Final Report

User and Task Analysis

Description:

This phase mainly consists on interacting with potential users in order to identify their needs, goals, and desires. Identifying all these factors is critical for the designer to narrow down both the issue to tackle with the design and the specific target user base for which this product or solution will be optimized.

Example:

A clear example of this phase is the user interviews that we performed in order to formulate a root concept and preliminary project proposal as out first individual assignment in HCI 440. With the goal of creating an appropriate root concept, I interviewed various Japanese citizens living in Tokyo and was able to identify various common issues that affect them in their daily lives. By talking with them and questioning them about their daily lives, their daily commute and work/school activities, I was able to better understand their needs and wants. I learned that their common issue has to do with their daily commute, they mentioned that not knowing which trains and train cars are full or empty very inconvenient since they would rather wait for a less packed train or move to an empty car if they only had access to this information.

Insight:

The main lesson that I learned throughout this phase is to try to be open to discovering new ideas and solutions. I believe that due to the current trend of making an application or an electronic solution for every single problem may often obfuscate or limit a designer's available resources. While technology is useful, it does not replace listening to the users and truly understanding their problems or individual circumstances. There could be a limitless number of solutions to a problem, but in order to find the best one we need to be open to the user's feedback.

Conceptual Design

Description:

This stage of the design process focuses on utilizing the information acquired from the users during the User and Task Analysis as our basis for creating a preliminary design. This design is very basic and mostly represents the broad idea, an outline of what the solution is attempting to achieve and the possible steps, experiences and interactions that may be required for the solution to address our users' needs.

Example:

An example of this phase can be seen in the second part of my first individual assignment for HCl 440. In this part, I came up with a root concept based on the information about the user's needs and wants that compiled via interviews. Their identified core issue, not knowing when a train or train car is full or empty, was studied carefully and multiple solutions were considered. This identified need and the most promising solution served as the root concept of this preliminary proposal.

Insight:

The main lesson I learned in this phase was to keep this design simple and focus on the overall idea. It is easy for a designer to become excited about a specific solution and start thinking of things such as the physical layout, colors, and the user interface. While all of this is important, this is not the time to worry about those details. This phase should be all about finding the various paths that can reach to the goal based on the users' needs. In other words, this is the time to propose multiple solutions and try to think about the benefits and disadvantages of each of them.

Interaction Design

Description:

In this phase, we follow to further refine the conceptual design of our solution by adding more details, defining the layout, user interface and screens of the interaction. Here, we take the concept that we settled on during the Concept Design phase and we flesh it out by creating sketches and prototypes of what the solution will look and feel like to the user.

Example:

My personal example of this phase takes place during the Team Project 3. Here, my team and I created a series of wireframes and sketches in order to add detail to the core concept of our application. This is when the main idea of the project finally took physical form. We each created our own wireframes based on our interpretation of the users' comments, wants and needs. We then followed to analyze each other's designs and integrated the best ideas into a final wireframe and interactive prototype. (Figure 1)

Insight:

Throughout my experience in this phase I realized how difficult it is to make an all-encompassing set of wireframes for all the possible use cases or scenarios. I believe that this is really valuable, since you do not normally think of every single permutation when making the original design. It isn't until you start physically placing each page, button and menu that you understand that some ideas may not work as well as you thought or that the flow of the application needs to be reworked.

Fernando Araujo

Evaluation

Description:

This is the final phase of the design cycle. In this stage the main goal is to go back to the group of target users for testing and using their feedback in order to restart the cycle if necessary. During this phase we instruct the users on how to interact with the application and take metrics regarding how intuitive, useful and efficient our design is.

Example:

An example of this phase can be observed in the Team Project 4. Here, we created an interactive prototype of our Museum application. We then followed to ask the users for feedback. We allowed them to explore the application, observed their behavior and took notes about their interactions, comments and impressions. Finally, we utilized these notes to identify parts of the application that need to be reorganized or redesigned. For this application, some of the mentioned changes include removing certain buttons and adding pages that were skipped over during the Interaction Design phase. With these changes in mind, the design cycle will be restarted with the goal of further refining the design until all the problems are addressed. (Figure 2)

Insight:

For this phase, the most important lesson I learned was how difficult it is to reach a balance between allowing the users to explore the application freely and instructing them to do a specific task. While it may seem natural to guide the user through the application for the first time, we must remember that this is not how people will interact with the application in the real world. Instead, I believe that instructing the users should be done sparingly and only for certain key tasks that we want to make sure that are efficient. The rest of the application should be explored organically, this seemed to generate a lot more feedback and even discover issues that we did not think about before.

Fernando Araujo

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Figure 1

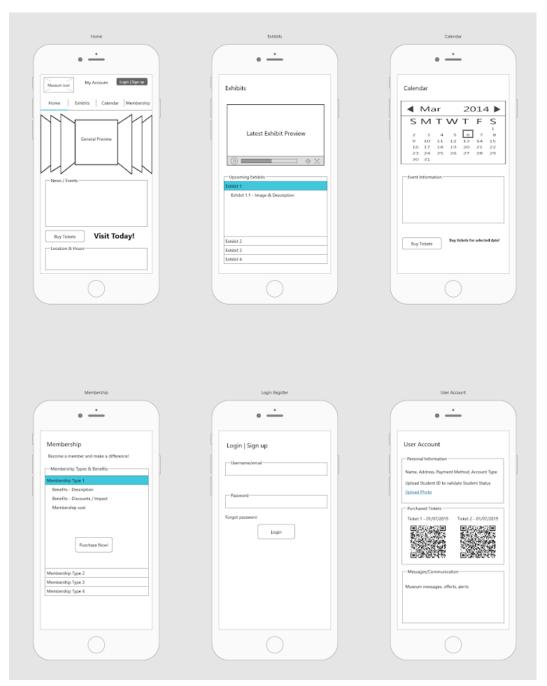


Figure 2

BEFORE



AFTER

