Awesomesauce

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Evaluation Plan and Prototype Rationale for Photo Editing Mobile Application

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EVALUATION GOAL

Our main goal when designing our mobile application was to create a simple user interface with recognizable elements. We wanted to combine elements of multiple applications into an easy to use format that would minimize the effort required by the user. The following is a list of evaluation goals, ranked in order of importance, that will help us ensure that we've achieved this goal.

- understand how to use tab layout
- know what each tab is for
- know where to get help
- know how to save the image
- understand how to make different adjustments
- understand that they can make different adjustments
- how to apply and adjust filters
- how to add and remove a border
- how to add and adjust text
- know how to undo
- know how to redo
- know how to start over
- understand how to save to presets

EVALUATION DESIGN

Type of Evaluation

We will perform our evaluation using a combination of the 'observation' and 'interview' methods covered in class. Combining these two methods together gives us both subjective and objective responses, covering most of the spectrum of qualitative data. With the observation method we will be able to see any problems that may arise even if the user isn't aware of them. With the interview method we will be able to get feedback from users about any problems they ran into and any other thoughts and opinions they had while using the application. Using both methods, rather than just one, gives us a better evaluation of our application overall.

Representative Users

Ideally we want to test our application with a wide range of users since our application is supposed to be easy to use. Therefore we want our application to be evaluated by someone who has photo editing experience, as well as someone who has no experience whatsoever. We want someone to test our application who has previous knowledge of the various elements we've included. To fill this role we've chosen our friend Matthew Eisler who has extensive knowledge of photo editing applications. Since we also want to test our application with an inexperienced user we've chosen our friend Bryce Taylor, who has almost no experience whatsoever with photo editing. In order to cover the broadest spectrum we've also chosen users from different age groups with different knowledge and experience. We have chosen Debbie Paxton who has had many years of experience with film photography, but little knowledge of digital photography. We also felt it was important to get the opinion someone from a younger generation who has grown up with cell phones and uses them constantly. Therefore our final evaluation will be done with Kasidi's cousin, Michelle Bellanger.

In order to cover the widest range of representative users, we feel it's important to test our application with different genders and different age groups. Bryce Taylor is an IT professional in his mid-forties with very little knowledge of cell phones in general. Matthew Eisler is in his mid-twenties and recently graduated with a degree in computer engineering. Debbie Paxton is in her late sixties and recently retired. Michelle Bellanger is a fifteen year old high school student. While obviously these people don't represent everyone, we feel they are members of very different groups and evaluating our application with all of them should help us see if our application is usable by a diverse audience.

Evaluation Plan

We will be conducting our evaluations in an office at Ashley's house. It is a quiet environment with access to a computer where the users can evaluate our interface. We are going to be observing the users as they evaluate our interface and we will make note of their actions and

responses. Once they have finished going through the application, we will sit down with them and ask them a series of questions while recording their feedback. This will allow us to acquire qualitative information about the application and give us the opportunity to learn of any problems that arose. Once we have completed the evaluations we will combine the feedback from our users with our own observations. From this we can determine where there are flaws in our design or issues that we hadn't considered and make the appropriate changes. We estimate that the sessions will last between 30 - 45 minutes depending on the amount of feedback the user has and how long it takes them to evaluate the interface. Even if the evaluations last longer than we are anticipating this won't be an issue for any of our users as we will be doing this over the weekend when they have no time constraints.

PROTOTYPE RATIONALE

We first decided we wanted to do a horizontal prototype so we could demonstrate all of the main components of our interface and give the user an accurate idea of what our application will encompass. We wanted to include the major functionality of our system in terms of allowing the user to switch between tabs and apply adjustments to images. The user only need to be able to perform one task per tab to understand how that tab functions so we only needed to give the illusion of a functioning prototype. Also we wanted to fix the problems that we found with our low fidelity prototype so we were able to add these elements into the system. For instance, saving an image, undoing a change, being able to view help, etc. Adding these to our medium fidelity prototype will allow us to get new feedback about these changes.

