### Reflection

I have been looking forward to 767 since I began this certificate program and was not disappointed. I also went through a lot of ups and downs during this class. My job-hunting experience in the last couple of months has been a lot of raised, then dashed hopes. Working on and learning about developing have been welcome distractions. It has also been frustrating as you will see.

# Theory, Strategy, and Usability

This course was developed for a senior citizen target audience. I designed it specifically for seniors that were timid or reluctant with internet interaction. Everything I did had to be easy to absorb with a low-stress focus. None the less, they are adults and need to feel the appropriate ratio of expectancy, value, and cost, which is both the background of adult learning and a motivational theory in and of itself (Yarborough & Fedesco, 2020). Therefore, with adult-learning theory as the backbone, I also incorporated usability and some of Mayer's Multimedia Principles (2009) where I could. Specifically, the two I found I used the most were the Segmenting Principle, where I broke up topics into manageable chunks, and the Personalization Principle where I tried to make the content as conversational as possible. With all this in mind I created a learning module where the learner could clearly see what they were about to learn, it could only benefit them, and it cost them nothing but a bit of time.

Some of Mayer's principles conflicted with the usability requirements I had laid out: Narration, Captions, Large text, and High Contrast. A lot of what Mayer said had to do with not having narration and text at the same time. This wasn't really something I could avoid because I was also designing the course to have both so those with hearing and visual challenges could view the content. I had to have both text and narration. I ended up employing narration and caption buttons so the learner could choose their preferred method.

The main strategy for assessments was to reinforce learning with low pressure questions rather than evaluate the learner's comprehension. I initially had two True or False, one Multiple Choice, one Pick Multiple, and two simulations. All the traditional questions provided feedback specific to the answer given except the Pick Multiple which did not have that feature in Storyline. I decided to remove it because it wasn't constructive feedback, and the topics were adequately covered in the other questions. I had a lot of fun building the two-factor authentication simulation, but as discussed later, the password creation simulation cost me a lot of blood, sweat, and tears. Both slides had representational graphics that represent real world visuals between the smartphone and the password fields. The simulation questions were the only ones required to try again if they were missed as I felt the traditional questions should focus more on a teaching moment than execution.

# The visual design journey

I am a graphic artist and have been since I got my first computer in 1999; I even have a concentration in multimedia and visual communication with my BSIT. Therefore, I had a bit of a hard time letting go of some of my artistic design instincts and habits to embrace usability. While I had read about it and understood it on paper, in my mind it was for things like ensuring there was enough white space and making sure all information was appropriately chunked. I was brought to my attention in more than one instance that my idea of a clean aesthetic was not as user friendly as it was minimalistic.

For instance, I had left the lightbox close buttons alone as they were what was provided to me in Storyline. I do not like the look of redundant navigation buttons, in my mind if they are featured in the player, then they are an industry accepted standard and thus should be sufficient. They were a little hard to see, but I did not have the ability to customize the color so I left them be since it was already present in the player. I did not want an ugly "x" button interfering with my design. I had feedback from my usability test that they were hard to find against the player. In other words, just because it visually made sense to me to keep it button free, I was not the target audience and needed to remember that.

I was starting to accept that things could not be as minimalistic as I was going for when the last nail was hammered into my design's coffin. My mom told me, without seeming to realize I was the one that made this design choice, "I hate it when they do that! It throws everything off!". While it was a little painful hearing it from you, thanks, Mom! I think it was a combination of those two sources of feedback that allowed me to let go of my design minimalism enough to make it more user friendly.

### **Other Challenges and Feedback**

### **JavaScript**

My largest challenge was getting my JavaScript password to function correctly. Storyline has the capability to run JS but does not support it, which translates to them not having adequate documentation on how to insert and execute it in the program. This gave me a hard time. Although I know HTML and CSS, I don't know JavaScript or how it interacts with things. All I knew was I had to find a script for password validation and plug it into my story. Easier said than done. I had actually started trying to implement the script before I started this class, but I didn't know enough about how it worked with variables to get it to work right.

