

Assignment Reflection

In my time as a student at USF, I have completed a very broad range of assignments and projects. In this brief essay, I will review 2 assignments, and one extracurricular project that have been essential in my journey towards a career in cyber security. Including an assignment in my Ethical Hacking class, my Senior Capstone class, and finally an important cyber writeup that got me into USF's Whitehatters Computer Security Club Hall of Fame.

Taking ethical hacking was a turning-point in my education. In this class, we learned the differences between black hat, white hat, and grey hat hackers. This was the first time I even considered hacking being used for good. I can remember looking at DegreeWorks as a sophomore and seeing that class further down my degree path and I wanted to take it as soon as possible. Upon completing the class prerequisites, I finally got to take it last fall. I thoroughly enjoyed all the labs, looking back at them is kind of funny to me. With my more advanced knowledge of hacking, the labs seem so easy. That wasn't the case at the time so it feels great knowing how much my hacking knowledge has come. I wish I could have taken it sooner to some extent as it inspired me to join the Whitehatters Computer Security Club. The final lab for this was on scanning a target using linux commands. This represents the reconnaissance stage of the cyber attack life-cycle. It was an excellent learning experience where I learned the fundamentals of Nmap. It was certainly interesting to see what ports/ possible attack vectors you can take. Ultimately I wanted to learn more about the cyber attack life cycle, which is why I decided to become an active member of our school's cybersecurity club.

The next assignment, which I feel has been essential in getting me to where I am today has been creating my portfolio in my senior capstone class. You might even be reading this on the product of said assignment. Creating a professional portfolio is essential in helping you outshine your potential peers who may be going after the same job. Creating this online space has inspired me to take the time to complete extracurricular projects as it gives me somewhere to post them too and one day show to potential employers. My portfolio includes a section of school projects, as well as a section for cyber write-ups which I made in my free time. Included in that section is my Bandit Over-the-Wire writeup, which we will discuss next.

During a meeting with the Whitehatter security club, we were introduced to the Bandit war game. A CTF-style hacking game that involved remotely connecting to a target and using various exploits to find the password for the next level in its directories. I was able to get through the first 5 at the club. Towards the end of the meeting they mentioned if you completed a write-up, documenting your whole journey through all 30 levels, you would be inducted into the club's Hall of Fame. Seeing this as a great opportunity as something to add to a resume, I jumped at the opportunity. It was no easy task; in total I estimate I spent at least 40 hours on this project but was able to get done in time to show the recruiters at ReliaQuest. This, in turn, helped me secure a spot in the ReliaQuest spring labs program, which could hopefully get me a job as a security analyst by the time I graduate.

Overall, I have enjoyed most of the assignments given to me throughout this degree path. Although some can sometimes just feel like busy work, the reality is that

you're going to get some assignments from your employer that might make you question their sanity. It is for this reason I believe all proactive students should view every assignment as a learning experience and a chance to grow.