

## CS 3053

### Project – Personas and Scenarios

*Due Tuesday 2014.02.13 at the beginning of class.*

#### **Overview**

In this assignment you will gain experience with conceptual design and apply it to refine the main window of your collection browser. In class, we had several group exercises to identify relevant application functions, organize them into categories, link them with user concepts, and speculate about potential users and how they might be likely to interact with your browser. Out of class, you will use the techniques that you practiced in a second round of conceptual design. Individually, you will write several new personas and scenarios, then implement an additional window in your application to display the scenarios. For this you will also utilize a simple file reader to load the title and description of each scenario. As a group, you will gather your personas and scenarios into a portfolio, choose one persona and scenario to focus on (for now), create a flowchart of the scenario, then do a cognitive walkthrough roleplaying the persona.

The group tasks in this assignment are likely to require a significant amount of team face time. Be sure to leave plenty of time for your team to complete the group tasks! You must complete **all** individual tasks before proceeding to group tasks.

#### **Individual Tasks**

All individual tasks must be completed entirely on your own.

**#1: Review** the slides on usability, conceptual design, and utility from class. **Think** about which principles of usability and utility are especially important for the success of your application.

**#2: Write** three personas that describe potential users of your application. Strive for relevant diversity; that is, vary details (name, age, gender, personality, culture, capabilities, education, employment, etc.) to emphasize aspects that might significantly affect usability or utility. Format each persona as a single paragraph and give it an evocative title (not necessarily their name).

**#3: Write** a scenario for each persona, including details about why, when, where, and how they would use your application. Include enough variation in your scenarios to get a good sense of the major paths users might take through your app. Format each scenario as a single paragraph and give it an evocative title.

Useful personas and scenarios can vary widely in length. You'll also develop an individual style. I suggest aiming for about 1/4 page of single-spaced text each. It's hard to get enough detail to inform design in less space than that! Scenarios tend to be a little longer than personas.

**#4: Edit** four text files to store the titles and descriptions of your personas and scenarios. Since bundling resource files inside Java applications isn't straightforward, I created a new package called `edu.ou.cs.hci.resources` package to do that for you. The four files to edit are in the `personas` and `scenarios` subdirectories of the new package. The Gradle build is configured to copy any non-`.java` files in the source tree into the same jar file as compiled class files. This means the text files will accompany your application and can be easily accessed in your code.

**#5: Implement** a new frame to display your scenarios. Make a copy of your team's integrated build from the previous assignment. Add code to create, layout, and display a second frame for your scenarios. In the frame, lay out a single-selection `JList` of scenario titles alongside a non-

editable `JTextArea` that shows the description of the currently selected scenario. Create a `ListSelectionListener` to update the text area whenever a different scenario is selected.

**#6: Implement** code to read the text files and populate the new list and text area. Copy the new package (with your edited text files) into your build. The new `Resources.java` class provides a `getLines()` method to “slurp” each text file into an `ArrayList` of strings. You can use this method to easily read each of the four text files.

When your app starts, show both the existing wireframe and your new frame. Make sure one of the scenarios is selected when your app starts. Don’t forget to gracefully handle the special case of zero scenarios because the text files are empty or reading them somehow fails!

To **turn in** your individual work, run `gradle clean` to reduce the size of your build. Zip your entire `project` directory. Submit your zip file to the “Individual - Personas & Scenarios” assignment in Canvas.

### **Group Tasks**

*Complete all individual tasks before proceeding to group tasks.*

**#7:** Discuss your individual personas. Assess the relevance of each one to your project theme. Rank them by relevance and select the top **three**. Do the same for your individual scenarios.

**#8:** For each selected persona, determine *which* of the ten usability principles it most directly confronts, *how* it does so, and speculate on *how* you could refine your wireframe layout to make it more usable for the personas. For each selected scenario, determine *which* of the nine utility principles play the most important role, *whether* the scenario is detailed enough to understand that role, and *how* the scenario might be improved by describing it more completely.

**#9:** Narrow your choices down further to a single persona and scenario. Develop a flowchart showing the pathways of the persona’s activities and choices through the scenario. Walk through the scenario **twice**, with a different team member role playing the persona each time. Discuss the questions on the Flowcharts and Cognitive Walkthrough slides from class. Did the conceptual design process work for you? Draw conclusions about how your individual and group efforts on conceptual design tasks could be improved.

**#10:** Decide which one of your scenario frame implementations, or combination of them, to carry forward to the next project assignment. Integrate the necessary code into your team’s shared build. This will be the build that you all start from in the next project assignment.

**#11:** Report on your discussions, assessments, choices, and conclusions from tasks #7–#10. Write this together. Be objective, clear, detailed, and thorough, yet succinct. Between 1.00 and 2.0 pages of writing should be about right. Use regular paragraphs and standard formatting (12 point font, 1 inch margins, etc.) Please include a header (not too many lines) on the first page with your team number, name/logo, and list of member names. Attach your flowchart at the end and refer to it in your writeup where appropriate.

To **turn in** your group work, go to the “Group - Personas & Scenarios” assignment in Canvas to submit your results as a PDF. Only one team member needs to turn in the group component.