Master Mind Clone – Requirement analysis.

Inspiration – Originally I had no clue what I wanted to do for my capstone, but after talking with Dr. Bekkering, he suggested I look up Master Mind and see how I felt about it. At first I had no clue what Master Mind was, or how it even worked, but after some research I loved it. For me Master Mind is a real test on the mind and how to take guesses at a sequence without having 100% solid hints. I always enjoy a great challenge, especially with a puzzle.

Plan – I quickly knew that this was what I wanted to attempt and recreate, though it was not just as simple as making it, I noticed that most of the ways to play Master Mind on the Computer where as I wanted to create a more versatile version where you only needed the internet to download the files and needed technologies. Thus we have my own Master Mind Clone.

Requirements – For my requirements one of the biggest things I wanted to ensure I did, was to have my project functional and working before the deadline. This seems like a simple thing, but when you look at it, it is the major component. Secondly, I wanted to have the ability for higher levels, which we have achieved with two more advanced levels added more pegs to the sequence. Thirdly, I wanted to ensure that I learned from this project and not just tossed something together.

Future – I do have future plans for this project as there are many wonders I want to explore with it. My first plan is to change how it is hardcoded now, so that it does not auto resize the form since it places the pegs in locations. Secondly, there is a method by Donald Knuth called the “Five Guess” method that can help solve it faster. Implementation of this would be an automated method, as I would like a way to play against AI and see which can solve the sequence faster. Thirdly, I want to allow this to be usable for anyone, which means that by using specific colors, it limits some players with color blindness. So I want to add a function for colorblindness.

What I have Learned – Throughout the course of this semester and finishing this capstone, I have learned quickly that TIME MANAGEMENT is key. Completing a capstone in general is rough, let alone with a full college schedule or worse. Secondly I learned that hard coding some things is great, but in other aspects it is not the best option. Lastly I learned how hard bugs can be to work out, or work with.