Master course (grp. 2): Human-computer interaction (HCI)

Om kurset

uddannelse	Informatik
modul	The course will be in English / unless all participants are Danish speakers.
forkortelse	hci
sted	43.2-29
Kursustype	forelæsning
Undervisningssprog	English
Kursus starter	04-09-2013
Kursus slutter	20-11-2013
ECTS	7,5
Eksamensform	20 min. individual oral exam based on a written assignment
Eksamenstidspunkt	January 2014

Evaluering

The excellent performance: The student demonstrates

1. solid knowledge, insight, and overview of the subject area;
2. solid description, competent application, and critical reflection with respect to his/her command and application of theories and methods; and
3. certainty, conceptual accuracy, and independent and clear organization with respect to structuring and communication.

The good performance: The student demonstrates

1. knowledge of and insight into the subject area;
2. clear description and relatively competent application with respect to her/his command and application of theories and methods; and
3. clear presentation and organization with respect to structuring and communication.

The performance meeting the minimum requirements: The student demonstrates

1. sufficient however limited knowledge of the subject area;
2. a sufficient account of his/her command and application of theories and methods; and
3. a sufficient, but uncertain presentation with regard to structuring and communication.

forudsætninger	Recommended prerequisites: An introductory course in the design of interactive systems - supplemented by basic programming skills, for example acquired by having completed a programming course and a project involving programming.

The course covers the following topics:

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<tr><td>Indhold</td><td>

- User-centred design, which involves principles for and barriers to a managed, iterative, user-driven process alternating between design and evaluation * Visual structure, which involves the use of grouping, hierarchy, relationship, and balance in the layout of screens
- Information visualization, which involves the use of overviews, interaction, and other techniques in the presentation of information
- The concept of usability, which involves the three dimensions effectiveness, efficiency, and satisfaction
- Prototypes, which involve design sketches, prototypes for use laboratory-like settings, and pilot systems for evaluation under realistic conditions
- Empirical usability evaluation, which involves the thinking-aloud method and other ways of eliciting user feedback about a design prototype
- Usability inspection, which involves usability evaluations performed analytically by usability specialists, includes cognitive walkthroughs and the keystroke-level model
- Usage aspects of selected user activities, which involve information seeking and retrieval and computer-supported collaboration

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Changes may accour

Kursusdage	Wednesdays at 1.00 - 5.15 p.m. in the period from September 4. - November 20. 2013

kursusform	Lectures, seminars, and weekly assignments

mål	User needs and requirements must be understood in the context of users' tasks and the technological possibilities. Consequently, needs and requirements are discovered, elaborated, and revised during software development processes through two types of activity: design and evaluation. The development of innovative, useful, usable, and pleasing IT applications requires competence in a set of design and evaluation methods, and knowledge of conceptual models and design principles enabling informed use of these methods. The aim of the HCI course is to provide participants with this competence and knowledge.

- With respect to design, course participants learn to use and theorize about techniques and concepts that are central to the visualization of information and thereby to the design of visual interfaces. This includes the use of prototypes and design sketches to illustrate and drive a process of discovering and communicating design ideas and user needs among designers and user representatives.
- With respect to evaluation, course participants learn the theories and frameworks underlying selected usability evaluation methods, and they learn to choose among, apply, and tailor these methods to concrete situations in order to measure |

effects of system use, determine whether design goals are achieved, and enable new insights about user experiences and design opportunities to emerge.

The common framework for the course elements about design and evaluation is the concept of usability. Participants will acquire an understanding of the three dimensions of usability – effectiveness, efficiency, and satisfaction – and how they affect the fit between, on the one hand, specified design and evaluation activities and, on the other hand, characteristics of the system, task, user, and cultural setting. Such an understanding is essential to the creation of visions of user experiences that can drive the design of innovative IT applications. Mastery of the course content will enable participants to design visual prototypes, evaluate their impact on users, and contribute to software process improvement.

målgruppe	The course is intended for all students with an interest in user-centred systems development. It is mandatory for Informatics students at their first candidate module.
Materialer	Will be announced later
Vurdering	Will be announced later
Aktivitetsansvarlig	Morten Hertzum (mhz@ruc.dk)
Kursussekretær	Heidi Lundquist (heilu@ruc.dk)
Underviser	Morten Hertzum (mhz@ruc.dk)

STADS stamdata

kandidat 1. modul

aktivitetskode : U23736

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