DH2417 Interaction Design for Collaboration 7.5 credits

Interaktionsdesign för samarbete

This is a translation of the Swedish, legally binding, course syllabus.

Establishment

Course syllabus for DH2417 valid from Autumn 2017

Grading scale

P, F

Education cycle

Second cycle

Main field of study

Computer Science and Engineering

Specific prerequisites

Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

Intended learning outcomes

On completion of the course, the students should be able to:

- account for different social aspects that can influence cooperation between people
- describe and explain different concepts that are central in the area of CSCW/CSCL
- describe the difference between various types of groupware and how they influence cooperation and interaction between people
- based on theories in the area analyse how different groupware influence the users' possibilities to cooperation and their work pattern
- based on the knowledge of an organisation needs, justify choice of appropriate types of groupware as well as suggest a design of new support for cooperation

Course contents

An advanced course in human computer interaction that treats the field Computer Supported Cooperative Work (CSCW)/Computer Supported Collaborative Learning (CSCL). A summarising issue is, how cooperation in different forms can be supported by technology and how different technical aids influence the cooperation. The field is highlighted from technical, sociological as well as psychological and cultural perspective.

The course contains a laboratory part in which includes a number of smaller assignments that are carried out collaboratively during the first part of the course, a project assignment that is carried out in small groups in parallel during the time of the whole course as well as an individual report.

Examples on what is included in the theoretical part of the course:

- "groupware" (system that supports cooperation e g e-mail or chat-system) and different forms of its applications
- technology support for the process around collaborative writing
- different technical solutions for cooperation in learning environments
- how we are influenced by the medium we communicate via, e g differences between communication face to face, text-based communication and video based communication
- how cooperation can take form in computer games and in virtual reality(VR)
- different perspectives (sociological and psychological) to understand cooperation and communication
- workplace studies and how they exemplify cooperation

The project work consists of an empirical study of an existing collaborative situation, and an analysis of how technical aid is used today and how it can be designed to better support the situation. A tentative design is prepared by means of active involvement of end users. The project work is presented in the form of an interactive prototype with supplementary video.

Course literature

Offprint describing theory, research and applications in the area are made available via the course web page.

Examination

- INL1 - Hand-in Assignment, 2.0 credits, grading scale: P, F
- PRO1 - Project, 4.0 credits, grading scale: P, F
- LAB1 - Labs, 1.5 credits, grading scale: P, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

If the course is discontinued, students may request to be examined during the following two academic years.

Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.