

Criterion A

Problem Statement

My brother who is a digital artist has trouble keeping track of the colors he uses in his commissioned artwork and has trouble sharing colors with his online collaborators.

Scenario from the initial interview (see appendix 1)

My brother is a graphic artist who works on multiple projects. He deals a lot with colors, especially certain palettes of colors for each project. The way he currently stores his colors is through a separate document or a hidden layer in his photoshop canvas, which can often change when painted over or disappear. This caused him to have trouble keeping track of his colors as well as sharing his color schemes to those working with him on the same project. In addition, as someone who works with web design, my brother will sometimes need to display those stored colors in a format that is readable by his web development platform. My brother needs a way to not only create palettes to use in his projects, but he also needs a way to store them.

Rationale for the Proposed Product

I decided to write a program in Java because it allows me to develop fast and complex algorithms. It is also useful because even though my brother is currently the only user, other people may decide to use it as well. I have decided to use java for the following reasons.

- I am most familiar with it
- It works on many platforms
- It allows me to take an object-oriented approach
- I can use Java libraries, which gives me access to several useful functionalities.

Success Criteria

- Can create a palette from an image
- Can edit and remove palettes
- Can store and search palettes
- Can display palettes in a color format that can be used in programming environments.
- Swatches can be seen at all stages of the process
- Input needed for each field are clearly communicated
- Palette has other attributes which will allow them to be easily identified.
- Palettes are an appropriate size.
- Appropriate error handling for border values and incompatible data types
- User friendliness is appropriate for degree of specialization

Summary of client feedback on first prototype (See appendix 2)

My brother was satisfied with the features presented but found the GUI arrangement counterintuitive. This is the summary of his suggestions.

- displaying the Color Chooser GUI in another tab.
- GUI components should be listed from left to right to improve understandability
- Eliminated the option to add date and time of creation because it is not needed
- Add a place to display the palette in the search menu.
- Increase size of the table.

An annotated prototype has been added (See appendix 3)

Word Count: 400

Appendix 1: Initial Interview

***Not included in word count**

I know you have trouble keeping track of colors. Can you talk more about what you have trouble managing specifically?

There are two things. Sometimes when I'm painting (digitally), I will use several colors from a reference image so the colors in my painting are accurate. When I'm not using a color reference, I still like to store the color scheme of my painting to maintain consistency or to share it to my clients/instructors.

How do your color schemes get lost?

Well, when I store my colors, I usually just paint it on a separate layer on my photoshop canvas. So after I start working with a lot of layers, I sometimes have to go through all the hidden layers to see where my color palette is.

How do you create your palettes?

I use the eyedrop tool in photoshop or illustrator to pick up the color, then store the color in a hidden layer in the document, or a separate canvas entirely which I later save as an image.

How do you share your palettes to your clients/instructors?

I don't do it often, but if they ask for it, I just send them a screenshot of my palette. If I'm working on a web-based project, I will share it in an RGB or HEX color format.

What would you feel about me making a program that allows you to create palettes and store them all in one place?

Sounds cool. I wouldn't have to waste time searching my computer for the document where I stored my palette.

What are some things I could include that would make the program useful?

You could add some rudimentary stuff like the name of the palette and the date I made it.

How many colors are normally in your palette?

I try to keep it at around 5 or 6.

Appendix 2: Prototype interview

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[manual input menu]

My brother: Looks pretty good. How am I supposed to use the color picker?

Me: I honestly don't know. I'm guessing you would have to click on it and I'll have to program it to show the colors.

I think right now it looks a bit cramped. The attributes stuff is pretty clear but after that, I don't really know what I have to do next.

[create from image menu]

It looks pretty empty.

There's supposed to be a window that displays the image.

Ok, then that looks pretty good. And it automatically extracts the color?

Yes.

I don't know how that would work but you should add an option to edit the palette in case the colors taken from the image isn't the one I want.

[search menu]

Again, this looks pretty empty. How would the search even work?

