



DM2518 Mobile Development with Web Technologies 7.5 credits

Mobilutveckling med webbt teknologier

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-2020-2937, K .S: 3.2.2 .Decision date: 15/04/2021

Decision to discontinue this course

The course is discontinued at the expiration of spring term 2023 in accordance with Head of School decision:: J-2020-2937, 3.2.2.Decision date: 15/04/2021The course was given the last time spring term 2020. Final opportunity for examination in the course will be given spring term 2023.The course is examined as usual through LAB1 7.5 credits that consists of written assignments that may be done in period 4. A Canvas room for the discontinuation period is created there the written assignments are made available and submitted.

Grading scale

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

Education cycle

Second cycle

Main field of study

Computer Science and Engineering, Information Technology, Information and Communication Technology

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 student should be able to

- develop mobile applications based on W3Cs standards and recommendations
- adapt digital formatted content to the possibilities and shortcomings of the mobile channel
- use web programming for both mobile web applications and native applications that can be published to business portals, so-called app stores
- apply knowledge of the mobile platform API and how the hardware can be exposed and made accessible for applications
- give an account of and apply both server and client technologies to build basic mobile services for information retrieval, interaction and use in everyday life
- give an account of technologies that allow application development for several platforms and operating systems using a single code base
- formulate, plan and carry out a larger student-defined programming assignment
- find solutions to programming problems on the internet

in order to

- be able to make independent and critical assessments
- be able to independently distinguish, formulate and solve problems
- be able to search for and evaluate knowledge
- be able to follow the knowledge development in mobile software development
- be able to participate in and lead development of mobile utility or entertainment applications based on web technologies.

Course contents

The course is given thoroughly through mobile consumption of html5 – that is HTML, CSS and JavaScript and more at a general level applications of a number of related technologies, such as PHP and Scalable Vector Graphics SVG and SQL. Since emphasis is placed around how web technologies can be used that to create whole or parts of a mobile application, the

course also treats how html5 can interact with other programming languages mainly C/C++ and how calls may be done between a web view and underlying program layers.

Half the course consists of lectures and labs in the above topics. Certain topics are expansions and are studied individually for those that want to have higher grades. The other half consists of a project.

The course is lab and programming intensive.

Examination

- LAB1 - Laboratory Assignments, 7.5 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.

Other requirements for final grade

In this course, the code of honor of the school is applied, see: <http://www.kth.se/en/csc/utbildning/hederskodex>

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.