CTHCl Lab 2
Writing a Review (Part 1)

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Plan

• Review
• Practice: Paper structure
• Practice: Writing a review for an evaluation section
• Logistics of Assignment Zero
• Reflection
• (optional) Demo: Searching and retrieving literature
Yesterday in Current Topics…

- Differences between descriptive empirical research and ethnographic research
- Triangulation
- Key attributes from Engineering & Design research
- Internal vs. external validity
- Learning curve
Measures

19 characters, 31 keystrokes

\[ WPM = \frac{|T| - 1}{S} \times 60 \times \frac{1}{5} \]
\[ KSPS = \frac{|IS| - 1}{S} \]
\[ KSPC = \frac{|IS|}{|T|} \]

\[
(19 - 1)/10 \times 60/5 = 21.6
\]
\[
(31 - 1)/10 = 3
\]
\[
31/19 = 1.63
\]
In-Class Practice

Paper structure and writing a review of an evaluation section

Quasi-Qwerty Soft Keyboard Optimization

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Evaluating Swabbing: a Touchscreen Input Method for Elderly Users with Tremor

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Guided review: Quasi-Qwerty Soft Keyboard Optimization (Bi et al., CHI 2010)

High-level understanding:
Summarizing your understanding about the contribution and benefits of the paper. The final summary is usually put into 3–4 sentences in the actual review.

A. Problem 
Between the two keyboard layouts (___________________ and _________________), there is a trade-off between ____________________ and ____________________.

B. Method
This paper proposed ________________________ that _________________________ _______________________________________________________________________.
This paper argue that __________________________________________________ _______________________________________________________________________.
To support this argument, regarding the motor performance, the authors derived theoretical movement efficiency of five keyboard layouts.
A(n) ______________________ comparing ______________________  and ______________________ in three conditions: _________, ___________, and ____________.

C. Results
Both theoretical motor performance and initial visual search time from the experiment reveals that _____________________ provide a balance between _____________________ and _____________________.

D. Implications
The results of this paper can lead to a future keyboard layout design that strikes a balance between the motor performance and visual search time.

Writing a review for Evaluation sections:
This part of the review focuses on the validity, generalizability, and replicability of the methods used in the evaluation.

B1. Research method:
B2. Variables:
What are they? Operational definition?
Were the definitions described unambiguously? If no, what are other interpretations?
How much does the definitions serves the purpose to answer the research question?
B3. Procedure:
Was the procedure described in detail such that you can replicate this experiment? What are still ambiguous?
B4. Validity:
How much does the study achieved internal and external validity? What are potential threats to the validity?
Assignment Zero: Writing a Review for Dummies

• Write a review about the evaluation section for one of these papers:
  • Typing on Flat Glass¹ (Findlater et al., CHI ’11)
  • The 1Line Keyboard² (Li et al., UIST ’11)

• Required reading for background:
  • Evaluation of Text Entry Techniques³ (MacKenzie, 2007)

• Peer grading
  • In groups of 3, select one of the papers
  • Individually review the evaluation sections in the paper
  • Grade each other’s review
  • Structured review form and grading form will be posted online
  • Submission: 3 × original reviews and 6 × peer grading feedback
  • Deadline: Tuesday, April 23rd, 2013 before 12:00 noon

1 http://dl.acm.org/citation.cfm?id=1979301
2 http://dl.acm.org/citation.cfm?id=2047257
3 http://www.yorku.ca/mack/chapter4.html
Logistics of Assignment Zero

• **Review:** Plain text in *one page A4* (font size: Helvetica or Arial 12pt)
  • Summary: Summarize the main contributions and benefits of the paper in one short paragraph (max. 5 sentences)
  • Evaluation: You may structure this section freely
  • Suggestion for improvements
  • Final judgement: Would you {accept, reject} this paper? Why?

• **Peer feedback:** one page A4

• **Recommended schedule**
  • Saturday: finish your review
  • Monday evening: finish your feedback
  • Tuesday morning: collect all 6 pages in PDF (include your names and Mat. Nr.) and email to Chat
Peer Feedback Guide

• First glance: How organized is the structure of the review?

• Paper understanding
  • How well did the reviewer understand the contribution of the paper?
  • How well did the reviewer understand the methods used in the paper?
  • What points might the reviewer misunderstood?

• The review
  • How clear and how concise was the reviewer’s arguments?
  • How substantiate was the arguments?
  • How detailed were the suggestions?
  • How constructive was the tone of the review?

• Additional suggestions to improve the review
Reflection

• Lecture 2: Example of experimental text entry research

• Short-term purpose (this course)
  • To appreciate the detail and pitfalls that is needed for understanding an experimental research paper

• Medium-term purpose (your thesis)
  • To recognize some of the important factors that you need to consider when planning a user study

• Long-term purpose (your life)
  • To be an intelligent knowledge consumer by spotting potential flaws from the scientific studies
Demo:
Retrieving and Searching for Papers

- Google Scholar: Entry point, alerts, citation search, finding the full version for free.
- ACM Digital Library: The main archive, video materials, comprehensive search by author.
- Citeology: Citation visualization (1982–2010)