Linnæus University



Course syllabus

Faculty of Technology

Department of Computer Science and Media Technology

1DV527 Webben som applikationsplattform, 7.5 credits The Web as an Application Platform

Main field of study Computer Science

Subject Group Informatics/Computer and Systems Sciences

Level of classification First Level

Progression G1F

Date of Ratification Approved by Faculty of Technology 2016-05-30 The course syllabus is valid from spring semester 2017

Prerequisites

1DV022 Client-based Web Programming, 7.5 credits and 1DV023 Server-based Web programming, 7.5 credits or equivalent

Objectives

After completing the course the student should be able to:

- Describe the Web's growth and development, and significance / impact on today's society (1)
- Describe and discuss current research in the subject area of Web Science (2)
- Create and use web api:s supporting the principles of REST (restful architecture) (3)
- Describe and discuss the term Web of Things (4)
- Create and describe applications supported by web standards and integrate these against IoT (Internet of Things) (5)

Content

The purpose of the course is that students will develop basic understanding for the web as an application plattform and its influence on society

- Current problems in Web Science
- Development of web api:s through the principle of the REST (RESTful architecture)
- Web of things, its importance and opportunities
- Web standards as the basis for application development on IoT (Internet of Things)

Type of Instruction

Teching is in the form of lectures with different forms of learning activities and group discussions.

Theory combined with practical applications in problem solving oriented towards web standards.

The course can be studied at campus or remotely. The studies requires own access to a computer webcam and internet connection.

Examination

The course is assessed with the grades A, B, C, D, E, Fx or F.

The grade A constitutes the highest grade on the scale and the remaining grades follow in descending order where the grade E is the lowest grade on the scale that will result in a pass. The grade F means that the student's performance is assessed as fail.

Test 1 (2.5 credits): Goal 1-2 is examined through a written assignment and peerreview. The grades A-F is applied.

Test 2 (3 credits): Goal 3-5 is examined through a programming problem. The grades Fail and Pass is applied.

Test 3 (2 credits): Goal 1-5 is examined through oral examination. The grades A-F is applied.

The grades A-F is applied in the final grade.

Course Evaluation

During the course or in close connection to the course, a course evaluation is to be carried out. The result and analysis of the course evaluation are to be communicated to the students who have taken the course and to the students who are to participate in the course the next time it is offered. The course evaluation is carried out anonymously. The compiled report will be filed at the Faculty.

Other

Rating Criteria for the A-F scale is communicated to students through a special document.

The teaching is mainly in Swedish, but English components are recurring in the form of, for example, English literature. Course learning resources are open through the course's public website.

Required Reading and Additional Study Material Recommended learning resources

- Dominique D. Guinard and Vlad M. Trifa, Building the Web of Things, Manning publications, latest edition, pages 375
 Web based resources specified on the web site of the course