

# CS 422 – User Interface Design – Spring 2004

## HW Assignment 4 – User Interface Prototype Development

**Due: Tuesday March 29 at 1:30 p.m.** Any related hard copies may be turned in during class.

### Overall Assignment

For this assignment you are to design an interface for an international on-line competitive game, such as Poker, Bridge, Go, Chess, or Backgammon, and to develop prototypes for your interface using software tools such as Visual XXX, HTML, Java Swing, PhotoShop, . . . You should also show your sample screens to one or more potential users **who are not CS students**, and record their comments and other feedback. ( Other games may be acceptable, but they should be similar in nature to those mentioned here. I.e. a strategy or board game, NOT a first-person shooter or action-adventure type game. Please ask if you have any questions. )

### Game Properties

Some key features of the game and your UI design:

- Players play on-line, in real time, against other players who may be located anywhere in the world.
- As players win, they advance in the standings, and are pitted against other players with comparable winning records. Anyone should be able to see both their own standings and the rankings of the top players at any time.
- Your design should include sample screens for at least the following interactions:
  - User registration.
  - Game play.
  - Results feedback ( at the end of a game or session. )
  - Standings display.
  - This is not a complete list. You should include at least one additional interaction not listed here.
  - ( Also note that some interactions, e.g. game play, may require more than one sample screen, depending on the design and the game chosen. )
  - Annotate the sketches if necessary to explain functionality, or include that information in written text. ( If not inherently obvious. )
- You should also include a menu tree, indicating what menu and submenu items are to be included. ( Please explain any that are not immediately obvious. )
- Please include a state diagram indicating how one moves from one sample screen to another.
- You don't have to implement the game, or even design the architecture, just design the look and feel of the UI, and let someone else worry about how to implement it.

## **User Evaluations**

Once your sample screens have been developed, you should show them to potential players of the game to get their feedback, which you should document and hand in with your results. Some of the things you might want to ask them include:

- What do you think of this user interface? Is there anything that you find confusing or that you would recommend changing?
- Without my giving you directions, can you show me how you would likely play this game or use this computer program? ( The UI developer may want to play the role of the computer for this step, showing one screen at a time to the user, and changing screens when the user makes actions that would change the screen in the real application. )
- Would you play this game? Would you buy this product?
- Does this interface appear professional and high quality?
- Please note that this is not necessarily a complete list, and that you should think for yourself, not just use a checklist of instructor-provided questions.

## **Results**

When your sample screens have been developed and evaluated, you should post the results to your course web site, ( on a separate but easily found page. ) You should include at a minimum the prototype screen shots that you have developed, results of user evaluations, and suitable documentation. The latter includes your menu tree, state diagram, and discussion of how your interface implements UI design principles. Your user evaluations should include information regarding the demographics of the users who were questioned. ( How many people did you query, how old were they, what genders, are they frequent game players ( on computers or in real life ), are they fluent in English, or any other relevant information. )

## **Optional Enhancements:**

It is course policy that students may go above and beyond what is called for in the base assignment if they wish. These optional enhancements will not raise any student's score above 100 for any given assignment, but they may make up for points lost due to other reasons

For this assignment you may want to change your interface based on the feedback you get from potential users. In this case your posted results should include both the original and final interfaces, and an explanation of the changes made and why. ( And the user evaluations of both the original and revised versions. )