

Course description:

**Purpose of the course.** Subject is dedicated comprehensive reviewed issues related to the interaction of the human-computer interface (ang. Human-Computer Interaction) and designing useful and beautiful things (ang. design). The aim of the course is to learn the rules that govern the process of design, evaluation and implementation of interactive computing systems interfejsów meet the demands of utilities (ang. usability). During the classes, students discuss the topics presented in the lecture and indicated in the literature, present yourself and perpetuate their knowledge. As part of the workshop, students design and perform in teams of two or trzyosobowych interface of their choice application or web site, acting in stages, in accordance with the rules of the art in this field.

**Requirements.** Subject „ human-computer communication "is very interdisciplinary. Computer interfaces are analyzed and reflection in contact with the real, typical or sophisticated user. In addition to the obvious qualification information, including software engineering techniques ( separate lecture) and certain aspects of AI ( separate lecture)

interest in psychology, sociology, anthropology, linguistics, physiology, ergonomics, industrial design, and even the philosophy of art and give the person studying KCK (HCI) edge creative and productive. As for workshop tools, it is desirable to elementary knowledge of any language to create interactive web pages (eg. HTML, separate lecture) programming system, which can create windowing applications ( another lecture) and trained to operate any of the systems, constructing mock-ups of interfaces (to a minor, self-control).

**Specific objectives.** The student has the opportunity to get to know the ingredients for a good interface, within the meaning of exerting the most favorable impressions on the user target, master the basic knowledge of psychological and sociological in the range useful in the design of the GUI, to understand the relationship between a successful interface and economic success, learn the basic principles of ergonomics and communication verbal and visual (and sound) using computer interfaces, usually operating space, color, typefaces writings and other materials to build interfaces and trace the design techniques help to develop interfaces of modern computers and computerized equipment. Ran virtually the selected tool design mockups graphical interfaces.

**Benefits.** The student takes on a new perspective and understanding of graphical user interfaces, and awareness of the rules governing the successful construction of the GUI, it ceases to be an amateur in the approach to design networking sites. Knowledge of psychology, sociology, neurology (how human memory works) give him a new, analytical understanding of the possibilities and limitations of both man and produced by his subjects and machines, including - computers.

**The framework of the lecture.** The following lectures are given titles. Detailed bullet discussed issues beyond the scope of this summary, it is available during the semester on the lecture site SKOS.

## 2. Search needs

3. Analysis of the needs of [i] human

## 4. Prototyping Time to start

## 5. Learn to criticize

## 6. Developing interfaces

7. senses confuse

## 8. color, typeface and layout

9. A system, the system counts

## 10. Inventory GUI

## 11. GUI - complete inventory and lecture student

## 12. Lectures Student

**Literature.** There are many good books KCK (HCI). Some are available for free on the Web.

Besides network contains a lot of articles on website development and more generally - computer interface designer issues. From studying people and their interests depends on how much he could bring in a finite time semester of the sea Internet expert advice and news. The lecture is offered as additional reading some, of the points, accommodated on the Web. Here are some guiding books:

1. Lynch PJ, Horton S .: **Web Style Guide**. 3rd Edition. Yale University Press, 2008. The book is available on the Web free of charge.

2. Van Duyne DK, I Landay, Hong JI: **The Design of Sites: Patterns for Creating Winning Web Sites**. Prentice Hall Professional 2007.

3. Leventhal LM Barnes JA: **Usability Engineering: Process, Products, and Examples**. Pearson / Prentice Hall, 2008.

4 .Dziela classic art, Norman D. and J. Nielsen - available on the Web.

5. Other valuable articles, thoughts, tutorials and standards, including pages from Microsoft and Google.

During the semester dummies lecture materials are available on the relevant page of the site SKOS.

**Forms of credit.** Active, creative participation in exercises and workshops, developing valuable and full mock the interface (in an effort to improve existing applications or entirely new), to demonstrate the ability to constructive criticism and assessments of useful objects, including computer applications. Skilful representation and transfer of own product (GUI). In addition, to the extent possible time, students can prepare for the end of the semester own enrichment lectures, and especially modernizing, knowledge of trends, fashions and practice in the field of KCK (HCI). Semester course ends with a written exam.