DH2641 Interaction Programming 6.0 credits

Interaktionsprogrammering

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

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

Establishment

Course syllabus for DH2641 valid from Autumn 2011

Grading scale

A, B, C, D, E, FX, F

Education cycle

Second cycle

Main field of study

Computer Science and Engineering

Specific prerequisites

Single course students: 90 university credits including 45 university credits in Mathematics or Information Technology. Swedish B, or equivalent and English B, or equivalent.

Language of instruction

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

Intended learning outcomes

Students will:

- get familiar with techniques, technologies and processes allowing them to prototype,

- develop and improve digital interactive systems based on various user interface technology platforms.

For that, the students will:

- be able to program digital interactive systems based on various technology platforms and approaches to interaction

- be able to prototype digital interactive systems using specific tools for running prototypes

- be able to judge usability of and improve existing interaction programming

- be able to choose an user interface technology platform that is most suitable for a new system

- work together with other students to design, prototype, and implement interactive systems.

Course contents

Preliminary course content:

- elements of software design and development processes

- recap of principles of object oriented programming

- general principles of interaction programming

- Graphical User Interface interaction programming

- interaction-intensive internet programming (Web 2.0, Rich Internet Applications)

- mobile interaction programming

- advanced frameworks for programming interaction (e.g. Eclipse RCP)

- programming techniques for running interactive prototypes

- advanced interaction (augmented reality, multitouch surfaces, sensors and actuators).

Course literature

To be announced at least 4 weeks before course start at course web page.

Examination

- LAB1 - Laboratory Assignments, 2.0 credits, grading scale: P, F
- PRO1 - Project, 4.0 credits, grading scale: A, B, C, D, E, FX, 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.

In this course all the regulations of the code of honor at the School of Computer science and Communication apply, see: http://www.kth.se/csc/student/hederskodex/1.17237?l=en_UK.

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.