Flash 2  Actionscript

midterm I review

Georg Apitz
Interactivity in Flash

- used pre build interface components
  - *buttons*
  - *combo boxes*
  - *scrollbars etc.*

- create own interactive areas
  - *Actionscript 1 and 2*
  - *scripting language, similar to javascript etc.*
ActionsScript Control Panel

- input field for all ActionsScript Commands
Create your own interactivity

- task: create a button of random shape that changes color when pressed and you can drag it.

- steps
  - *create the button*
  - *create a movie clip and add the button plus action*
  - *add the movie clip to the scene*
Simple Example

- task: create a small interface that lets you enter a URL and submit it, include simple error checking

- steps
  - create the graphical content
    - Background
    - Labels
  - interactive components
    - text input
    - buttons
  - add action
    - actionscript, important to add it at the right frame
A more complex Example

- colorslider

This button has a constrained draggable area. The area is a rectangle set using the 4 corner positions (in pixels)

Please drop something on me!
important aspects

- incremental building of interfaces
- buttons cannot have actionscript applied directly
  - need to be embeded in movies

- extensive tutorials and info
  - http://www.actionscript.org/tutorials.shtml
review DTUI 1-6
Chapter 1

- usability requirements
  - think of people who use and maintain it

- motivations for usability, aspects of usability, classification of different systems by area of use
  - driven by area
    - life-critical systems
    - industrial and commercial use
    - office home and entertainment applications
    - exploratory, creative and collaborative interfaces
    - sociotechnical systems (voting, health support)

- hard and software diversity
  - different OS, different hardware
Chapter II

- display organization (p 63)
  - consistency, efficient information assimilation, minimal memory load, data display should match data entry, data display should be flexible

- how to get user's attention
  - intensity, marking, size, fonts, blinking, color, audio

- knowing the user, classification by skill level
  - novice, intermittent, expert
Chapter II

- eighth golden rules (p 75)
  - consistency
  - universal usability
  - informative feedback
  - dialogs that yield closure
  - prevent errors
  - easy reversal of actions
  - internal locus of control (user is in control)
  - reduce short term memory load (7+/− 2)

- preventing and handling errors
Chapter III

- pillars of design
  - guidelines documents & process
  - user interface and software tools
  - expert reviews, usability testing
- development methodologies / design cycle / waterfall
  - LUCID (Logical User-Centered Interactive Design Methodology)
- legal issues in the design process
  - informed consent
  - user rights
Design

Cycle in the project lifespan

- Acceptance (1)
- Analysis (2)
- Definition (3)
- Ideation (4)
- Idea selection (5)
- Implementation (6)
- Evaluation (7)
- Design Process

Number of Ideas under consideration

Project timeline

Final product

courtesy of F. Guimbretière
more design

- waterfall model
Chapter IV

- expert reviews
  - subjects experts to review interface

- usability testing
  - test different subjects
  - control and measure conditions

- survey instruments
  - questionnaire writing (p 150)
Chapter V

- grammars
  - *abstract description of interface interaction (p 176)*
- interface building tools and their features (p 185)
  - *Flash, Director, VB, PLs*
- evaluation and critique of tools
  - *know which tool for what*
Chapter VI

- direct manipulation, what is it, pros and cons
  - visual interaction and feedback
  - easy, intuitive
  - undo, history difficult

- applications for direct manipulation
  - finder / explorer
  - Flash