

ELEC-E9900 Networked Partnering and Product Innovation - NEPPI

Introduction

Salu Ylirisku

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Recording

- Personal intros will be cut off

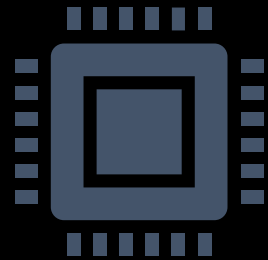
Salu Ylirisku

- Doctor of Arts (industrial design, *concept design*)
- Master of Science (computer science, *interaction design*)
- Over 20 years of user-centered concept design experience
- Since 2017 in Aalto ELEC

Learning Goals

1. To **know Internet of Things (IoT)** from a pragmatic perspective
2. To **design technical concepts** in a user-centred manner
3. To **define key design requirements** for technical applications

Schedule – Two parts



Part I:

Building a complex IoT machine with given design requirements

Event: Show on 4th of November in DeFa / Studio
(13:00-14:00)



Part II:

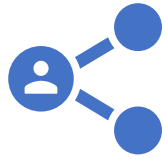
Defining a design concept with the key design requirements for an IoT application

Event: NEXPO on 2nd of December in TUAS
(15:00-18:00)

The daily schedules

- Mondays 09:15-12 – Lectures online
- Wednesdays 09:15-16 – Hands-on workshops
- Fridays 09:15-16 – Team presentations/dialogue & events

Absences



The team is expected to participate in each hands-on session throughout the course



If you are absent, please,
1) inform Salu
2) inform your team



Absences are compensated by reading & writing assignments

Deliverables

- Weekly deliverables
 - W1: IoT Machine – Challenge 1
 - W2: IoT Machine – Challenge 2
 - W3: Three initial design concepts
 - W4: Design concept
 - W5: Key design requirements
 - W6: Final IoT Concept & NEXPO
 - W7: Final deliverable (Concept document) & exam

Evaluation criteria

1. HexMachine, 20%
 2. NEXPO, 20%
 3. IoT Product Concept Document, 20%
 4. Team Process Contribution, 20%
 5. Exam, 20%
- If you are absent, reading assignments will be assigned to you – and you need to catch up with your team

HexMachine

- Active participation, 100%
- Reading & writing for absences (400-600 words / missed day)

NEXPO

- Product Concept / clarity/perceived value/attractiveness
- IoT Service / illustration of system architecture
- Physical Product / illustration/physical mock-up
- Product UX / demo/video
- Stand experience / presentation/attractiveness/feel

Evaluated collaboratively with NEXPO visitors + You & Me

IoT Product Concept Document

- Concept description
- Key design requirements /w concrete suggestions
- Key types of partners /w concrete suggestions
- Key sources of revenue /w concrete suggestions
- Estimated main monthly running costs & production costs (per thing)

Team Process Contribution

- Peer evaluation
 - 0.0 – 1.0
- NEXPO team will get two evaluations
 - Own team
 - NEXPO team

Be kind! Only if there are issues lower your score.

Exam Grading

- Online exam, 9.12 10-12
- 5 questions, 1pt / each

The Exam is about Knowledge

- IoT, Clouds, Apps, Devices, Computing, Connectivity
 - Web, UX, Trends, Prototyping Tools
- what, why, how, and why bother as a design manager

Enrolment and survey

- Are you enrolled to the NEPPI course? If not, please, enrol asap. And if you cannot, please, inform me via e-mail.
 - The capacity of the course is 50 students.
 - Priority for IDBM students.
- And, if you have not yet filled the pre-questionnaire – please, send me (salu.ylirisku@aalto.fi) a request to submit the questionnaire to you again.