

Due: Thursday, 3 November, 2011, 18:00 **Group size:** 3 – 4 Contribution to the course score: 3/100 Estimated workload: 3 hours/person

Description

In the lecture, you have learned several design principles: visibility, affordances, mappings, constraints, and conceptual models. You also have read the first few chapters in <u>The Design of Everyday Things</u> (Don Norman, 1990). You will apply these principles by criticizing objects surrounding you in both the physical and the virtual world. Use the following questions as a guideline:

- Which design principles are used or violated?
- How are they implemented?
- How do they affect the interaction with the object?
- Why might the designer have deliberately violated the principles?
- What are alternatives?
- Were there tradeoffs between different principles?
- How did the designer handle those tradeoffs?

Task

- 1. Find two objects that are used for the same task, e.g., two mice. One object should show that the design principle was applied; the other one should violate the principle.
 - Remember that designers have to balance tradeoffs among different design principles. An object may violate some principles to embrace another. If you notice these tradeoffs, describe them in your report.
- 2. Write a short report contrasting the pair of objects.
 - Briefly describe the objects and the usage scenario that you imagine.
 - You may include photos or sketches of the objects in the report. You may also submit additional images or videos in separate files.
 - Concisely criticize the objects by answering some of the questions mentioned above.
 - The discussion of an object pair *must* fit in one A4 page.
- 3. Do this for four pairs of objects, two physical and two virtual ones. Do not use the examples discussed in class or lab. In total, your report should be four pages long, one page for each pair of objects.

Submission: See the Assignment Submission Guideline for details.

- Please create a submission entry in L²P well before the deadline. The process of group invitations is a bit tricky.
- If you cannot submit via L²P, send the submission to <u>chat@cs.rwth-aachen.de</u> before the deadline. In the subject line, put "DIS1 A01 Submission".

Grading

What will reader learn from your submission? How clear and concise is your work?

Criteria	Guiding questions	Check minus	Check	Check plus
1. Object and scenario description clarification (20%)	Were the object and scenario described clearly? Were the scenario recurring frequently?	No concrete objects, tasks, or both described. The scenario is impossible or too rare for the typical users	Concrete objects and scenarios are clearly described. The reader do not have to make any assumptions about the object or the scenario.	The scenario described happens frequently and surprisingly overlooked by typical users.
2. Validity and completeness of the arguments (30%)	Were the principles you selected correctly associated with the scenario? Were your argument chains logical? Were the critique objective?	The selected principles does not apply to the scenario. The selected principles were misunderstood. The critiques were subjective.	The select principles suits the scenario, and the argument chain is correct.	The argument chain is convincing and reveal the insights is hidden in plain sight.
3. Depth of the arguments (30%)	Were the critique show deeper understanding of the tradeoff and rationale behind the design?	No description of pros and cons about the design.	The pros and cons were discussed.	Plausible hypotheses about the design rationale and tradeoff were made and discussed.
4. Clarity of the writing (10%)	Was the written description clear and concise?	The work were verbosely elaborated without any structure.	The description shows the structure of the arguments.	Key points are highlighted and expanded clearly and completely.
5. Image quality (5%)	Was quality of the images adequate to see the focused detail? Were the images clearly emphasize the issue? Were the annotations readable?	Low quality (too dark, too bright, too small, too pixelated) image that cannot be interpreted.	Clear image that show the problem.	Clear image which emphasize the problem in the design with optional annotation, if it is not obvious.
6. Text layout quality (5%)	Were appropriate typographical features (font face/ style/size, bullets, paragraphs, and tables) are used to describe the work?	The layout prevents readers from comprehending the work. E.g., text were not separated into proper paragraphs, mixed font style without sensible reasons.	The layout of the text allows to read adequately.	The reader may understand the rough structure of your text by looking at it from one meter away. The layout explicitly reduce the reader's time to understand your submission.