Proseminar Medieninformatik
Sommersemester 2017

Prof. Andreas Butz
Renate Häuslschmid (renate.haeuslschmid@ifi.lmu.de)
Christina Schneegass (christina.schneegass@ifi.lmu.de)
27.04.2017
Agenda

• Goals
• Orga
• Scientific literature review
• Topic assignment
Agenda

• Goals

• Orga

• Scientific literature review

• Topic assignment
Goals

• LEARN TO WORK SCIENTIFICALLY
• Prepare for your Bachelor thesis
• Learn something about a new topic
• Practise your English
Agenda

- Goals
- Orga

- Scientific literature review
- Topic assignment
Process

- Research topic → find literature about this topic
Process - timeline

Today: Topic assignment

- 10.05.17 Submit short presentation
- 18.05.17 Short presentations
- 26.05.17 Submit paper outline, abstract & lead paper
- 22.06.17 Submit paper
- 29.06.17 Submit final presentation
- 03.07.17 Final presentations
- 10.07.17
Submissions

• **All submissions via UniWorX, zipped**
• Short presentation submission: **10.05.2017**
  • Lastname_Title_Spr.pdf
• Paper abstract & outline & lead paper submission: **26.05.2017**
  • Lastname_Title_Ou.zip
• Paper Submission: **22.06.2017**
  • Lastname_Title_Pa.pdf
• Presentation submission: **29.06.2017**
  • Lastname_Title_Pr.pdf / .pptx
Dates

• Short presentations:
  • Thursday, 18.05.2017 (12:00 - 14:00), Amalienstr.17, A105

• Presentation sessions:
  • Monday, 03.07.2017 (09:00 - 14:00), Theresienstr. 39, B133
  • Monday, 10.07.2017 (09:00 - 14:00), Theresienstr. 39, B133
General

- Absence $\leq 1$ day and only upon agreement
- Meet **all** deadlines
- Participate!
  - Preferred communication tool: **slack**
    - https://mimuc.slack.com/messages/ps-ss17
    - Desktop client available:  [https://slack.com/downloads/osx/](https://slack.com/downloads/osx/)

$\rightarrow$ Questions via Slack or Mail

$\rightarrow$ Personal meetings on demand
Short Presentation

• Introduce your topic in 90 seconds (in English)
  • Sounds easier than it is!
    → think carefully about what you want to say
• One to three slides
  • Submit as .pdf → no animations possible
• Prepare the talk well! You will get feedback about the presentation style for the final presentation.
Paper – Outline

- LaTeX-Paper template on the webpage
  - Link: [http://www.medien.ifi.lmu.de/lehre/ss17/ps/template/ps_latex_template.zip](http://www.medien.ifi.lmu.de/lehre/ss17/ps/template/ps_latex_template.zip)

- An optimal outline already contains everything you want to write as ordered bullet points (story & golden line)

- Outline is basis for your paper – investing time here pays off!

- Structure of general research papers

- Interesting title (not the research topic)

- Submission: Outline & Abstract as one PDF - document
Paper – Abstract

**DO:** ~150 words

1. What is the large scope?
2. What is the specific problem addressed?
3. Why is the problem important?
4. What have you done?
5. What is new about this work?
6. What did you find out? What are the results?
7. What are the implications on a larger scale? How does it change the bigger picture?

**DON‘T just list / write a sentence per chapter.**
Final Paper Submission

- Two pages prose text in English
- References on a third page (at least three references)
- Include Feedback you get on Outline & Abstract
- Use figures, diagrams, images to illustrate / summarize when it actually supports your explanations (refer to them!)
- Submission: **PDF**
Introduction

What is the problem?

Why is it important?

Introduce your paper/approach
Main part

Design Space, deep discussion of related work. Don’t only tell what is in the paper, think beyond! Connect the papers to a meaningful text, don’t just list summaries!
paper

main part

conclusion (& discussion)

short summary & your opinion (based on your main section)

what is missing in related work?

