Individual Capstone Assignment – Assignment 3 Part 2

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Group Name: Bootstrap Buddies

For our senior design project, we are creating an AI chess engine with an associated website. We will implement both a back-end and front-end side to achieve our desired project. We don’t have the most AI experience in our group compared to web development experience. However, we will be educating ourselves on the AI side of the project to be able to end up with our desired end goal. We will take what we have learned from our previous classes as well as co-ops to achieve our goals. Each one of us has a wide range of strengths and skills which will help us to achieve our end goal of an AI chess engine with its associated website.

The class that I have previously taken have helped to prepare me for this project immensely. There were classes that helped me to gain the backend programming knowledge and skills. These include but are not limited to CS 2021 – python programming, CS 6033 – Artificial Intelligence, and CS 2028C – Data structures. Then there are the classes that helped me gain front-end knowledge and skills. These included IT 1040C - Website Creation and Management and IT 2020 –Website Management. I have acquired from these courses technical skills including Python, Java, HTML, JavaScript, and CSS. As well as non-technical skills including Microsoft office and WordPress.

The experiences that I had gotten from my co-ops were in software testing and software development. I completed all my co-ops with a company called London Computer Systems located in Mason, Ohio. I worked on the API side of the software with jobs in software testing and software development. We used C# at my job and a GUI design software. Before my co-ops I didn’t have much experience with C# but after the many rotations I had with them I was able to fully understand the language. I will be able to apply all my technical and non-technical knowledge into the senior design project because we will be using both back-end and front-end languages to end up with our desired project.

I am very excited about going with an AI chess engine with an associated website as our senior project. This will be a project that will both challenge us as well as build on our previous knowledge. I enjoy working on front-end developments but haven’t done much with AI other than the one class that I took. Having this project will push me as well as my teammates to further educate ourselves in a sector that we might not all be as familiar with. Whilst still having the front-end side of building the associated website. That’s what makes me most motivated to go forward with this project because I do enjoy a challenge and getting an end goal to something that is feasible. I know that my teammates and I will work together to get to that end goal.

Our preliminary approach to our end goal will be to end up with an AI designed chess engine that will be accessed on a website we create. We don’t have much knowledge in building an AI engine so educating ourselves on how to go about starting it will be the first step. We have discussed using something as simple as a count utility function or as advanced as a machine learning AI that would train itself to play the game of chess. Our expected results will be to get the AI chess engine to work as closely as possible as if one was playing another human in the game and not an automated computer user. I will self-evaulate the other contributors by the quality not the quantity of their work. We all have different strengths when it comes to certain parts of this project so if we can all put in our best efforts on the parts that we can do then that’s good enough for me.