When deciding on what platform to use for implementing our medium fidelity prototype, we looked at the following options:

- Powerpoint
- Keynote
- Detailed Paper Prototype
- Minimal Coding
- Flash
- Xcode StoryBoard
- Balsamiq
- Axure

Based on the scope and complexity of our application we ruled out paper prototyping as an option because it does a poor job of accurately simulating our application. On the other hand, we ruled out minimal coding because it would be unnecessarily complex to build and would be relatively difficult to change later if we find severe problems with our design. We also ruled out Flash and Xcode Storyboard since these would pose similar problems while giving us little to no benefit over our other options.

At this point we had it narrowed down to the programs that were more geared towards creating interactive wireframes. We ultimately decided on Keynote because it fulfills the requirement of accurately simulating our application without being too complicated and time consuming. Keynote was chosen over Powerpoint, Balsamiq, and Axure because we have more experience working with the program and felt that this allowed us to build a better wireframe simulation overall. This also saved time because we didn't have to learn a whole new system just to design a wireframe which would almost defeat the point of a medium fidelity prototype.

Keynote lends itself well to the wireframe process due to the fact that you can create links between slides, giving the impression of touch interactions. Keynote also has various shading techniques that are useful to denote 'pressed' or 'selected' buttons. A button in an application has a perceived affordance that it can be pressed and with Keynote we are able to give visual feedback to let the user know that a button press has occurred.

It also offers many different shape and colour options which are useful when designing interfaces. More features of Keynote include exact sizing and location of elements, this makes placing elements in the same spot on every slide effortless. This is really important because subtle shifts in interface elements can break a user's immersion within the application.

For medium fidelity prototyping we feel immersion is especially important in the sense that it will give the user an actual feel for how the application will function; the user will see how to interact with the system not just how the system looks. Keynote is especially good at capturing this immersive element.

While we felt that Keynote was the best option it is not devoid of downfalls. One of the major short comings is the inability to simulate the user performing a swipe interaction. Due to the nature of touch screen phones we designed our application with swipe to be the main interaction with our system. Unfortunately this problem was present in all of platforms we considered so it didn't play a huge role in our decision making process. Another downside is that our Keynote presentation only works well on a computer, whereas our application is designed to be used on a mobile phone. The difference between these to mediums is vast in the way users interact with them with the exception being touch screen computers. Even then the computer is much larger than a phone and can't be held in your hand and therefore is still interacted with in a different way. Essentially this means that no matter what we do our prototype will be interacted with in a different way than our final product.

APPENDIX

Tasks for Evaluation

1. **Click next through tutorial**
2. **Click next through camera roll**
3. **Adjust contrast**
4. **Adjust brightness**
5. **Select Olden filter**
6. **Adjust Olden Filter**
7. **Add thick line border (3rd Border)**
8. **Add Text: Georgia**
9. **Edit Text**
10. **Save to Presets**
11. **Change image to Preset2**
12. **Save Image**
13. **Start Over**

Interview Questions:

1. **Were you able to complete each task? If not, which ones were difficult and why?**
2. **Did you understand how to interact with the system? if not, what was confusing?**
3. **Did you understand the different elements in the system? did you understand the purpose of all the buttons?**
4. **Was there anything within the system that didn't make sense? if not, what?**
5. **Was our application as easy to use as other similar photo editing applications? (Instagram, Facetune, etc.) if not, why?**
6. **Did our design help you achieve your tasks easily and efficiently? if not, why?**
7. **Was learning to use the system easy? if not, why?**
8. **Did you understand what the different tabs were for?**
9. **Now that you've used the system, explain step by step (step 1 being selecting a photo from the camera roll) how you would go about using a preset, then adding text and saving your changes as a new preset.**
10. **If you wanted to undo a change, how would you do this?**
11. **Did you like the layout of the application?**
12. **Did you have any specific problems with the application? if so, what?**
13. **Would you make any specific changes to this application to make it better? if so, what?**
14. **Did you enjoy the photo editing experience? why?**
15. **Would you use this application to edit your photos? why?**