5 conclusion

This paper explored possible interaction concepts for smart glasses, especially of current smart glass wearer’s technical capabilities. The factors for whether a action is applicable to performance, which varies in terms of performing just one task or group of tasks, is extended to another area, similar to the study of Tang et al. [13]. The concrete context is relatively simple. Large surfaces like the floor can be used for lower precision requirements, such as selecting a cycle option from a menu. Preference for a task is dependent on the user’s satisfaction. The most important task is to choose the best suitable technique or a linear moving menu.

The alternative cycle has low social acceptance because it could be perceived as the “you are crazy” gesture [14].

The best suitable technique might be a linear moving menu. The interaction cycle has low social acceptance because it could be perceived as the “you are crazy” gesture [14].

inputs [5], because users don’t like that the device is not always available. It has to be taken out of the pocket first [5]. The worst fact in my opinion is that the interaction is not hands-free anymore, which destroys a main advantage of head-worn displays.

4. USE CASES FOR GESTURE BASED CONCEPTS

To ensure a great user experience [11] will still focus on gesture-based interaction. To evaluate whether an interaction concept is suitable it is necessary to look at the concept’s performance (performing time and the user experience) and user (social) acceptance. To find out which task is to be performed, I first set some input actions into navigation tasks [4]. A task can usually be performed by a user action (e.g., answer a phone call, pause music player), whereas a navigation task can be more complex like moving through a menu or selecting an object, e.g., a web browser viewport.

4.1 on-body interaction

A factor for whether an on-body interaction is suitable is the area it is performed on. An attracting attention situation occurs when touching or when touching the human is broken in a low social acceptance [14]. The second important factor is the movement awareness. Body movement which are to intensive will not be accepted by users [44]. Aside from these limitations, on-body interaction offers lots of possibilities like combining with on-body projection, and has the advantage of giving feedback through the human proprioception [14].

4.1.1 hand-to-face interaction

Hand-to-face input has an overall good performance. The most preferred areas for hand-to-face actions are the face and forehead. Due to their area larger users think they are the best parts for the face, especially the head which is described as a touchpad [45]. Performing actions on the head turned out as significantly faster and less moving than the same actions on the forehead and on the floor. The on-floor shows as an alternative to hand-to-face input [4] (Figure 1). The social acceptance is very good as well, face contact is something natural [44]. Nevertheless, the social acceptance to hand-to-face interaction is worse than EWD interaction, especially in public context, but still on a good level and most people don’t mind using the face. Some users show lower acceptance because of issues with facial contours and dirt on the hands [4]. Users preferred head-to-face for navigation tasks more than for task actions. The performance is good for the typical navigation tasks passing and routing due to the face’s large area [4]. Only for the navigation task “running” the performance on the EWD’s sample (stimulated) is slightly better [4]. Moreover because of the non-existent higher acceptance, passing tasks also acceptance, passing tasks also better be done on the EWD (provided that the EWD has an extended overview).

4.1.2 hand-to-body input: other body parts

When the so-called body areas there are the arms, fingers, e.g., hand, eyebrow, and ring left. These areas could be used for interaction tasks requiring just one tap, each task or group of similar tasks can be extended to another area, similar to the study of Tang et al. [14]. The concrete context is relatively simple. Large surfaces like the floor can be used for lower precision requirements, such as selecting a cycle option from a menu. Preference for a task is dependent on the user’s satisfaction. The most important task is to choose the best suitable technique or a linear moving menu. The alternative cycle has low social acceptance because it could be perceived as the “you are crazy” gesture [14].
Presentation

• 15 min presentation (in English) + 5 min discussion (in English)
• No slide template – get creative!
  • Many tips on the web, e.g., here.
  • Very good book: [Zen oder die Kunst der Präsentation](https://www.ted.com/)
  • Max. 10 words per slide – Use figures and diagrams!
• Get the audience interested! Do not make us fall asleep!
  ([https://www.ted.com/](https://www.ted.com/))
• Anticipate questions and prepare answer slides (backup-slides)
# Evaluation sheet

**Bewertungsbogen für Proseminararbeiten**

Bitte nur die grünen Felder editieren!

