## Master course (grp. 2): The Web of Data and XML (XML)

## Om kurset

uddannelse Computer Science / Informatik

sted 43.2-29

Kursustype Kandidat 1. modul

Undervisningssprog English Kursus starter 04-02-2014 Kursus slutter 22-04-2014

## Contents

- Data models for web data.
- Essentials of XML (Extensible Markup Language)
- XML dialicts XHTML, SOAP,
- Semantic Web concepts
- RDF (Resource description framework)
- · Ontologies
- Link to classical databases
- XML-enabled and native-XML databases
- Survey of typical applications
- Cases study

Goal

mål

Indhold

Computer applications increasingly have access to online data and exchange data with other online applications. Huge amounts of data are now stored in "the Cloud". This "web of data" includes data mined from online sources such as social websites. The first goal of this course is to introduce the essentials necessary for designing systems and exploiting the possibilities opened up for sharing data and building information systems and services around the web of data. The second goal is to introduce concepts that turn "data" into "knowledge"; how to attach semantics to data so that applications can process it more meaningfully and intelligently.

litteratur Collection of articles.

Kursusdage Tuesdays at 1.00 - 5.15 p.m. in the period from 4 February - 22 April 2014.

Undervisningsform Lectures and exercises.

20 min. individual oral exam based on a written assignment incl. grading.

Eksamensform

External examiner and 7 step scale.

Eksamenstidspunkt Wednesday 4 June 2014.

20 min. individual oral exam based on a written assignment incl. grading.

Reeksamensform

External examiner and 7 step scale.

reeksamenstidspunkt Before end of August 2014.

The student taking this course will

formål

- be familiar with XML and associated languages such as DTD and Query;
- know how to use XML for modelling data, storing and retrieving it in databases;
- know how online data can be exploited by applications;
- understand the basic concepts of the Semantic Web;
- know how to store, query and retrieve XML data in conventional databases.

Aktivitetsansvarlig John Patrick Gallagher (jpg@ruc.dk)
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forelæsning

STADS belastning: 7.5 ECTS aktivitetskode: U24645 /

stamdata U24646

prøveform: mundtlig bedømmelse: 7-trinsskala censur: Ekstern censur