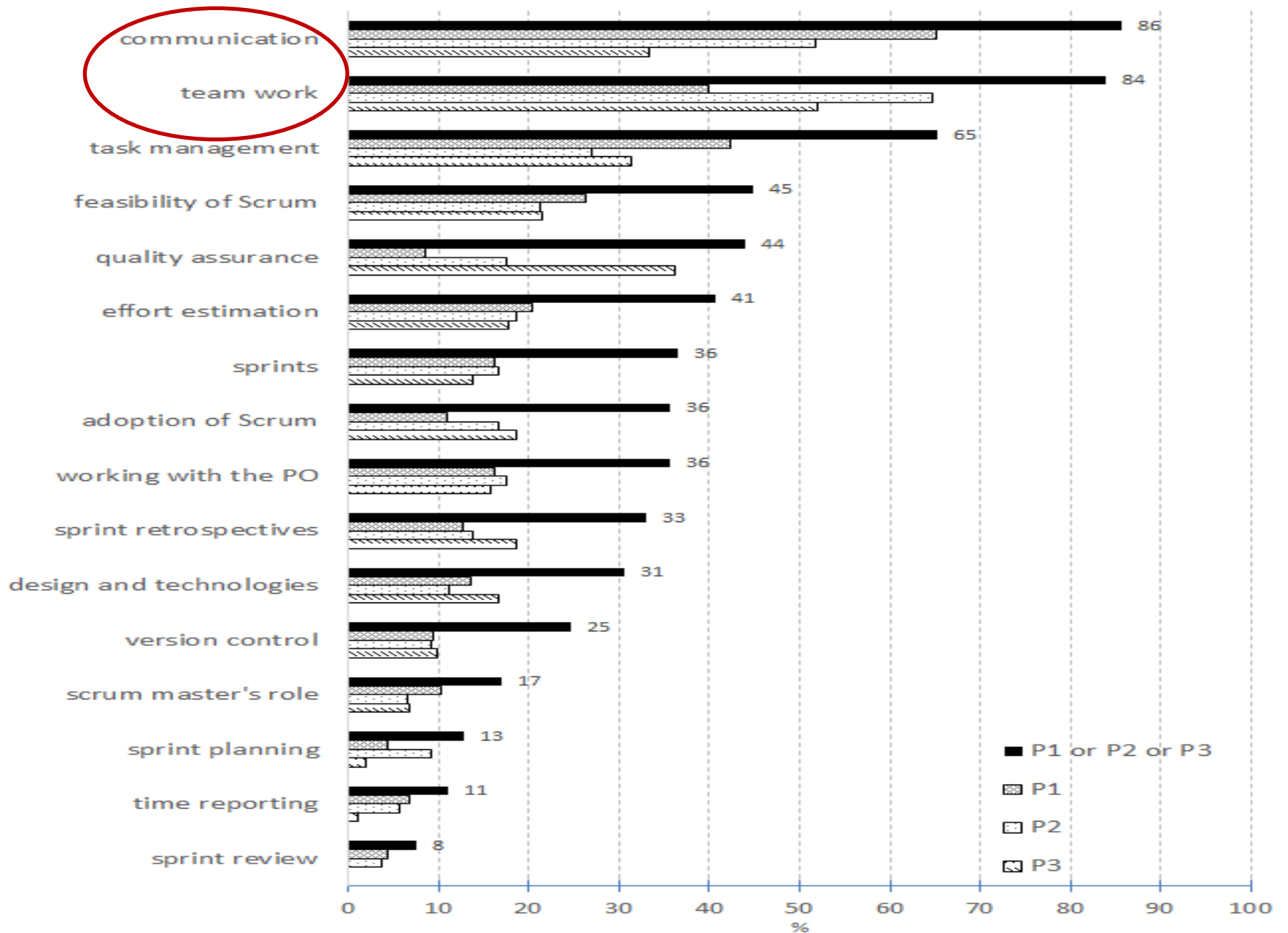


# Analysis of old learning diaries

- 328 diary entries from 118 students
  - written just before each project review (P1, P2, P3)
- Content of each entry
  - at least three **most educational observations** related to **Scrum or other work methods**
- Data analysis method
  - identifying the topics (and their subtopics) discussed in the entries
    - an educational observation could be related to more than one topic
  - summarizing the observations for each subtopic
  - calculating the frequencies of the topics