<table>
<thead>
<tr>
<th>Thema:</th>
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<tbody>
<tr>
<td>Student:</td>
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<tr>
<td>Seminar:</td>
<td>Proseminar Sommersemester 2017</td>
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<td>Betreuer:</td>
<td>Peter Häussler, Christine Schmeissig</td>
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<table>
<thead>
<tr>
<th>Aspekt</th>
<th>Gewicht</th>
<th>Note</th>
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<td>1.1 Gerechtigkeit der Annahme</td>
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<td>1.2 Richtigkeit von Annahmen und Vorüberlegungen</td>
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<td>1.3 Richtigkeit von Annahmen und Vorüberlegungen</td>
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<td>1.4 Gliederung der Arbeitsvorschläge</td>
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<td>1.5 Sprache</td>
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<td>2.1 Präzision der Lösungsansätze</td>
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<td>2.2 Richtigkeit der Annahmen und Vorüberlegungen</td>
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<td>2.3 Logische inhaltliche Konsistenz/Reihenfolge</td>
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<tr>
<td>2.4 Innovation/Einbringung neuer Gedanken</td>
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<td><strong>Gesamtnote der schriftlichen Ausarbeitung</strong></td>
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<thead>
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<td>1.1 Aufbau</td>
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<td>1.2 Bildmaterial</td>
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<td>2 Vortrag</td>
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<td>2.1 Verbaler Präsentationsstil</td>
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<tr>
<td>2.2 Nonverbaler Präsentationsstil</td>
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<tr>
<td>2.3 Einhaltung der zeitlichen Vorgaben</td>
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<td>3 Diskussion</td>
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<tr>
<td>3.1 Vorbereitung von Slides zu Diskussionsthemen</td>
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<td><strong>Gesamtnote der Präsentation</strong></td>
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67%  
33%
Agenda

- Goals
- Orga
- Scientific literature review
- Topic assignment
Research in General

• Starting point for your work: your topic
  • First orientation
  • Look for synonyms, leading researchers, frequently cited literature
  • Not every source can be used (e.g., online articles without author, contributions in online communities, Wikipedia)
  • References: Papers, conference proceedings, journals, books, online sources with author and date of access
Finding Literature

- Almost all literature is available online!
  - Google/Google Scholar (http://scholar.google.com)
  - ACM Digital Library (http://portal.acm.org)
  - Citeseer (http://citeseer.ist.psu.edu)
  - IEEE Xplore (http://ieeexplore.ieee.org)
  - Springer (https://link.springer.com)
  - Elsevier (https://www.elsevier.com/catalog)
  - ScienceDirect (www.sciencedirect.com)
  - OPAC der Universitätsbibliothek (http://opacplus.ub.uni-muenchen.de)

- For the full functionality log in at „LMU E-Medien-Login/Datenbanken“ and find the needed library (e.g., ACM)
Finding literature
Why should I care about citations?

- Copyright / intellectual property
- Foundation of scientific work
- Citations links belonging work together
- Reader needs all the information you had to check if you are correct
Citations

• Quotation
  • Direct (in quotation marks)
  • Indirect
• No secondary citation

• Wikipedia: not citeable (but good for quick research)
• Citation style: APA 6 (for this work):
  see http://www.edu.lmu.de/apb/dokumente-und-materialien/dokumente-bachelor/hinweise-zur-apa.pdf
# Citations APA

## In-Text Reference

### Books

<table>
<thead>
<tr>
<th>One author – in-text reference placement</th>
<th>'Information prominent' (the author’s name is within parentheses): The conclusion reached in a recent study (Cochrane, 2007) was that...</th>
<th>Cochrane, A. (2007). Understanding urban policy: A critical approach. Malden, MA. Blackwell Publishing.</th>
</tr>
</thead>
</table>
| **Note:** There are two main ways to use in-text references. Firstly, to focus on the information from your source – ‘information prominent’. Secondly, to focus on the author – ‘author prominent’. | **OR**

