# CST315 Software Enterprise: UCD / Personas / Prototyping (Fall 2015 revision)

## **Objectives:**

- Apply the User-centered design process from ISO 13407 "in the small" to elicit the value of iteration
- Apply techniques for persona development
- Identify Users, Goals, and Tasks
- Develop proficiency in low-fidelity prototyping

### **Overview:**

In your senior year, you will work on a team capstone project we refer to as an *eProject*. eProjects are industry-mentored projects where students work on a real-world project. The hope is that this real-world experience will provide you perspective and context, as a senior, for the upcoming "working world." Industry participates because they are interested in you as potential hires, and to provide a general professional service ("pay forward") for the community. Faculty are interested as the capstone project represents a *synthesis* process, or "can our students integrate the mastery competencies they have developed during their undergraduate experience."

A real problem the faculty faces with the eProject process (your capstone projects next year) is how to effectively assign students to teams. Decisions are made on a number of criteria – skills required of the project, desires of the industry sponsors, desires of the students, desires of the faculty, scheduling, and a whole lot more. For this lab you will 1) develop personas representing the categories of stakeholders of such a system, and 2) generate "low fidelity" hand-drawn *sketches* of the UIs for such an application. Finally, you will do so in the context of the UCD process (just to emphasize *process* again!).

# eProjectMatch.com: Find your capstone partners online!

You are asked to develop a web/mobile application that determines who should be your eProject partners based on a series of interactions on a website.

## Task 1 (group):

For this task, you should plan to gather your team for an hour long online meeting. An shared GoogleDoc and a way to share drawings will be needed. Your process for doing this lab should follow the UCD process "in the small." Namely:

#### 1) Understand the context of use –

Create simple "personas" for each type of user that could use the site. These can be simple in that you do not have to write multiple paragraphs, just a few sentences. Use the "Rhonda Wilson" example from your reading as a guide as to the length and detail. Be sure to <u>identify goals</u>, and <u>represent</u> each category of user you may have. You must have at least three personas. *NOTE: We expect you to spend significant time on this step. We expect you to conduct at least rudimentary research – what kind of research can you do within your group, in the discussion board, by asking friends, or via email?* 

#### 2) Define the User & Business Requirements

Document any further *assumptions* you have about both the technical and non-technical requirements of the site. (This should be brief and done quickly).

#### 3) Produce Design Prototype as "sketch(es)"

Starting on a piece of paper, or an online whiteboard, create hand-drawn sketch(es). (15-20 minutes)

### 4) Test Design Prototype

Have individuals outside of your group (ask on the discussion board) to review your sketch(es) and provide you feedback as to whether they is "directionally correct." As it is initial ideation your evaluations should be high-level, "are you on the right track" types. (10-15 minutes)

1. Plan Meets Requirements Develop! Understand Context of Use Define User & Test Design Business Prototype Requirements 4. Produce Design Prototype

A copy of this group work should be distributed to each group member after its completion.

#### Task 2 (individual):

Then iterate! Based on the feedback from the outside individuals, go back to steps 2 and 3 and revisit your personas and requirements, and then revise your prototype.

You should be able to complete an iteration (steps 2-5) during your meeting, then complete a 2<sup>nd</sup> iteration at a later time. Be sure to capture hand-drawn sketches by taking a screenshot or scanning in a document (if you draw them on paper).

#### Task 3 (individual):

Each person in the group must, individually, create a Pencil version of the 2<sup>nd</sup> hand-drawn prototype. Pencil is an open source UX prototyping tool available from <a href="http://pencil.evolus.vn/en-US/Home.aspx">http://pencil.evolus.vn/en-US/Home.aspx</a>. I do not expect you to become experts on this tool in the span of one lab session, but it is pretty intuitive to get started and create initial mockups.

#### Task 4 (individual):

Take a moment to answer the following questions:

- 1. Name some effective research techniques for developing personas
- 2. What is, in your opinion, the greatest strength of creating personas, and why?
- 3. What is, in your opinion, the biggest weakness in creating personas, and why?
- 4. Are personas sufficient for user modeling by themselves, or do you think they should be augmented by other techniques (if so, what techniques and why?).
- 5. Were your prototypes successful in iteration 1? (in other words, what was the goal of doing the prototypes?)
- 6. What is the value of a hand-drawn sketch?
- 7. What is the value of a tool-oriented sketch in Pencil?

### **Submission:**

For this lab submission, we expect you to submit individually in a Word formatted document:

- For Task 1, include your personas (step 1), assumed requirements (step 2), images of the hand-drawn prototypes (step 3), and summary of feedback from your external evaluators (step 4). (These should be the same for all group members.)
- For Task 2, indicate any revisions you thought necessary for steps 2 and 3 (personas and requirements) based on the feedback you received. Then create new sketch(es) yourself. We suggest you draw these on paper but you may also use a whiteboard and take picture of that instead. Again, indicate what you changed from iteration 1 and why you changed it.
- For Task 3, you can export your Pencil sketch(es) as PNGs and cut-and-paste into your word document.
- Task 4 is self-explanatory, include your answers to each prompt.
- When you submit your document to Blackboard, name it <asurite>\_UCD\_Persona\_Proto.docx. Please take a moment to reduce the size of large images so your submission file will not be excessively large. We do not need 10 megapixel images...
- As always, make your work presentable. Follow the instructions here carefully, ensure your images are readable, use proper grammar, spelling, and punctuation, and express your opinions in a clear, articulate style.