*There are certain common topics learned by most of the students even though we know that there are large differences on what is learned among teams or even among the students in the same team.*

## Percentages of students who mentioned the topics



# Course Evaluation

Component	When	Client	Coach	TOTAL (max)
Work practices	After each project review	-	0-5p*	15p
Project progress	After each project review	0-5p*		15p
Final results	After the last project review	0-15p	0-15p	30p
EES participation	After each EES	-	0-2p	2p
TOTAL (max)				62p

# Grades

- You worked hard and spend lots of effort for the project
- You learned a lot
- The project results were excellent this year

*In the end of the project, the team was working as well as / better than typical teams from IT consulting companies.*

*-mentioned by a couple of different Product Owners*

# Grades

1-Droppe, **5**

2-Conveqs, **5**

3-Accountor, **4**

4-Bytecrafft, **5**

5-Mafy, **5**

6-Sievo, **5**

7-Beamex, **5**

8-Komu Homes, **5**

9-Aalto University, **5**

10-CollectiveCrunch, **5**

11-Remedy, **5**

12-Mafy, **5**

13-Ahola, **5**

14-Polycon, **5**

15-Savox, **5**

16-VR Group, **5**

# Course Feedback

- Please, fill the course feedback form
  - includes also some additional questions
    - coach, client, course events
  - invitation link sent from “course feedback” today
- Let us know how we could
  - improve the course arrangements
  - increase the educational value even further

Remember also to ask and give feedback in your team!

# Do you want to come back to the course?

- **Product Owner**
  - Any company can propose a topic
  - Contact Jari and/or see MyCourses pages in August
- **Scrum Master -> Coach**
  - We need more coaches
    - Discuss with Jari immediately (or by the end of August)
- **Developer -> Scrum Master**
  - Choose the Software and Service Engineering (SSE) major
    - Responsible professor: Casper Lassenius

