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Design Project 4: Design Evaluation

This artifact outlines how the clickable prototype conforms to the general design principles, guidelines, and theories that we explored in lecture. Furthermore, it reviews details specific to the affordances of iPhones and iPads. Finally, this artifact details the information gathered during cognitive walkthroughs of the design.

**Guidelines**

Guidelines are low-level focused advice about good practices and cautions against danger. The following details an assessment of how Mr. Party abides to the mobile design guidelines discussed in lecture:

* Spatial consistency:
  + The buttons and text appear consistently throughout the user interface. For example, back and cancel buttons always appear at the top left corner of the screen throughout the application.
* Show high-level information:
  + The header of the application tells the user what page he/she is viewing. For example, if the user is looking at the home feed, the header has a label that says “Home.” Furthermore, if the user is looking at the users in a party, the header has a label that says “Users.”
* Minimize number of steps (taps):
  + On the live version of Mr. Party, parties are a completely separated from the social network. In fact, a user cannot do anything else in the app while being in a party. As a result, the host of the party cannot look at the social network without ending the party. However, in the clickable prototype, parties are integrated into the social network. The following is a table showing the number of taps required to perform certain tasks from the home screen:

|  |  |  |
| --- | --- | --- |
|  | Clickable Prototype | Live Version |
| Create a party | 3 | 4 |
| Joining a party | 1 | 3 |
| View the song playing in a party | 0 | 3 |
| Viewing the number of users in a party | 2 | 4 |

* Minimize data entry:
  + The only data entry depicted in the clickable prototype is the text field for party name. In order to create a party, the user will have to type in a party name.
* Focus on goals and optimize tasks:
  + The goal of this redesign was to make parties as simple as possible. As outlined in the “Minimize Number of Steps (Taps)” section, the tasks required to complete each goal has been reduced.
* Emerging standards from manufacturers
  + Although it is not shown in the clickable prototype, Mr. Party has been adapted to support dark mode on iOS. Dark mode was a new standard introduced last year from Apple.

**Principles**

Principles are mid-level strategies or rules to analyze and compare design alternatives. The following details an assessment of how Mr. Party abides to Schneiderman’s 8 Golden Rules discussed in lecture:

* Strive for consistency:
  + Mr. Party uses consistent colors, layout, and fonts throughout the interface.
* Cater for universal usability:
  + In an effort to make the platform more versatile, the live version of Mr. Party works for both an iPhone and iPad. In other words, the design dynamically adapts to work for both the smallest iPhones (iPhone 12 Mini) and the largest iPads (12.9-inch iPad Pro).
* Offer informative feedback:
  + In the clickable prototype, the profile picture of the party host gets outlined in green when the user joins his/her party. This small design element gives feedback to the user about which party he/she is in.
* Design dialogs to yield closure:
  + In the clickable prototype, if you are about to end or leave a party, a dialog box is used to confirm the decision. This provides the user an extra layer of closure if he/she chooses to leave/end the party.
* Prevent errors:
  + In the clickable prototype, the user cannot play music while in a party. If the user attempts to play a song from the home feed while in a party, a dialog box appears for the user to confirm his/her decision to leave the party. This dialog box will be useful to prevent users from accidentally leaving when they do not want to do so.
* Permit easy reversal of actions:
  + On the live version of Mr. Party, if the user leaves the party and rejoins, the user will be returned to the round of voting in which he/she left off. As a result, the user does not have to worry about losing all of the votes cast up to that point.
* Keep users in control:
  + The users prompt every action that happens within the application. As a result, the users are always in control.
* Reduce short-term memory load:
  + There is nothing that the user would need to keep in memory to effectively use the interface.

**Theories**

Theories are high-level widely applicable frameworks to draw on during design and evaluation. The following details an assessment of how Mr. Party abides to a couple of theories that we discussed in lecture:

* Consistency theories:
  + The language, colors, font, and layout are consistent throughout the user interface.
* Contextual theories:
  + The interface is going to adapt depending on the location of the user. For example, in the clickable prototype, a local party will appear at the top of the feed if there is a party locally

**Technology Specific Affordances**

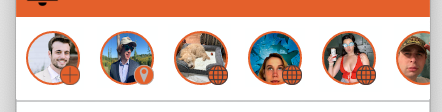
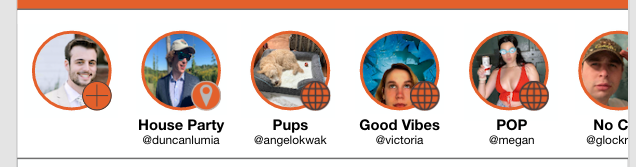
The application is developed in Xcode using Swift. The user interface is built using a relative layout with constraints dictating where different elements will appear in the user interface. As a result, I was able to adapt the interface to work with many screen sizes (including iPads) with minimal effort. On the home screen, a table layout is used to display posts. As the user scrolls, pagination will be used to fetch additional posts. The party selection on the home screen in the clickable prototype can likely be developed using a grid layout with pagination.

The clickable prototype features two dialog boxes. The first dialog box appears if the host of the party attempts to leave (by pressing the “X” button or playing a song). The dialog box confirms that the user wants to end the party. This information is important because if the user ends the party, it will end for everyone else in the party. The other dialog box appears if a party joiner attempts to leave (by pressing the “X” button or playing a song). The dialog box confirms that the user wants to leave the party. Since the application is designed for a touch interface, there is not a default selection that can be triggered by clicking enter.

Finally, the design features one text input. This text input is used for the user to enter the party’s name. The party name appears on the home screen below your profile picture and above the username.

**Cognitive Walkthroughs**

In an effort to make my design to a state where it is ready for development, I performed two cognitive walkthroughs. First, I reviewed the design with one of my friends who is a user of Mr. Party. He suggested that I add the name of the party and the name of the host under the profile picture. Below are two images depicting before and after the change:

* Before:
  + 
* After:
  + 

Finally, I performed a cognitive walkthrough with one of the developers at Mr. Party. He was blown away by the changes and did not have any design recommendations.