

Senior Design Individual Capstone Assessment

Ted Cordonnier, M13289915

This senior design project from my individual academic perspective is a very important milestone for me. I have taken almost 5 years of computer science classes in college and even took some back in high school, that have taught me many things about this field. This is also important for my academic career because I have never had a project that is this extensive and detailed. Working on a project for over a year should give me a strong sense of what it's like working on a project for that long and the whole design process that goes into it. Working by myself is also an interesting part of this project, there are pros and cons, but I can get to see what it's like dealing with all areas of the project and not having anyone else to rely on. I think this Senior Design project will be a good experience overall and will be able to teach me many things about CS and making a high-quality product.

My senior project is a culmination of my years at UC and the education that I received. I started learning python all the way back in the first ENED class, and then was able to then use it in many other CS classes and Co-op's. I learned about databases through a class last year as well as one that I am taking this year. Now on my final project I will be using these tools as well as other ones to complete my project. Other skills such as time management, creative thinking, etc. that have been learned in school will also be put on display in this project. This project will be a good capstone to my academic career and will be more advanced and meaningful than the other projects that I have done in the past.

Co-ops have also taught me valuable skills that will be utilized when working on my senior project. Working with my advisor for this project will be very similar to what I have experienced working on Co-ops. Checking in with them and then talking over what I plan on doing and inquiring with them when I have questions. Again, skills such as Python, SQL, etc. that I have used on Coop will be used again on this project. On many projects on Co-op, I would have to do research on the topic that my project is in and must come up with the best solution. This type of internet research will also be very important and utilized for this project.

This project is exciting to me because I get to choose which area. I want this project to be in as well as the technology that I choose. These factors allow all students to enjoy what they are doing since they chose it themselves and be able to fully express their skills. My choosing of using some sort of database such as SQL to take in this data and then using something such as pandas, numpy, etc. to analyze this data. Other ideas such as AI/ML using TensorFlow are possible but I'm not sure at this point.

The choice of my project at this point is to take Cincinnati Crime data and then clean it up, organize it, analyze it, and map it using something such as a heatmap. Many possibilities are there for me to analyze this data and come to conclusions about different aspects of this data. I like this project because it can have tangible value for myself and others because it relates to Cincinnati, something that we are all familiar with. Expected results is to be able to get all of this completed by the end of the next term. This term I would like to have everything clearly outlined and have a good understanding of what I have to do, so next term all I have to do is implement it. I will know what I have done a good job when I have accomplished what I set out to do and have been able to come to meaningful analysis and conclusions about the data. I would also like anyone to be able to digest the information that I provide.