CMSI 370

INTERACTION DESIGN

Fall 2008

Final Review Sheet

The final exam will take place on Tuesday, December 9, at 11am. It will be open book, notes, handouts, and computer — so we'll have it at the Keck lab. You can use one computer, either your own laptop or one of the Keck workstations.

Covered Material

The final covers the entire semester, including all handouts and sample code that have been distributed; in addition to the covered material from the midterm (see the Midterm Review Sheet for that), we also have:

- Chapters 6 and 7 in Shneiderman/Plaisant
- Chapter 4 in Norman
- Papers on menu types
- Working knowledge of 3D interface case studies: Google SketchUp, Second Life
- Java Swing API topics
  - Menus, toolbars, and Actions
  - Externalization, resources
  - Higher-order components: JTables, JLists, renderers, editors
  - Custom components
  - Low- and high-level event handling
  - Drag-and-drop
  - Threading
- XHTML/CSS/JavaScript topics
  - Form tags and "menu" simulation
  - Direct manipulation implementation
  - Event handling

Sample Tasks and Questions

The following represent the types of questions or tasks that you may be asked to accomplish (in addition to those listed in the Midterm Review Sheet):

- Given a proposed application, choose and justify the most appropriate interaction style/paradigm for that application
- Given two alternative user interfaces based on the same interaction style/paradigm for the same application, state which user interface is more effective and why
- Assess the quality of a menu-driven user interface based on the guidelines and principles for creating effective menus, forms, and dialogs
- Assess the quality of a direct manipulation user interface based on the guidelines and principles for creating effective direct manipulation designs
- Given some Swing or dynamic HTML code, evaluate its design based on its reusability and separation of concerns (MVC, etc.)
- Explain or describe some frequently-used Swing or dynamic HTML technique, such as externalization of resources (Swing), creation of custom components (Swing), drag-and-drop implementation (both), etc.
- Break down a user action (drag-and-drop, text field manipulation, button tracking, etc.) into a sequence of low-level input events
- Identify bugs or potential issues in some given fragment of Swing or dynamic HTML code
- Identify, describe, or compare the similarities or differences between the Swing and dynamic HTML user interface frameworks