**Final Project: Report**

**Ari Eastman**

**CS150-01**

**Computer Programming for the Liberal Arts**

**Tuesday 12 December 2023**

**Abstract**

This project is a unique blend of something I am very versed in, art, and something I just started learning about in August: code. The code developed herein evolved into the beginnings of a registry tool for artists and/or galleries. In its current state, it uses Python to manage and display information about artists and their artworks, but with additional development, it could be a functional and practical app that is useful.

The project was also interesting because of its dual objectives – it did not start out as an initial iteration of a practical tool for the art community but as a learning journey, with the overarching goal of addressing real-world applications in art while simultaneously deepening my understanding of coding principles.

**Introduction**

As an art and design student, I did not have any preconceived notions about coding except that I knew I wanted to develop a deeper knowledge for communicating and collaborating across subjects down the road. This project essentially pushes together the expressiveness of art with the logic and application of coding. I also really wanted to create something that wasn't just an idea on the screen but could be actually useful and have an impact.

My standing as a student was also part of the impact that needed to take place - this project needed to be put to use to help me study. Because time was limited, I could not spend my energy on a project and study for a final simultaneously. I had to find a way to make two count for one. I knew my best chance for success would be to make a strong connection between the fluid, creative world of art and the structured, rule-based realm of coding.

**Methodology**

To bring my project idea to life, I knew I needed first to identify the areas in which I struggled over the course of the class. Then, I would need to consider the broader problems artists face. After a shortlist of problems for artists and a longer list of the concepts I struggled with, I went back over our class notebook for inspiration. I created a shorter list of potential ideas and tried to work through some potential outcomes for development.

The development process involved a lot of planning – figuring out what the tool needed to do – and coding, where I turned my objectives and plans into code. Then came the testing part, where I went about finding what syntax errors I made and finding and fixing any bugs in the notebook. The refinement stage was just running the code with the actual artists in the placeholders and then just making sure this early version was as user-friendly as possible.

**Design and Implementation**

The core of my project was studying-this much is true. However, after the code was implemented, I decided that it would really be useful to be able not just to see what works were on display but also to be able to add additional works if “special pieces” were being added for the opening night reception, as they often are. This piece would be very helpful for both artists and galleries. So what started as just a study guide and a design for a system to organize and display information about artists and their artworks, then grew a little larger.

I used two main types of data structures: tuples and lists. I know that tuples are unchangeable lists – once you create them, you can't modify them. I thought this was perfect for storing your favorite artist names, which don't change. On the other hand, lists are flexible and can be changed, making them ideal for storing the artworks of those artists, which often grow over time and change. I felt really good when I managed to create the 'Artist' class which to me works like a blueprint for creating objects with specific attributes and methods.

**Challenges and Solutions**

One of the biggest challenges was the learning curve. It’s literally all brand new to me. Initially, it felt like trying to solve a puzzle without all the pieces and sometimes that feeling prevails. However, as continued to practice connecting the coding concepts to see how they worked in a bigger picture, it made more sense. The practical application of managing art information helped me connect, too. The more I went back and combined concepts, the more I understood, and gradually, the puzzle pieces fit.

**Results and Findings**

The code outcome was a crude tool to identify, manage, and display information about artists and their artworks. After I put the actual artists in with their artworks, it was a big boost to my confidence to see it come back without a syntax error or something else. It came back and named the artists and the works and the number of pieces, and it was doing exactly what it was meant to do.

The tool's functionality is a stepping stone towards what could be a more developed application that honestly could really help how art is cataloged and managed in galleries.

**Discussion**

This project was even more challenging than I thought it might be even though I designed it to be a study guide and a final project to make it easier on myself. However, it definitely did the job of helping me make the connection to my own field. I am happy to report that it highlighted the importance of interdisciplinary skills and how learning something outside your area of expertise can lead to creative solutions. The increased communication potential is the whole reason why I took the code class, to begin with, so this was a good discovery.

**Conclusion**

Overall, the experience was challenging yet a positive reminder that coding shouldn't just be cornered into computer science. I think it should have a place in every field, including art. This project ended up being more than just creating a final design but bridging two seemingly different worlds – art and code. The journey did help me with my final performance and not only equipped me with sharpened skills and an initial draft for a practical app in the art world but also opened my eyes to opportunities across fields for advancement.

**References**

Fantagraphics

https://www.fantagraphics.com/

Gallery Nucleus

https://www.gallerynucleus.com/books?utf8=%E2%9C%93&filter\_category=Books