

## DIS1 Assignment 3

# Prototyping

<http://www.flickr.com/photos/peterhellberg/4625578444>

**Due:** Friday, November 18th, 2011, 13:00

**Group size:** 3 – 4

**Contribution to the course score:** 3/100

**Estimated workload:** 6 hours/person

## Description

In the last assignment, you have identified the users and the task for your remote control. Based on the information you gathered, you will create low-fidelity prototypes of your design and test it with a user.

## Task

1. **Prototype:** Create a low fidelity prototype (e.g., paper, cardboard, flip book, Post-It) of your remote control. This prototype should represent the overall design of your remote control including size, shape, control layouts.
2. **Design alternatives:** Identify an aspect of your system that can be implemented in different ways, e.g., different button layouts, different sequence of controls. These aspects usually reflect a tradeoff among design principles, e.g., visibility vs. simplicity, immediate usability vs. efficiency. Create a low or medium fidelity prototype to test that aspect.
3. **Focused prototype:** Test both prototype with 2 – 3 user who may fit the primary persona that you defined. For testing, choose one or two scenarios you have defined in the last assignment. Tell the scenario to the user, and ask them to try using your prototype to perform the task described in the scenario. Observe how the prototype is used. Is it the same as it is designed? Does the user recognize how the device should be held? Ask their opinion about your design. For the second prototypes, ask the user to perform the same task to each of them. You should switch the order of the prototype among users to counterbalance the learning effect. For example, Mark tests prototype A then B, but Sarah tests prototype B then A.
4. **Report:** Create a short report from your finding:
  - a. Photos, videos, and description of your prototypes (1 page)
  - b. A short paragraph describing the design alternative you chose to evaluate together with photo and a brief description of the two focused prototypes (1 page)
  - c. Interesting finding from the test which may include (1 page)
    - i. Quotes of users' comment
    - ii. Photos or video of how the user used your system
    - iii. Description of unexpected usage and why the user think it should be used in that way.
  - d. Discussion of the final choice of the design alternatives. (0.5 – 1 page)
  - e. A description of your final design with diagrams and illustration. Highlight the properties of your design that make it usable (1 page)

**Submission:** See the Assignment Submission Guideline for general detail.

## Grading Guideline

Is your design usable? What are evidence supporting the usability?

Criteria	Guiding questions	Check minus	Check	Check plus
1. Usability of the design (50%)	Was the design serve the users and the tasks that is aimed for? Was the design heuristically usable according to the principles learned in the class?	The design was suitable for the intended user and intended task. The design suffered from common usability pitfall	The design was not suffered from any usability pitfalls, and it served the users doing the task.	Innovative design that is not only usable but also improving the experience of the user beyond currently available products.
2. Prototypes and testing (30%)	Was the prototype implemented adequately to test the broad or narrow aspect of the design? Were the design alternatives tested by the prototype?	The quality of the prototype does not suit the intended purpose. E.g., the prototype is too rough for the user to give a concrete feedback, or the prototype was implemented in too high fidelity which may discourage the user from giving feedback.	The prototype adequately show important characteristics of the system, especially those that are designed for the selected users and tasks.	Various prototyping methods were selected to suit the aspects to be tested. Several iterations of prototyping were used to refine the design.
4. Clarity and quality of the presentation (20%)	Was the written description clear and concise? Were the images used convey the personality of the persona? Were the quality of images adequate? Were the appropriate typographical features used?	The description was ambiguous. Photos of the persona were unrealistic. Sketches were not clear. The layouts prevented the assignment from being readable.	Clear and concise description and images were used.	Layouts and typographical detail make the content clear without having to read in the detail.