

# CIS 4930 / CIS 6930 User Experience Design

Project #2: Wireframing, due October 15<sup>th</sup>, 2015

## Project Overview

This is a group project. You will design the interface for a **mobile parking app for UF**, up to the point of **wireframe prototypes**. You will meet with a focus group of your target user population, generate design ideas based on your user research, and design the interface and task flow. Your group will present your design in class during critique.

## Project Detail

### *Selecting Groups:*

This is a group project. You may select your own groups, but you must group with other students in your own section (undergraduate students together, graduate students together). Groups may consist of 3 or 4 students **only**. Once you have identified your group, your group should send an email to the instructor listing your group members **and** sign up together on the Project #2 Groups page on Canvas<sup>1</sup>. **Due date for finalizing your groups and notifying the instructor is 11:59pm on Sunday September 20<sup>th</sup>**. A Discussion thread has been created on Canvas to assist students in finding groups.

### *Process:*

- **User Research:**
  - **Conducting a focus group.** The target user population for your app will be **UF students** (not faculty or staff). You should recruit and conduct a focus group of 6 to 8 target users from that population (undergraduate students or graduate students). You may not recruit users from the class, but you may recruit your friends and other classmates. You may **supplement** your focus group with individual interviews if you wish (but 6 to 8 of your users must be focus group participants). The goal of this user research is to identify the main user types to consider in your design, and what they need from such an app. You may consider using a design probe if similar mobile apps exist for other contexts.
- **Design Process:**
  - **Creating personas.** Based on your user research, create 2 to 3 user personas that fit the user types you have identified through your focus group. Use the persona template described in class to create consistent, thorough personas. Remember: a persona does not reflect an individual user, but should reflect the main themes uncovered during your user research.
  - **Brainstorming design ideas.** Follow-up persona creation with brainstorming sessions to generate design ideas surrounding the user needs of your personas. Rate each design idea as to how well it satisfies each main user need. Refine, combine, and merge the brainstormed ideas through the use of affinity diagrams. Select one complete concept as your design idea for the rest of the project.

<sup>1</sup> Find this page by clicking on the “People” page on the left-hand sidebar, and choosing the “Project #2 Groups” tab, or via this URL: <https://ufl.instructure.com/courses/321292/groups#tab-15882>

- **Creating scenarios and storyboards.** Sketch the best complete design idea through scenarios and storyboards to illustrate your design idea and how it meets user needs. You should create 3 to 5 scenario + storyboard pairs to illustrate your design idea. Your scenarios need not individually showcase all features of the app, but the set of scenarios should span the range of features.
- **Design Solution:**
  - **Creating wireframes.** Draft the task flow for your app based on your understanding of the user's conceptual model of the tasks they will perform with the app. Then, create a set of wireframes to illustrate exactly where in your app each feature will live and how users will access it. Begin with the app's home screen and create wireframes for all main screens, noting the transitions between screens and what interactions can be performed. You are encouraged to consider and note gesture interaction, both standard and novel gestures, in your design.
  - **Finalizing a solution.** Create the required documentation of your design process and all deliverables to prepare to present in class (see below). This document should be prepared as if you will be handing off this design to a development team to begin implementing it (your **audience**). Document the products of your design process as thoroughly as necessary to make this hand-off smooth and error-free. Make sure to document both the **what** (design solution) and the **why** (design rationale).

***Additional Guidance:***

It is recommended that you iterate through the three phases of the Design Process to refine your design ideas, rather than simply selecting the first design that you think of.

Consider the context of use for this mobile app. Feel free to use onboard sensors to augment the features of the app as desired by the target users. For example, a GPS sensor can determine the speed at which a device is moving; accelerometers can determine the cadence of a person walking or running; a microphone can be used to infer the ambient noise level in the surrounding context; etc. Recommended form factors are the Apple iPhone 5 or 6 iOS models, or the Google Nexus 5 or HTC One Android models.

Do **not** consider graphic design elements such as color and font and other look-and-feel aspects of your design. Wireframes which go beyond the level of detail suitable for wireframes will be downgraded.

***Recommended Timeline:***

- September 17th: Assignment handed out, start finding group members
- September 20th: Finalize group members, start conducting focus groups / interview(s)
- September 27th: Focus group / interview(s) conducted, start walking the data, writing personas, brainstorming, scenarios, and storyboarding
- October 4th: Design process finished, start designing task flow and drafting wireframes
- October 11th: Wireframes drafted, start finalizing deliverables
- October 15th: Assignment due, in-class critique

### ***Deliverables:***

Each group will produce one poster presenting your final design idea, and one paper documenting your design process.

Posters can be hand-sketched or digitally produced, but must be printed out to bring to class on the due date, **and** digital versions should be submitted (either a photo or scan if hand-sketched are acceptable) via Canvas by the assignment due date. Accepted file types for the poster will be .pdf, .png, or .jpg. The poster must be of size 11" x 17". Please note: this is a poster, not a novel or a product specification; text descriptions should be brief. Include only enough text to express the relevant information. The poster should include all team members' names in the lower left-hand corner. No UFIDs. Only one submission is required per group.

Papers must be printed out and brought to class on the due date, **and** submitted via Canvas by the assignment due date. Papers should be printed single-sided and stapled in the upper-left corner. Accepted file types for the paper will be .pdf **only**. Papers should be 8 to 10 pages in length (not counting cover sheet and table of contents), and should use 1.5 spacing in Times New Roman font size 11 for the main body text (headings can be larger). Names of all team members must appear on the cover page. No UFIDs. Only one submission is required per group.