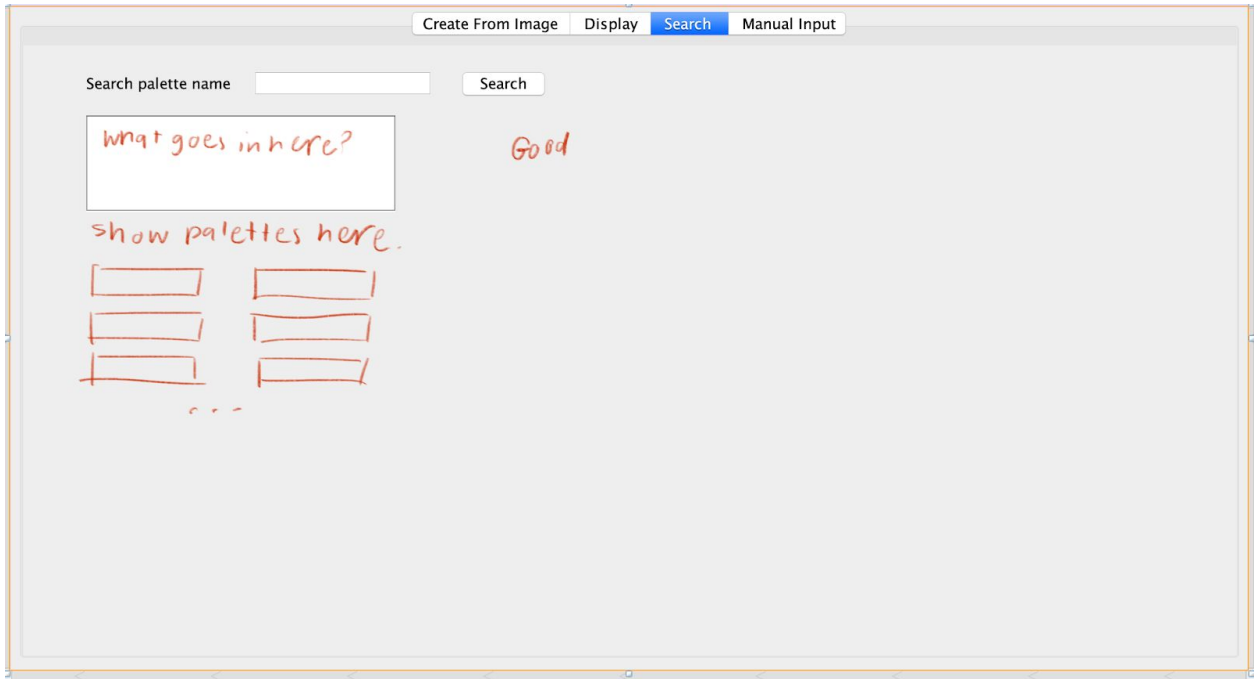
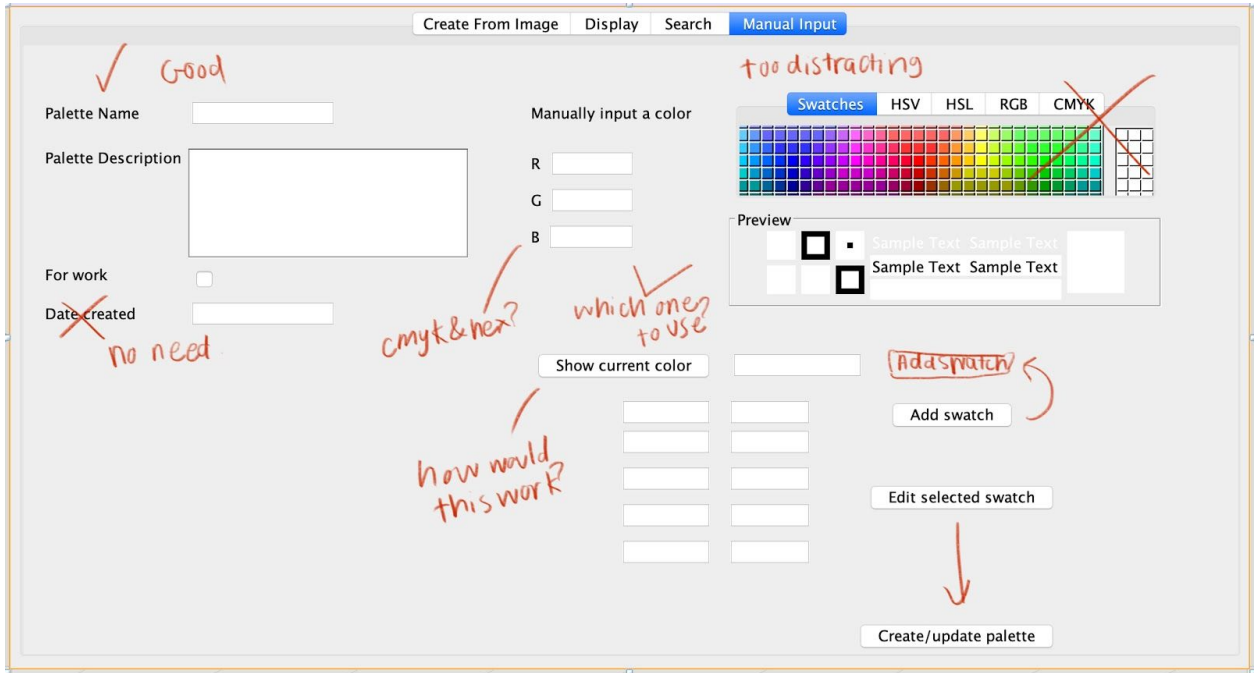
You search an item and it shows the index.

OK. I'd also like for there to be a space to show the palette I searched as well.

Do you think there should be an edit/delete option in the search menu?

I don't know, actually. I think that's up to you. It doesn't matter that much, because I'm a hoarder anyway.

Appendix 3: Annotated prototype



Create From Image | Display | Search | Manual Input

Upload image

Build swatches from image

<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>

Palette Name

Palette Description

For work?

Create Palette

good

** how do i choose a file?*

show picture here?

→ should this come first?

