Thomas McCoy

Self-Assessment

My individual contribution to the project was mainly the general design of the user interface, displaying the running process information, and analyzing the executable files. I built upon some of the skills identified in my initial assessment from last fall, but not all. For example, one of the skills I believed I'd build upon was my networking skills. While our project did have a network capture component, my partner was the one who worked on the implementation of it. I did mention I believed I'd build up my ability to work with processes though, which I did in this project.

In order to display all of the running processes and information about them on the machine to the user, I had to make use of the Windows API. I also had to make use of the Windows API to parse executable files. That was one of the more challenging aspects of the project, and I had to research how to find the information we were interested in, like the dll imports. On top of that, I got to further develop my Qt skills, which wasn't mentioned in my initial assessment. My first exposure to the Qt framework was on a co-op. However, I largely worked on bug fixes and didn't get to build anything from scratch. For this project, I did have to start from scratch, giving me a much better understanding of the structure of user interfaces made using Qt.

Our group accomplished creating a tool that can be used by malware analysts and security administrators to help them in their work. We created a place where they can perform their tasks in one place, instead of using many different tools, improving their efficiency. The main functions are displaying the process table, analyzing the executables, and capturing the traffic to and from processes. We designed the tool in a way that we believe is easy to understand for someone using it for the first time.

Through working on this project, I learned how to effectively split up parts of a large programming project in a way that allowed us to easily integrate the parts together. I believe we did a very good job of working together. We communicated well and met our deadlines. I also believe that both of us put in a similar amount of effort into the project, both in learning new skills and applying old ones.