DH2642 Interaction Programming and the Dynamic Web 7.5 credits

Interaktionsprogrammering och dynamiska webben

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

The official course syllabus is valid from the autumn semester 2021 in accordance with Head of School decision: J-2021-0878.Decision date: 15/04/2021

Grading scale

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

Education cycle

Second cycle

Main field of study

Computer Science and Engineering

Specific prerequisites

Completed course in programming technique equivalent to DD1337, DD1318 or ID1018.

Language of instruction

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

Intended learning outcomes

Having passed the course, the student will be able to

- choose appropriate technical platforms or JavaScript frameworks to create useful data persistent interactive web applications or native applications
- program interactive web applications according to Model-View-Controller or related architectures
- program systems that read data from, and send data to, web interfaces with good use qualities
- assess and improve the usability of existing interactive web applications
- cooperate with others to implement interactive web applications.

Course contents

JavaScript for interaction programming, callbacks, synchronous and asynchronous code, functional programming.
Web development interfaces (API): REST, JSON, AJAX, Fetch, Promises.
Local data: cookies, local storage.
User interfaces, appearance: HTML, CSS, DOM API, other tree based frameworks for user interfaces (e g Android).
User interfaces, interaction: events, event levels, event propagation, event management.
User interfaces, architectures: Model-View-Controller.
User interfaces, frameworks: React, Angular, Vue.

Examination

- LAB1 - Lab, 3.0 credits, grading scale: P, F
- PRO1 - Project, 4.5 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.

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.