Team Project Deliverable #3
Analytic Evaluation
Worth: 5% of your overall course grade
Due: Wed., April 11 by 11:59p.m.
Team member assessments due: April 13 by 11:59 p.m.
Last modified: 1 April 2018

### **Overview**

In this phase of the team project your team will apply an analytical evaluation method, covered in lecture and the required readings, to the low fidelity prototype developed in TDP#2. Your team has the choice of using either the cognitive walkthrough or heuristic evaluation technique. After conducting the analytic evaluation of the application, you will present your results in a report.

# Steps

- 1. **Choose an analytical evaluation method.** Pick either cognitive walkthrough or heuristic evaluation as your method of analytical evaluation of your low fidelity prototype.
- 2. **Conduct an analytical evaluation.** Use the appropriate worksheet to aid in your completion of the chosen analytic evaluation. Note that you are required to assign scope and severity to all problems regardless of evaluation method chosen.
- **3. Analyze results.** Once you have performed your analytical evaluation, as a team, analyze, and synthesize the data you have collected. What patterns or themes emerged? What possible usability issues have you uncovered? What are the scope and severity of these issues?
- 4. **Write report.** Write a formal report on what you did and what you learned, according to the requirements below.

## Specific Requirements

Through OSBLE, you are required to hand in a written report in .pdf format. Your report should begin with a title page that includes the following lines, in 14 point Times-Roman font, centered both from top-to-bottom and left-to-right:

Analytic Evaluation:
[Cognitive Walkthrough or Heuristic Evaluation]
Team Members' Names
Date

Your report should be between 1.5 to 3 pages (not including title page, annotated images, worksheets, or references), single-spaced (11 pt Times-Roman Font, 1 inch margins), and have a single title page. Your report

must include the sections described below. Each section must begin with the section name shown in italics, as illustrated below.

**Abstract**. In 150 words or fewer, succinctly summarize what you did (for example, "We completed a heuristic evaluation of our low fidelity prototype"), and what you learned (for example, "Our evaluation yielded x key findings/usability issues:...").

**Evaluation Tasks**. Briefly list the tasks evaluated in your analytic evaluation. *Note: you will need to cover at least your 5 core tasks but are free to add additional tasks if desired.* 

**Findings**. This section describes in detail your findings. What usability problems were uncovered? Please be as detailed as possible here and provide evidence from your analytical evaluation to back up your findings and make them more vivid.

**Usability Problems**. Here you will present a table which briefly summarizes the usability problems uncovered in your analytic evaluation as well as scope and severity of each. **This table is required for both methods of analytic evaluation.** See "Severity and Scope Ratings" at the end of this document for reference.

| #   | <b>Usability Problem</b> | Severity | Scope |
|-----|--------------------------|----------|-------|
| 1.  |                          |          |       |
| 2.  |                          |          |       |
| ••• |                          |          |       |

**Proposed Design Changes**. This section describes the ways in which you plan to change your design based on your findings. In addition to describing each change in words, **you are required to include annotated "before" and "after" sketches or screenshots to clearly illustrate each change**. Make sure to cite any relevant design principles as justification for your proposed changes and refer back to your usability problems table.

Analytic Evaluation Results. Include the results of your analytic evaluation.

- One required depending on analysis method:
  - Cognitive Walkthrough:
    - Completed "Cognitive-Walkthrough-Worksheet.docx"
  - Heuristic Evaluation:
    - Completed "HeuristicEval-Sheet.docx"
- Any other documents/worksheets created as part of your analysis

### Assessment

Your document will be assessed according to the structured grading rubric available on OSBLE. Please carefully read the rubric before starting this phase of the project.

### Assessing Team Members' Contributions to Project Deliverables

All team members are expected to contribute equally to all project deliverables. Early in the process of completing each deliverable, I recommend that your team devise and agree upon a plan that equally distributes the work across team members, and that your team leader take the initiative to ensure that each team member

performs the work that was assigned to him or her. To ensure that all team members get credit for the work that they do and that team members do not "free load," I require that team members assess each other's (and their own) contributions toward each project deliverable. You are required to submit this assessment through OSBLE within 24 hours of each project deliverable resubmission deadline. For further details on how to do this, please carefully read the Team Member Assessment document. For these two project deliverables, submit your assessment through the "Team Member Assessment for Low Fidelity Prototype Study" assignment.

## Handing in the Proposal

Submit a **.pdf** file containing your report through OSBLE by the due date. (Use the "TDP#3: Analytic Evaluation" assignment link.)

# Severity and Scope Ratings

Severity and scope ratings are included to communicate which problems are most important.

#### Severity

Severity is an assessment of a problem's impact on user performance. The following scale is derived from Dumas and Redish (1993):

- **Severity 1** ("Showstopper" (Must be fixed)) problems prevent users from completing a task. Participants give up after a few tries or they need a hint to continue. For example, users consistently select an incorrect dialog option and do not know what else to do.
- Severity 2 ("Major problem" (Must be fixed)) problems create significant delay and frustration. Participants continue to get lost or to use inefficient methods to accomplish a goal. For example, the lack of feedback to users confirming what they have just done causes them to do the task over to make sure they did it correctly.
- **Severity 3** ("Minor problem" (Should be fixed, but lower priority)) problems have a minor effect on usability. For example, an unusual term in a dialog causes user to hesitate for a moment before making the correct choice.
- **Severity 4** (*improvements -"Cosmetic issue"* (*Fix only if time allows*)) while not problems per se, improvements will make the task even easier to perform or learn. The interface doesn't hamper users but there is something that could make it even better.

#### Scope

Scope is an assessment of how frequently users will encounter a problem. The more users that a problem affects, wider its scope.

- Scope 1 problems will affect almost all users.
- Scope 2 problems will affect many users.
- Scope 3 problems will affect few users.