HCI DESIGN & EVALUATION

Course Manual 2021 - 2022

Module ID: 202001031
Bachelor Technical Computer Science / Business & IT
November 2021

UNIVERSITY OF TWENTE.

HCI Design & Evaluation
Module 6

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Test Schedule:
Test 1 (week 5 – Dec 17) – Location: TBD
Test 2 (week 8 – Jan 21) – Location: TBD
Oral Reflection (Project) week 9, week 10) – Location: TBD
Resit (week 10 – Feb 02) – Location: TBD

Assessment Plan (Grading):
Refer to Module manual
HCI Test: Test 1: 50%, Test 2: 50%, no minimum grade for each part.
HCI Project grades are determined by the instruction team.

Course Objectives:
The Human Computer Interaction Design component of Module 6 for TCS/BIT students focuses on the process of designing technology solutions for specific users and specific task domains using a user-centered design (UCD) process. Topics include discovery, design, research methods, and fields of human-computer interaction. You will learn about techniques of designing, evaluating and prototyping user interfaces and interaction, then you will apply those techniques to your own group project. The topic of group projects will be Intelligent Assistants. You will design a prototype of an intelligent assistant for your own target user group and using the most promising technologies. Project work includes a proposal, discovery work, prototyping, preliminary user evaluation and communication of project ideas and results.

Resits: Resits have the option to participate in peer reviewing and user testing in lieu of participating in the HCI Project. Peer reviews are written on the all tutorial assignments, except the final report.
Participating in user test happens in week 8 (see table)

Project: The HCI Project is a group project. The size is 5 students. Each group will do their project on a single topic. Each group will identify problems, present discovery, design an interactive system, prototype it, test it with users and present final written and oral reports.

Tutorials: Tutorials have: 1) (project) exercises; 2) (project) work time; 3) project feedback time.

Week	Lecture *(Location in Rooster)*	on	Tutorial	Deadlines	Readings
1	Introduction HCI Course overview, topic and project	15.11	Ideation activity * Literature * Brainstorm * top 3 ideas	Proposal report (Fri 19-11)	Klemmer, Lecture 1. Available: YouTube Preece, Chapter 2 Link Lazar, Chapter 1 Link
2	Concepts, Ideation, Value Sensitive Design	22.11	Concept and Ideation * Scenario's, persona's, Values * Final #1 top idea * Video shotlist of above	Concept video, persona and scenario report (Fri 26-11)	Scenario-Based Design - Mary Beth LINK Value Sensitive Design and Information Systems - Batya Friedman LINK CHI - Guide to a Successful Video Submission
3	User confrontation	29.11	User confrontation * Interview script * Interview with peer groups * Interview results and conclusions	Interview report (Fri 03-12)	Lazar, Chapter 5 Surveys Link Lazar, Chapter 8 Interviews Link Lazar, Chapter 11 Qualitative Data Link
4	Lo-fi prototyping	06.12	Prototyping part I * (digital) prototyping * Setup user evaluation	-	Preece, Chapter 12 Link Klemmer, Lecture 2, The Power of Prototyping Link Lazar, Chapter 15 Link Lazar, Chapter 16 Link
5	Hi-Fi Prototyping	13.12	Prototyping part II * (digital) prototyping * User evaluation * Conclusions and results	Lo-Fi prototype report (Fri 17-12) **Exam part I (Fri 17-12)**	Lazar, Chapter 10 Link
6	Experiment Design, Research methods and Data Analysis	20.12	Prototyping part III * Hi-fi prototyping	-	Lazar Chapter 2 Link Lazar, Chapter 3.1, 3.2, 3.3 Link Lazar, Chapter 4 Link Usability.gov Link; Quant. Spec. Link
	Holiday				
7	Ethics	10.01	Prototyping part III * Hi-fi prototyping * Experiment design + ethics	Hi-Fi Prototype report (Fri 14-01) Controlled Experiment report (Sun 16-01)	*provided during lecture*
8	Guest lecture	14.01	User testing (Resits required)	**Exam part II (Fri 21-01)**	-
9	n/a		n/a	Final project Report (Sun 23-01)	
10	n/a		n/a	Oral Reflection (TBD) (option) resubmission Final project Report (Sun 06-02)	

Readings List:

Rosson, M. B. & Carroll, J. M. (2002) Scenario-Based Design. LINK

Friedman, B., Kahn Jr., P. H. , & Borning, A. (2013) Value Sensitive Design and Information Systems LINK

Preece, Sharp & Rogers (2019). *Interaction Design: beyond human-computer interaction.* 5th edition. John Wiley. Link

Lazar, J., Feng, J. H., & Hochheiser, H. (2017). *Research methods in human-computer interaction.* Morgan Kaufmann. Link