The other hang up was I could not find a script that could do everything I wanted. I was able to do a character count, special character, upper/lowercase, and a number, but I could not get it to check for words. I don't actually think that's something a simple JavaScript can do without a more in depth program or additional scripts and references to check. I finally got it to work about a week before submitting it for initial partner review, and then when I went to show

others it stopped working. I was in tears. I had to take what I had learned previously, build it again in a standalone project, and then re-insert it into my project again.

I finally got it to work, and then had feedback on the usability test that 1) it would not let you hit the submit button on a second attempt, and 2) you could pass the password check using words as long as it met all the other requirements. I couldn't recreate the first issue so I left it be, the second issue pains me a bit because even after all that work it is not perfect and will have to stay as is because I don't believe there is a better option to try.

#### **Narration**

Implementing narration also became a challenge with this module. I was initially on the fence about providing narration since the same effect can be achieved with screen readers. Then I realized not everyone has a screen reader, so I needed narration. At first I was set to record narration for every slide. I had recorded the two demonstration videos in Camtasia and was set to start on my slides when I ran into two issues.

I started to go hoarse, and I had several (ultimately proven fruitless) job interviews coming up so I couldn't afford to lose my voice. The second issue was that my iMac's drive was starting to die, and since my operating system runs on it that meant my computer kept crashing and I was losing time. So I made the choice to forgo using my own voice and implement Storyline's text-to-speech using the least robotic of the voices. I received a comment on this in the usability testing feedback wondering if it was intentional. While it wasn't in the plans, for now it will remain. When I have time (and a new Mac) I will go back and narrate, since this project will actually be put into use.

### Other Feedback

# Changed

I reviewed the feedback from the Usability test and made some adjustments where I was able to. These were the changes I made, all based on feedback:

The navigation should have restrictions until all interaction is complete (it did not). While the quiz slides and menu were already locked down, I originally did not do this deliberately because I didn't want to force the seniors to be locked into a slide they already felt comfortable with and begin to resent the module. I adjusted the navigation by adding click states and triggers to interactive slides and ensuring every slide with material on it was locked down until all interactions were complete.

I added close buttons to all the lightbox slides. I moved the player demonstration video button to directly underneath the title where it was more noticeable. I fixed the font size on the hover state of a text link to ensure it matched the normal state. I added more clear directions on the interactive slides.

# **Not Changed**

Additionally, there were things that were either intentional or not changed for various reasons. Captions were not on every slide because they needed to be selected from the player window and were only able to be selected if there was text-to-speech narration playing on the slide. Captions are not on the two videos because I had not added them when I built the videos; I will change this in the next iteration once I have a stable computer. Additionally, there was a comment that the second video did not have sound, I could not replicate this and think it's either a Storyline or operating system glitch. The first video was staticky, this was a transition effect I added in Camtasia. Title and directions on the Red Flag slide disappear on interaction with markers, this is deliberate because leaving them on while other text popped up was distracting. The text entry boxes look too much like buttons, I changed the style a little bit to make it look more like a text box.

### Where I am now

When I look back on the past several weeks I think where I grew the most was in visual design and accepting feedback. I reflected on feedback in EDUC-766 as well, but I think I've come further since then. I have learned to take the feedback and separate it from my feelings (still very much a work in progress) so that I can step back and see another person's viewpoint. In learning to do this, I have also begun to be able to separate my emotion and personal instincts related to visual design in my graphics. I am not an outwardly emotive person by nature, visual design has been one of my few methods of expressing myself, so this is not an easy task, but in the Cyber Safety module I learned to accept that it wasn't my emotion being expressed, but an objective lesson. I think researching how to work with stakeholders will help me discover some coping mechanisms dealing with taking things personally. I am pretty sure we will learn something about that in EDUC-788, and if not, I will research it on my own. While I am not able to create CBTs in my current job (despite my job title of Training Developer) I am already using what I've learned about separating myself emotionally from my creations in the projects I am working on for my portfolio, and hopefully soon a new job.

#### References

Mayer, R. E. (2009). *Multimedia learning* (2nd ed.). Cambridge, England: Cambridge University Press.

Yarborough, C., & Fedesco, H. (2020, March 27). *Motivating students*. Center for Teaching. Retrieved June 11, 2021, from <a href="https://cft.vanderbilt.edu/guides-sub-pages/motivating-students/">https://cft.vanderbilt.edu/guides-sub-pages/motivating-students/</a>