Each deliverable's required components are as follows:

- **Poster (for critique):**
  - Documentation of the mobile app context, the user needs you uncovered in your focus group / interview(s), and your main user persona(s)
  - Documentation of the mobile app design, illustrated through storyboards
  - Documentation of the wireframes for your app design, with the use cases shown in the storyboards highlighted or marked on the wireframes
- **Paper:**
  - Documentation of your user research (focus group / interview(s))
  - Documentation of your user personas
  - Documentation of your brainstorming process
  - Documentation of your scenarios and storyboards
  - Documentation of your task flow and wireframes

You should document the **what** and the **how** for each component of your paper:

- **What** is your final outcome for the specific phase (e.g., report on your user research results, your persona(s) themselves, etc.)?
- **How** did you come to this outcome (e.g., tell us about your process and the key elements which led to your conclusions, your design rationale)?

Be clear and concise. Organize your thoughts and ideas into a usable deliverable document. Include only the information relevant to the design decisions your team made; a chronological report of your project activities is not the goal. Include photos or scans of all artifacts produced.

During class on the due date, we will conduct an in-class critique of the design solutions. You should come prepared to speak for 2-4 minutes about your solution, and to critique your fellow students' solutions. **Please note:** due to time constraints, it is possible that not everyone will have a chance to present. This will not affect your project grade.

### ***Peer Evaluation:***

As part of this project, there will also be a peer evaluation component, in which group members will be rate themselves and each other's contributions to the group project. These will be filled out individually on Canvas and should be submitted before the assignment due date. Links to the Peer Evaluation for Project #2 will be announced separately by the instructor. Evaluations will be kept confidential.

### ***Materials and Supplies:***

The course is able to offer some materials and supplies for use during the design process which may be of use to your group, including: flip-board charts, large-format paper, Sharpie markers, and post-it notes. Your group may send a representative to the instructor's office hours to pick up the materials. You are not required to use these materials but you will be required to show evidence of using the methods we cover in class, some of which rely on these types of materials.

---

## **Project Grading**

- |  |     |
|--|-----|
| 1. Paper (70%):                                  |     |
| i. User Research (Communication of Process):     | 10% |
| ii. Design Process (Communication of Process):   | 25% |
| iii. Design Solution (Communication of Process): | 25% |
| iv. Execution:                                   | 10% |
| 2. Poster (20%):                                 |     |
| i. Communication of Overall Process:             | 10% |
| ii. Execution:                                   | 10% |
| 3. Peer Evaluation†                              | 10% |

The goal of this project is to give you an initial experience with conducting and analyzing user research, with using user research results to drive ideation, with refining design ideas through scenarios, storyboards, and wireframes, and with documenting and communicating your design process and outcomes. Each component of this project will be evaluated based on the degree to which you engaged in creative thinking versus analytical thinking, evidenced through your deliverables.

†10% of group members' individual grades for this project will be based on the confidential peer evaluations by their group members.

---

## **Project Rubric**

### **Paper Components**

#### ***User Research (10%)***

- (5 pts) Did you conduct a focus group with the required number of target users?

- (5 pts) Did you draw realistic and thorough conclusions from the user research as to what users of different types want or need from the mobile app?

### ***Design Process (25%)***

- (5 pts) Did you develop and detail the required number of persona(s) that reflect the range of target user types for this mobile app?
- (5 pts) Did you generate and refine your brainstormed ideas effectively through the use of good brainstorming techniques and affinity diagramming to group concepts by theme, opportunity, and breakdown?
- (5 pts) Did you generate the required number of scenarios highlighting key user paths through this mobile app that span the range of features in the app?
- (5 pts) Did you pair each text-based scenario with a sketched storyboard that effectively showcases the key features of the product design?
- (5 pts) Did you iteratively engage in the design process in order to achieve a final design idea that merges, refines, and improves on earlier iterations?

### ***Design Solution (25%)***

- (5 pts) Did you generate a task flow diagram that represents a realistic conceptual model of the tasks that can be performed with this mobile app?
- (10 pts) Did you generate a thorough set of wireframes documenting all transitions and interactions for each screen? Do your wireframes include all features of this mobile app at the appropriate level of detail?
- (5 pts) Does the interface design derive from the user intent? Does the solution meet the needs of the articulated persona?
- (5 pts) Do the scenarios and storyboards effectively highlight the best features of the design for this mobile app?

### ***Execution (10%)***

- (10 pts) Paper execution (documentation of required elements, visual craft, and professionalism)

### **Poster Components**

#### ***Communication of Process (10%)***

- (10 pts) Did you effectively summarize and communicate your design process, including the mobile app context, user needs, main user persona(s), storyboards, and wireframes?

#### ***Execution (10%)***

- (10 pts) Poster execution (documentation of required elements, visual craft)

\*\*\* **Note:** grading of design projects is inherently subjective. There cannot be a “right” and a “wrong” answer to a design problem, only a design solution that meets or exceeds the user’s expectations. We can provide you the above guidelines of what we will be looking for in your design solutions, but in general, if you are applying yourselves creatively and generating interesting ideas, you will do well on this project. No examples from previous years will be provided due to the overlap in project topics.