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SNHU

CS 499: 1-4 Portfolio Selection and Refinement Plan

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For my capstone, I am contemplating on which past work to display during my time at SNHU. The two designs I am going back and forth for my designs in CS 330 or CS 340. In CS 330 – computer graphics and visualization, I used openGL libraries to design a 3D model using a 2D photograph that I took of a specific area in my house. In CS 340 – Client/Server Development, I created a dashboard using a preset animal database to display geo-mapping, statistics and information. With both projects, I speak about all three areas because each project uses software design, algorithms and data structures, and databases. When comparing the two projects, I am leaning more to CS 330 – computer graphics and visualization because it was one of the projects I designed from scratch without pre-written code from the class. The starting issues would be downloading libraries and IDEs on to my personal computer because I used the virtual classroom Apporto throughout my time at SNHU when it came to writing code.

In my CS 330 Final Project, I can show how my design went from sections of code to a 3D design with lightning and mouse movement. When it comes to the design, I can show how my 3D design was created using the perimeters and structure designs within the 3D world. The design will also show the dimensions and mathematics that were written in the code to show the design of this world. The design of the entire project will show how each area of code is placed in a specific area in order for the constructions to work together and not cause issues with one another.

In the algorithms and data structures areas, I can show how textures and colors were wrapped around a 3D construct. The project displays the data structure on each shape and structure whether it be the flooring or the shape designs. With the data structure, I will write new data structures to add new textures and constructs to the 3D world.

When it comes to databases, I would like to use a lot more libraries than the libraries that I used in the original design. I would like to add more shapes, sounds, and movement libraries in order to give my design more life. To enhance this project, I would download databases and libraries from openGL website and github to enhance my project. These libraries can be movement designs, sound management, and shapes to be added to this project.

When it comes to the narrative of the project, I will speak about the design of 3D world, the different types of views, and the dimensions of each point for a construction in the 3D world. I will speak about how certain data structures causes the 3D design to be wrapped with texture and color. I will also speak about the dimension points for a construct will be graphed on X, Y, and Z points. In my professional reflection, I will let the viewers know information about my background and give my honest opinion about myself. I will notify the viewers about my strengths and weaknesses. I will also notify the viewers on which areas I feel comfortable and which areas I believe I need to refine in order to better myself. I will also describe areas of my personality when it comes to growing in experience and knowledge.

**3D Design**

A screenshot of a video game

Description automatically generated with medium confidence

**Flowchart**

Diagram

Description automatically generated