### Chapter in edited book

<table>
<thead>
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<tbody>
<tr>
<td><strong>OR</strong></td>
<td>Richards (1997) proposed that...</td>
<td></td>
</tr>
</tbody>
</table>

## Journal, Newspaper & Newsletter Articles

### Journal article with one author – separated paging (paginated by issue)

<table>
<thead>
<tr>
<th>Journal article with one author – separated paging (paginated by issue)</th>
<th>In an earlier article, it was proposed (Jackson, 2007)...</th>
<th>Jackson, A. (2007). New approaches to drug therapy. <em>Psychology Today and Tomorrow</em>, 27(1), 54-56.</th>
</tr>
</thead>
</table>

### Journal article with two authors – continuous paging throughout a volume.

<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>OR</strong></td>
<td>This article on art (Kramer &amp; Bloggs, 2002) stipulated that...</td>
<td></td>
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</tbody>
</table>
Plagiarism

- No plagiarism, NO plagiarism, not even a little!
- Plagiarism
  - Material of third parties, without reference
  - Direct quotations, without reference
  - copied pictures, diagrams or graphics without reference
- Your work will be checked automatically
- Work with plagiarism will fail the course!
- http://www.medien.ifi.lmu.de/lehre/Plagiate-lfl.pdf
Writing style

• Everything you write in your paper must be supported by literature!
• Think about a logical structure of your arguments
• Scientific writing is: objective, precise, and neutral
• CHECK: Grammar, SPELLING
• Numbers from zero to twelve are written as text
• Spell out abbreviations like “i.e.”, “e.g.”
• DON‘Ts:
  • Unprecise quantities (“high”, “slightly”, “almost”, “a little bit”)
  • Fillers (“now”, “well”, “quasi”)
  • Pseudo-Arguments (“naturally”, “as expected”)

LFE Medieninformatik - Proseminar Medieninformatik SoSe 2017
LaTeX

- Text formatting
- No WYSIWYG, instead creation of source code
- Integration of pictures and diagrams in the final document
- Integration of references (with linkage to Citavi, EndNote, BibTeX…)
- Very nice typography
- No formatting mistakes when creating the text
- Huge number of online tutorials available
Example creation of a document

\title{Mein Titel}
\tableofcontents
\section{Überschrift}
Text des Kapitels 1 ...
\subsection{Unterüberschrift}
Text des Kapitels 1.1 ...
\cite{Huber}

@article{Huber,
  author = "Egon Huber",
  title = "Implementing ...",
  journal = "Computer",
  year = "2001",
  ...}
JabRef

- literature administration

http://www.jabref.org/
Mendeley

- literature administration

https://www.mendeley.com/
Agenda

• Goals
• Orga
• Scientific literature review
• Topic assignment
Supportive Systems
Teams

What we expect:

• Share your background literature & knowledge
  → still, lead paper have to be different, specific to your focus

• Work of both partners should focus on the same aspects
  • Example:
    • Human side: Describe the dynamics of human attention (e.g., visual)
    • Computer side: Describe how a system can gather a person’s attention

• Coordinate your presentations (keep repetitions to a minimum)