# Objectives of the Software and Service Engineering (SSE) major

- Students learn how to
  - Design
  - Develop
  - Manage

... digital products and services that

  - Create value
  - Satisfy user needs and wants

... within modern organizations





Aalto University  
School of Science

# Software and Service Engineering: Tracks

Software  
engineering

Service design  
and engineering

Enterprise systems



Casper  
Lassenius



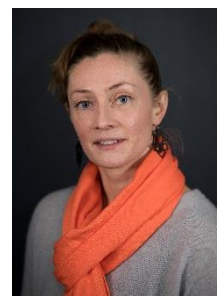
Fabian  
Fagerholm



Marjo  
Kauppinen



Marko  
Nieminen



Johanna  
Viitanen



Kari  
Hiekkanen

# Software Engineering Track



Dr. Sari Kujala



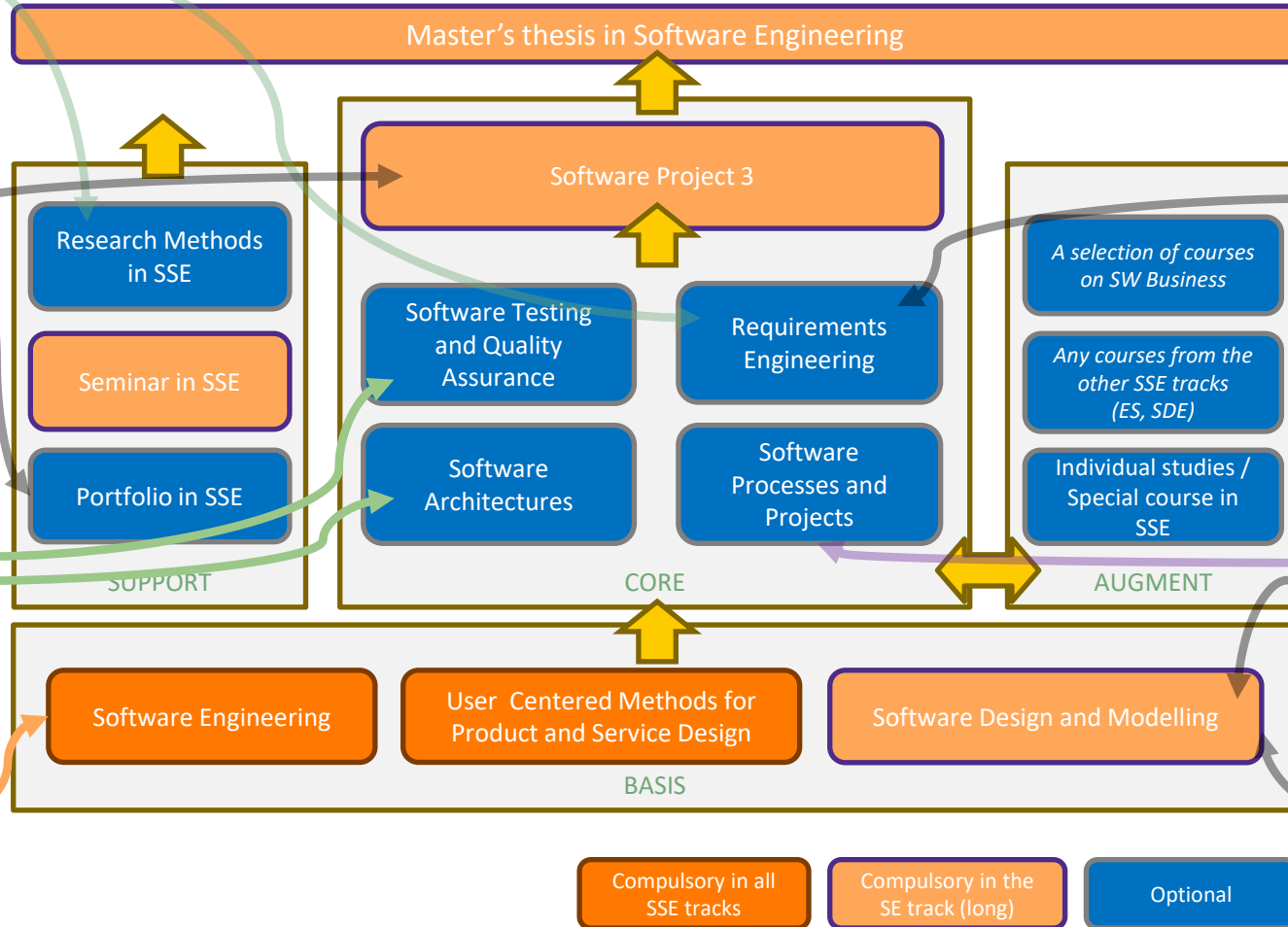
Dr. Jari Vanhanen



Prof. Fabian Fagerholm



Prof. Casper Lassenius



Prof. Marjo Kauppinen



Dr. Maria Paasivaara



Dr. Lassi Haaranen

# Thank you for everyone!

- Students
- Product Owners and other people from the clients
- Coaches
  - Tom Railio, Kari Suhonen, Felipe Gonzalez Carceller, Nikolai Denissov, Hansen Feng, Jhosimar Aguacía Fiscó, Ata ul Jamil, Konsta Kantola, Tero Mäkinen, Henry Tran
- Agile42 Certified Scrum Master Training
  - Lasse Ziegler
- Scrum LEGO simulations
  - Towo Toivola, Ferrix Hovi, Ville Heikkilä, Nikolai Denissov (Product Owners)
  - Joanna Kahila, Niklas Lindroos, Hanna Kalevo (Coaches)
- Quality Award & Gala & Design Thinking EES & Tech. Architecture EES
  - Accenture: Jarno Hilvenius, Niina Jones, Tomas Lindberg, Minna Seppälä

# Demos

- Team 5 – Mafy
  - Matriculation Exam Score Calculator
- Team 7 – Beamex
  - Bringing machine vision to everyday use in process industry
- Team 8 – Komu Homes
  - Reservation system

# Project Gala

- ~17:45 – 18:15
  - everyone can eat something
- ~18:15 – 19:15
  - 1-2 team members should be present at their stand
    - let the other students try your software, and tell them about your project
  - the rest of the team can visit the other stands
    - ask questions and try to learn from the experiences of the other teams
- 19:30 End of Gala
  - You can take your posters with you!

