

Übung 2 – Mensch-Maschine-Interaktion

Theme: Essay

Choose one of the topics below. Find out the facts and explain them in your essay for an audience of computer science students. Concentrate on issues related to user interfaces and human computer interaction on your theme.

Essays may be written in English or German and should be between 1000 and 2000 words (2-4 pages) in length. The focus should be on the written text images may only be added at the end of the document. Please cite all documents you used when researching the topic at the end of your essay. Please write your essay in **plain HTML**. Please include your name and the creation date of your essay below the title.

In the main text please use only the following HTML-tags: **<H1>** for the Heading, **<H2>** for your name and for subheadings; **<P>**, ****, **** to structure your text; **<HREF>** to link to further material at the end of your essay.

Essays have to be written individually by each student. The deadline for submission is the **16.12.2004**. Please send a single zip-file containing your HTML file and if applicable images to **andreas.peuss@ifi.lmu.de**. The file should be named **firstname.lastname.zip**.

Topics:

History of GUIs

- Amiga Workbench
- Apple LISA GUI
- Apple Newton
- GEOS on Commodore 64
- NeXTStep Graphical User Interface
- OS/2 User Interface
- VisiCorp Visi On
- Windows 1.0 - 3.11 User Interface
- X Window System
- XEROX-Star and XEROX-Alto GUI

Input

- input speed, writing speed
- devices for text input
- hand writing recognition
- navigation, paging, scrolling, scollbars, mouse wheel
- pen user interface

Models

- Norman's Action Cycle
- cultural constraints in user interfaces
- Task-Action-Grammar
- Object-Action Interface Model
- Model-View-Controller

Programming Languages

- user interfaces in Small-Talk
- user interfaces in Tcl/TK
- user interfaces in Visual Basic
- user interfaces LOGO

Techniques

- brainstorming and creativity methods
- paper prototyping
- UI prototyping (e.g. with Flash)
- hierarchical task analysis
- storyboards in user interface design
- heuristic evaluation
- statistical tests, T-Test, ANOVA

Humans

- Gestalt perception und user interfaces
- change blindness
- colors, color perception