• However, discrepancies & limitations can also be included
# Topic Assignment

<table>
<thead>
<tr>
<th>#</th>
<th>Human side (H)</th>
<th>Computer side (C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>(Interpersonal) Trust &amp; its Dynamics</td>
<td>Trust in (e.g. Autonomous or Recommender) Systems</td>
</tr>
<tr>
<td>2</td>
<td>Motivation</td>
<td>Motivational Systems</td>
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<tr>
<td>3</td>
<td>Subliminal Perception</td>
<td>Applicability of Subliminal Perception in HCI</td>
</tr>
<tr>
<td>4</td>
<td>Creativity</td>
<td>Creativity Support Systems</td>
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<tr>
<td>5</td>
<td>Personality, e.g. Traits &amp; Structure</td>
<td>Personalized Systems (e.g. in Health)</td>
</tr>
<tr>
<td>6</td>
<td>Self-Presentation in real World</td>
<td>Self-Presentation in Social Networks (online)</td>
</tr>
<tr>
<td>7</td>
<td>Interpersonal/Group Behaviour in real World</td>
<td>Interpersonal/Group Behaviour in Social Networks (online)</td>
</tr>
<tr>
<td>8</td>
<td>(Development of) Routines and habits</td>
<td>Adapting to users (Internet of Things / Ambient intelligent systems)</td>
</tr>
<tr>
<td>9</td>
<td>Emotions and emotion expression</td>
<td>Affective Computing – Possible development &amp; challenges</td>
</tr>
<tr>
<td>10</td>
<td>Attitude and attitude change</td>
<td>Designing Persuasive Technology</td>
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<tr>
<td>11</td>
<td>The process of learning / How do we learn?</td>
<td>Computer support for individual and collaborative learning</td>
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</tbody>
</table>

Topics can be adapted (with our agreement!)

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<table>
<thead>
<tr>
<th>#</th>
<th>Names</th>
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<td>Felix Althammer</td>
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<tr>
<td>10H</td>
<td>Simon-Anian Au</td>
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<tr>
<td>5C</td>
<td>Julien Breunig</td>
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<tr>
<td>10C</td>
<td>Hanna Daxer</td>
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<tr>
<td>1H</td>
<td>Felix Decher</td>
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<td></td>
<td>Sarah Delgado Rodriguez</td>
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<td>3H</td>
<td>Marcel Diepold</td>
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<tr>
<td>6C</td>
<td>Rebecca Essig</td>
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<tr>
<td>1C</td>
<td>Julian Fazekas-Con</td>
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<td>Valerie Hentschel</td>
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<td>Lisa Lohner</td>
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<td>Christoph Patzelt</td>
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<tr>
<td>4C</td>
<td>Petar Zoric</td>
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<tr>
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<tr>
<td>8C</td>
<td>Noyan Sahin</td>
</tr>
<tr>
<td>7H</td>
<td>Ludwig Wessner</td>
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</tbody>
</table>
Further Information on LaTeX
Installation

• Wenn noch nicht vorhanden: TeX-Implementierung und LaTeX-GUIs/IDE installieren, z.B.:
  • Windows: MikTeX (http://www.miktex.org/) + TeXnicCenter (http://www.toolscenter.org/)
  • Mac OS: MacTeX (http://tug.org/mactex/), beinhaltet TeXShop IDE (http://www.uoregon.edu/~koch/texshop/index.html) oder TexMaker (http://www.xm1math.net/texmaker/)
  • Linux: teTeX-package (www.ctan.org/) + Kile (http://kile.sourceforge.net/), vorinstalliert auf Pool-Rechnern

• Download des LaTeX-Templates
  • .tex- und .bib-Dateien mit IDE öffnen, Source anschauen und nachvollziehen
  • LaTeX => PDF einstellen, .tex-Datei zweimal kompilieren
  • Bei Bedarf weitere LaTeX-Tutorials, Foren etc. konsultieren
LaTex-Ressourcen

- LaTex-Klassen und Dokumentation (http://www.ctan.org)
- A (Not So) Short Introduction to LaTex2e (http://www.ctan.org/tex-archive/info/lshort/english/)
- LaTeX Symbols List (http://www.ctan.org/tex-archive/info/symbols/comprehensive/)
- Grafiken importieren und formatieren (http://tug.ctan.org/tex-archive/info/epslatex/english/epslatex.pdf)
- Deutschsprachige FAQs (http://www.dante.de/faq/de-tex-faq/html/de-tex-faq.html)
- BibTeX-Tool und Dateiformat zur Verwaltung von Bibliographien und deren Einbindung in LaTeX
  - Fachliteratur-Referenzen werden online bereits vielfach im BibTeX-Format angeboten (z.B. ACM, IEEE)
  - How-To: http://www.bibtex.org/Using/de/