Designing Interactive Systems I
L10: Week 10 Discussion, Introduction to Week 11, and Low-Fidelity Prototypes (Milestone

Oliver Nowak & Krishna Subramanian
Media Computing Group, RWTH Aachen University

WS 2019/2020
http://hci.rwth-aachen.de/dis

Week 10
Evaluation

Prof. Dr. Jan Borchers: Designing Interactive Systems I • WS 2019/20

In-Class Exercise: Evaluation

- Think about how you would evaluate a website that sells cat food

  - Your users are not available yet, but the deadline is approaching.

  - Which technique do you choose and why?

Prof. Dr. Jan Borchers: Designing Interactive Systems I • WS 2019/20

In-Class Exercise: Evaluation

- Think about how you would evaluate a website that sells cat food

  - The website owner wants you to now evaluate with users.

  - Which technique of **qualitative evaluation** would you choose and why?

  - Plan the whole setup of your evaluation, regarding the following questions:

    - Where? (Lab, In the field)

    - Who are the participants?

    - How do you deal with the participants? (Before, During, After)

Week 11
GOMS
Golden Rules

Prof. Dr. Jan Borchers: Designing Interactive Systems I • WS 2019/20

CMN Model 2.0?

- In the CMN model, predicted times are very rough because it is a very abstract model.

  - Does not distinguish between basic operations such as click, double-click, and drag.

  - Does not distinguish easier operations vs. more difficult ones
    e.g., typing *"usability"* will take lesser time than typing *"uxbntlzcu"*, even though they require same number of keystrokes.

- Solution? **KLM-GOMS**

  - To estimate execution and learning times even before a system is built!

Prof. Dr. Jan Borchers: Designing Interactive Systems I • WS 2019/20

Patient Records: Add Patient

Patient's Name: Krishna

Birthday (MM-DD-YYYY): 20 ⌃⌄ 2 ⌃⌄ 1958 ⌃⌄

Age 69 ⌃⌄

OK   Cancel

Is this interface efficient?

RWTH AACHEN UNIVERSITY

The Ten Golden Rules of Interface Design

1. Keep the interface simple!

2. Speak the user's language!

3. Be consistent and predictable!

4. Provide feedback & be responsive!

5. Minimize memory load!

6. Avoid errors, help to recover, offer undo!

7. Design clear exits and closed dialogs!

8. Include help and documentation!

9. Address diverse user needs!

10. Hire a graphic designer!

Low-Fidelity Prototypes

In-Class Exercise: Prototyping

- Pick a storyboard, and identify the core activities for the storyboard.

  - Identify two things that could go wrong when the user is performing the activity.

- Which prototype better supports these activities?

  - Paper: Storyboard-like, Flipbook, and Post-it prototypes

  - Hardware: What material will you be using?

- Discuss the rationale within your group.

Prof. Dr. Jan Borchers: Designing Interactive Systems I • WS 2019/20

In-Class Exercise: Prototyping

- Now sketch the different states (screens) of your prototype

- Show the sketches to members of at least 3 other groups to see if they understand the interaction

What Next?

- By **Wednesday, Jan. 8th**

  - Identify core activities for all three solutions.

  - Prototype at least one solution.

- Before **Monday, Jan. 13th**

  - Watch Week 11 Content:
    GOMS, Interface Efficiency, and the Ten Golden Rules of Interface Design

  - Submit your solution for milestone #4 via RWTHmoodle.

- Now: Course evaluation!

Prof. Dr. Jan Borchers: Designing Interactive Systems I • WS 2019/20