

INTERACTION DESIGN AND DEVELOPMENT OF MODERN WEB APPLICATIONS



Technical Teaching

WebInt

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ABSTRACT

Human-computer interaction (HCI) is the study of interaction between people (users) and computers, as the intersection of computer science, behavioral sciences, design and several other fields of study. This course aims to provide the basic concepts of user centered design when developing web applications. It will offer a deep dive presentation of modern web technologies: HTML5, CSS3 and Javascript. Finally, this course will provide techniques for evaluating user interfaces.

Teaching and Learning Methods: Lectures and Lab sessions (group of 2-3 students)

Course Policies: Attendance to Lab session is mandatory.

BIBLIOGRAPHY

- Bill Buxton (2007), Sketching User Experiences: Getting the Design Right and the Right Design, Morgan Kaufmann.
- Marti A. Hearst (2009). Search User Interfaces, Cambridge. <http://www.searchuserinterfaces.com/>
- Review of User Interface Prototyping Tools, <http://www.dexodesign.com/2008/11/07/review-16-user-interface-prototyping-tools/>
- HTML EdX online course: <https://www.edx.org/xseries/html5-w3c>

REQUIREMENTS

Software development methodologies

Basic knowledge of web technologies (html, css, javascript) is a plus

DESCRIPTION

Learning outcomes:

- Learn and understand the role of sketching in design and its relation to creativity
 - o Focus on interaction design for web applications
 - o Get an overview of existing software tools that support sketching and learn Sketchify or Balsamiq
- Practice and master new web technologies
 - o Develop rich web interactive applications (HTML5, CSS3, javascript)
 - o Learn advanced HTML5 APIs (web audio, media fragments, SEO and semantics)
 - o Be aware of accessibility constraints and devices constraints (mobile phone)
- Know how to evaluate user interfaces
 - o Know your users through user centered design methods
 - o Learn how to perform A/B tests, usability and ergonomics studies

Nb hours: 21.00

Grading Policy: Labs (40%), Final Exam (60%)