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Module 3 Assignment

There are several ways that color can be used in designs. Color can grab attention and make certain things stand out, like buttons and important messages. It can help to elicit emotion, like red making you excited and blue having a calming effect. It can make words easier to read by creating enough contrast against the background. It can help with branding, so people associate the colors with your product. It can enhance engagement by making things look cool and interesting. They can help show functionality such as a green button means you can click it and a gray button means it’s not clickable. It can help keep things organized by differentiating between components (Material, n.d.). The level of user engagement and interest can be enhanced with color. Social media sites use vibrant colors to not only attract attention but create a sense of excitement about their site. Amazon uses a bright orange “Add to Cart” button to stand out and guide users to purchase the product they are viewing (Amazon, n.d.). In fitness apps, the colors are often greens and blues to convey a sense of balance and well–being. News apps will use red for breaking news alerts to grab the user's attention. Educational apps for children use bright and playful colors to create an engaging learning environment and keep children's attention. Color is arguably the second most important aspect of your app, after functionality. The human to computer interaction is heavily based on interacting with graphical UI elements, and color plays a critical role in this interaction. It helps users see and interpret your app’s content, interact with the correct elements, and understand actions (Babich 2017). One thing to consider while trying to help your users meet their goals is the effects of colorblindness, which affects 8% of men and 0.5% of women. The color scheme that you pick out might have the opposite with colorblindness, making it harder to read and navigate.

Using these ways to incorporate color into my app designs will help to create an app that is engaging, easy to navigate, and conveys the right tone. I like the idea of using one primary color and using variants of that color to separate out different components of the interface. I also like the idea of using a secondary color sparingly to make action buttons, controls, switches, progress bars, and links and headlines really stand out (Material, n.d.). It seems that by only using at most 2 colors and their variants, and using them sparingly, you can really get a user to notice or focus on a specific section and make navigation much easier.

Vision is thought of as the strongest of the five senses, and our eyes are perhaps the most important and relied upon in our daily lives. We recognize approximately 80% of all impressions through our eyes. Humans tend to rely more on sight for information about their environment versus hearing or smell (Better, n.d.). This doesn’t mean that we should ignore using sound in an application, as sound can create an even fuller experience, and is even more important for users that are visually impaired. Sound design can be used to associate a UI element with a specific sound, express emotion or personality, convey hierarchical structure, by associating interactions with certain sounds, and provide sensory feedback (Material, n.d.). A device that incorporates sound into its functionality is a smartphone itself. Sounds in an app act as cues for certain actions, and it is the same for a smartphone. A notification for a text message, a phone call, and an Amber alert all have very distinct sounds and convey a different sense of urgency through the use of sound. Volume, duration, and pitch help to convey urgency as well. The best use of sounds in a device or app uses short and clear sound cues that are consistent with the desired effect. A ding for a successful action or a click for a button press would be good examples. You wouldn’t want an Amber alert alarm for a successful action. One way that sound design could be improved would be customizable sounds for the user and the ability to adjust volume and frequency for each type, possible as a system setting that apps would have access to and automatically adjust their own sounds accordingly.

Honestly, I didn’t think much about sound for creating an app. I guess I usually have the sound turned off on my phone because it drives me crazy when other people have the volume blasting away in public. I have come to the realization that sound does play a part in the complete user experience though, and noises such at clicks and dings and such can really improve the experience, and with the combination of sounds and animations for button clicks and other actions, can help users with disabilities navigate the app easier. I would definitely include sounds for actions in the future, even though it is something that I personally wouldn’t use. As for the actual types of sounds, most actions already have a very narrow set of sounds that are already established for them. I would most likely stick with those (ding for successful action, click for button press, etc.) than try and reinvent them, but if there was an action that was unique and specific to the app I am developing, I would try to come up with something unique and memorable that reflects the action.

There are quite a few limitations in using color and sound in UI/UX design. With color, using it excessively or too many colors much can be overwhelming and distracting. Using the wrong colors can be confusing for users as well (a green X or a red checkmark). Also relying solely on color to convey emotion or feeling can be hard, especially with users with visual impairments. While sound can enhance user experience as well, there is a chance that the device won’t have the volume on, or the user is hearing impaired. To work around these limitations it is important to not rely just on sound or color, but use a approach that uses both of them in addition to labels, symbols, and icons that clearly convey the message you are going for. In addition to this, it is important to do testing and gather user feedback and adjust the UI as needed to accommodate your users.

Amazon.com. (n.d.). Amazon (Version 28.6.0.100) [Mobile application software]. Amazon.com.

Babich, N. (2017, January 25). The Underestimated Power Of Color In Mobile App Design. Smashing Magazine. <https://www.smashingmagazine.com/2017/01/underestimated-power-color-mobile-app-design/>

Better Sight Vision Center. (n.d.). Did you know that we perceive 80% of all impressions using our sight? [Webpage]. Better Sight Vision Center. [https://bettersightvisioncenter.com/did-you-know-that-we-perceive-80-of-all-impressions-using-our-sight/#:~:t](https://bettersightvisioncenter.com/did-you-know-that-we-perceive-80-of-all-impressions-using-our-sight/#:~:text=Vision%20is%20thought%20of%20as,environment%20versus%20hearing%20or%20smell)ext=Vision%20is%20thought%20of%20as,environment%20versus%20hearing%20or%20smell.

Material Design. (n.d.). The color system. [https://m2.material.io/design/color/the-color-](https://m2.material.io/design/color/the-color-system.html) system.html