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CS Senior Design I

Section 001

For my senior design project, I want to create an application that will pull from articles on the internet information about movies, literature, or any other form of art that the user searches for. The application would provide facts about writers, directors, or other artists/scientists that the user is interested in. My interest in this project comes from believing that a more method for obtaining all sorts of art related information would be much more practical than relying on Google, which is often bloated in these scenarios. I also believe that this app has the capability to be a helpful tool for people interested in art related information. The applicaton will be built using the Python programming language that I was taught in a prior course at UC. I plan to utilize Python and my knowledge of frontend in this project to create a recommendation system which will suggest articles based on the user's interests.

The university curriculum gave me the technical skils to develop this program. I’ve completed courses in software development, database management, and Python programming. In these courses, I learned how to develop software applications properly, and manage databases efficiently. In addition, I learned to program with Python, which I plan to use in the developnent of the application. In my senior project, these technical skills will be useful in developing the backend and the user interface of the application. In addition, I learned to work in a team and communicate effectively due to my various class projects. This will be useful when working with my senior design team.

My experiences throughout my coops allowed me to acquire technical and non-technical skills that will be useful in developing my senior project alongside my peers. I worked on an inventory application at my sister's small busines, which taught me how to design and develop an application for a specific business need. I also learned how to work with databases and manage inventory data. In my other co-op, I worked on Python Machine Learning/AI projects at Etegent Technologies, which taught me how to work with machine learning algorithms and develop AI models using pyTorch. I also developed a few full stack applications using Javascript, Python, HTML, and CSS. These skills will be very useful in developing the application which requires these assets for both the frontend and backend. We are planning to use these recommendations for the articles in this project. In addition, I also learned how to work in a professional environment, use Github, and communicate effectively with colleagues.

I think my senior design project will be useful in my life and for people interested in art and science history. I would like to work with my team and learn from our experiences; since, I believe, my Python skills and frontend skills will both be improved during the completion of this project. My plan is to use web scraping to collect articles from various websites and store them within a database (probably using sqlite3. Using Python, I will create a system to provide people with articles based on their search query. I will also use design principles, such as those I learned in previous classes and in my co-op experience, to help create an interface which is aesthetically pleasing and user-friendly. My aim is to create an app that provides people with interesting and relevant art and science articles that are more user-friendly than what a traditional search engine would provide.

To assess my contributions to the project, I intend to set specific objectives and deadlines. I will regularly check my progress towards these objectives and adjust my approach as needed. Feedback on my work from my team members will also be helpful, so that I can continue to improve my skills and stay on track with my other team members. I will use this feedback to improve my own work and to stay up to date with the objectives of the project. I will document my work using Github and follow my own and my team's contributions to the project. This should help me evaluate my performance and ensure that I dothe tasks correctly.