

## **CMS 450: Final Reflection • Jaysa Ramirez**

### **1. Think back to how you felt at the beginning of the course. What were your expectations?**

I was worried about how the pandemic would affect the semester. I found it incredibly difficult to focus and stay motivated at the end of the spring, and I was hoping the hybrid approach would work. I was excited about the topics that would be covered in the course, and I was hoping that some of the projects would help me to figure out my interests. I was curious about things like web development and security, and I was looking forward to giving those things a try. I thought the course might be a great opportunity to build something I could put on my resume.

### **2. Tell a story about a topic, problem, or assignment from the class that challenged you. How did you respond?**

The first project we did was challenging – mostly because I pushed myself to do more than was probably necessary. I had a vision for the website and I pushed myself to see what could be done to achieve it. I even designed a logo and some graphics to use for the site. But translating my plans into a working site was not as intuitive a process as I thought it would be. Learning the syntax of HTML/CSS/Bootstrap was easy, getting it to all work towards what I had planned was the challenge. Something as simple as centering an image or text on my page involved making changes that would become undone when I made some small change elsewhere. And just when I thought I understood the hierarchy of what I had written, I'd delete a seemingly unimportant line and a whole section of the page would fall apart. This project was a fun way to learn by doing, and to practice searching for answers when you get stuck. I responded to the challenge with patience and a lot of time spent looking through forums and tutorial sites.

### **3. Tell a story about an interaction you had with another person because of this class.**

Frankly, I didn't have many interactions with other people this semester. Most of the projects we worked on were done individually, so my group did not meet very often. Still, I am glad we were able to work in groups for this class. It helped to have some classmates that I could talk to when my motivation waned. And I enjoyed seeing what they put together for their websites, hipster menus, et cetera. I think the most significant interactions I had as a result of the class were with you, Dr. Myers. I am thankful for your efforts to keep the material interesting, manageable, and practicable. I liked hearing the stories about how each framework/protocol/tool was developed, I think those stories help to shed light on what the problem-solving process (and the evolution of computer science in general) really looks like.

#### **4. Other than programming, what have you learned from this class that you can take forward into your other classes or post-Rollins work?**

The historical context shared during each unit taught me more about what's important to consider when you build something that involves people somewhere in its use. It was really interesting, for example, to learn how protocols for file-sharing scaled to support the existence of the Internet. As it turns out, this sort of thing happens quite often in computer science (though not always in such a world-changing way): you intend to solve one problem and your solution ends up being used – or even abused – for a different reason. Sometimes, this results in Really Cool Stuff. Other times, it results in New Problems. How will this insight benefit me in my other classes or my post-Rollins work? I feel like the knowledge will help me to be a better problem solver. I'll be more intentional about asking myself questions like:

- What's the *real* problem here?
- What are some of the tradeoffs that come with my solution?
- What could go wrong? How do I respond to those issues?
- How does this solution hold up to change?

#### **5. What has been your experience on learning during the pandemic, whether that was in-person or remote? What did you find most challenging? What (if anything) worked well for you during this time?**

It took me a while to acknowledge how the circumstances were impacting my productivity as a student. Might be obvious to others, but it took me a while. I thought I could take on the same level of responsibilities I was used to in previous semesters, so I said yes to a lot of extracurriculars. But after a while, it was difficult to maintain balance and stay motivated for everything all at once. The most challenging thing about learning during the pandemic was the temptation to tune out. My usual enthusiasm to engage had hit a low, and there were days when I nearly stayed home and attended virtually with my camera off. I found it hard to focus when so much was happening, so many things were demanding my attention. Not to mention the extra energy it takes to remain alert while you're around other people – constantly trying to be careful about keeping your distance, making sure your mask is on right, sanitizing your hands after opening a door... all of that.

What worked well for me was taking advantage of opportunities for creativity both inside and outside of class. When we were tasked with making something with anything visual, I tried to have fun with it. I also began drawing again after not doing so in any serious way for a while. Sometimes I felt guilty for taking a night to draw something or make a particularly intricate Powerpoint, but in hindsight those were necessary and helpful breaks.

**6. What are your thoughts on online vs. in-person education? Do you think there are positive aspects of online teaching that we should incorporate into our regular classes?**

I'm going to make a table for this one:

Online		In-Person	
Pros	Cons	Pros	Cons
<ul style="list-style-type: none"> <li>• more flexible, easier to adapt to change (for example, car breaks down you don't have to miss class)</li> <li>• easier to feature guest speakers</li> <li>• conversations in the chat can add depth when there isn't time to explore a tangent</li> </ul>	<ul style="list-style-type: none"> <li>• temptation to disengage/multitask</li> <li>• technical difficulties</li> <li>• isolation/lack of interaction</li> <li>• requires more self-discipline</li> <li>• video call fatigue</li> </ul>	<ul style="list-style-type: none"> <li>• human interaction</li> <li>• easier to have discussions</li> <li>• professor can more easily "see where the students are at" with the material</li> <li>• more structured/gives a better sense of routine</li> </ul>	<ul style="list-style-type: none"> <li>• less flexible, less accessible in some ways (for instance, student with chronic illness would have to just miss class entirely when sick)</li> <li>• takes more energy to be alert/attentive to the requirements of social distancing</li> </ul>
<b>What aspects of online learning should be incorporated?</b>			
<p>I think tools like Webex offer a great opportunity to invite guest speakers, since you don't necessarily have to worry about the when/where. Also, virtual office hours are more accessible/flexible in a way, too. Definitely not the same as stopping by a professor's office, but if your schedule doesn't work with their hours, Webex is a helpful option to have (especially helpful for off-campus students).</p>			

**7. Metacognition is the act of thinking about your own thinking. The single most important skill you can develop in college is self-awareness about your own learning process. What have you learned about your own learning as a result of being in this class?**

As I mentioned briefly in a previous response (#5), this class has helped me to appreciate the value (and *necessity*) of creativity in computer science. It was easier and more enjoyable to learn about something when there was an opportunity to be creative with it. What usually happened is I pushed myself to take it even further because I was curious. The opportunity to be creative also added balance to the material. I've learned that it is helpful to "indulge" my creativity even if it isn't always "for" something.