This project was definitely the most challenging coding project I’ve attempted so far. I’ve had the idea for a dungeons and dragons related program for a while. When I first had the idea, it was from a fairly naïve perspective and I hadn’t completely thought through how it would work and how everything would be set up. However, the inspiration had been there for a long time and I was excited to finally begin on a project I’ve wanted to pursue for the majority of the semester.

By the time I started working on this project I had a pretty good idea what the finished project would look like. I would have six push buttons to roll for each stat and I would have edit boxes to modify each stat and something to roll for damage. Essentially, it would look similar to a digital version of a character sheet.

There are some key ways that my final project differs from my idea though. For starters, I imagined the damage system would be a lot different. I imagined having one push button to roll for damage and then the damage roll would be determined by which radio button was selected. The radio buttons would list a selection of weapon names with the damage dice (something like 1d6, 1d8, 2d6) behind it. In the end I decided to scrap this idea for two reasons. One, I found this system of multiple buttons to select and then roll for damage to be confusing both to code and from the user’s perspective. Two, since many weapons have the same damage, it actually gives the users more choices to just have a few damage options to choose from where if I added a specific button for each weapon that would be redundant since many would essentially be the same roll.

While writing this code I referenced lab10 a lot. I still felt a little nervous using gui and global variables in the beginning. I know there must be simpler ways to do certain things. For instance, I know there must be a way to have all of my weapon roll callbacks in the same function, but I wasn’t entirely sure how to do that. Towards the end of the project, I felt that my code was very crowded with too many variables and callback functions that didn’t need to be there. If I end up expanding on this project later, I will figure out how to make the existing code more efficient.

The biggest issue I ran into while coding was the issue of trying to get what is inserted into the edit box to be used in the roll calculation. I had no idea how to do this and I felt pretty lost before looking it up on the MatLab help site. I figured out I have to use a get function to retrieve what the user inputs. It still took me some work even after looking it up to successfully implement it into my code.

This project was a lot of fun and I really enjoyed it. I think it showed me how far I’ve come to see an idea I had months ago finally become a reality. I felt proud of myself for being able to complete a project like this and I am very excited to continue to use gui for many more projects in the future. I plan to expand this project and include more features as well as start other projects and use these for my job in the future.