HI1017 Programming of Mobile Services with J2ME 7.5 credits

Programmering av mobila tjänster med J2ME

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

Establishment

Course syllabus for HI1017 valid from Autumn 2007

Grading scale

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

Education cycle

First cycle

Main field of study

Information Technology, Technology

Specific prerequisites

Knowledge in object oriented programming and distributed systems

Language of instruction

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

Intended learning outcomes

The course aims at giving knowledge about programming of mobile services with J2ME and providers SDK.

The course consists of two parts, a theoretical part and an applied part:
- In the theoretical part knowledge is given about what possibilities exist regarding development of future mobile services.
In the applied part applications are developed using providers' SDK for J2ME.

After completing the course the participant should:

- Be able to configure a proper environment for development
- Be able to explain the differences between J2ME and J2SE
- Be able to write a MIDlet application and describe its lifecycle
- Be able to use forms and canvas in order to present data
- Be able to use Bluetooth or other network technology in order to communicate
- Be able to use and store persistent data and PIM
- Be able to understand the possibilities and limitations when developing applications
- Be able to explain the construction and the usefulness of XML based protocols like WAP, MMS, and RSS

For higher grades in the course the participant should:

- Be able to reflect over the future development of Java Micro Edition
- Be able to use game canvas in an optimized way
- Be able to review and evaluate mobile services regarding performance and security

Course contents

- History
- Mobile networks
- Mobile plattforms
- Programming J2ME
- GUI programming in J2ME
- Development tools
- XML in mobile systems
- WAP
- The future of and the research in mobile systems
- Security

Course literature

Yuan: Enterprise J2ME, Developing mobile Java applications, Addison Wesley, ISBN: 0-13-140530-6

Examination

- LAB2 - Laboratory Work, 4.5 credits, grading scale: A, B, C, D, E, FX, F
- LAB1 - Laboratory Work, 3.0 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.

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

Other requirements for final grade

Passed lab assignments (LAB1; 3 cr.), grades A-F.
Passed lab assignments (LAB2; 4.5 cr.), grades A-F.
Final grades for the course A-F.

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.