**Statement of Work**

**General Task Distribution:**

To ensure that this project got done as efficiently as possible, we decided to assign each member with their respective roles with specific responsibilities they were held accountable for. The project lead assessed each member on their skill-sets and assigned the roles on fit.

**Suhani Mitra: Project Lead**

Suhani is the project lead. She organized the timeline of the project and made sure that everyone was on track. She looked over the code everyone was working on and did a big part herself. She wrote the Clothing and subclasses needed, and helped Margherita with the code to read the ppm file, while also helping with the overall function of the program. She wrote the main function (OutfitSelector file) and integrated Tara’s and Margherita’s functions within this. She also wrote the three functions that compute the RGB average values, using Margherita’s file for each Clothing image. Suhani also helped team members with code whenever they got stuck.

**Margherita Piana: Specification Lead**

Margherita is the specification lead, she made sure that the code was written in a correct and organized manner, she also commented the code and workend of the architecture powerpoint getting help from Tara. She wrote the code for reading the ppm files. Her and Marissa also tried to use another type of approach in order to make the code work for all images, but it was impossible for them to download OpenCV on the computer. Marghe did a lot of the debugging (and she enjoyed it as she keeps saying), she worked a lot to make the code work and remove all the errors. She also worked on the readme file and the overall organization of the github.

**Marissa Ruiz: Interface Lead**

Marissa is the Interface lead. She made a Windows desktop app using Visual Studio 2022 and a public github repository called Dear ImGui. This application was her method to make sure that the front-end was easy for users to use. The Dear ImGui repository includes multiple examples for simple websites using different APIs. Marissa built her code off of the example using DirectX9 and Win32. After playing around with the Dear ImGui functions, she made a bright and clear widget that prompted the user to enter a filename for their articles of clothing and another widget that produced a lava lamp graphic. When the file names are entered, the app should call the backend functions made by Margherita, Suhani, and Tara and return a verdict: match or mismatch. The look of the app was intentionally designed to body the 90s, from the font to the lava lamp.

**Tara Gill: Technical Lead + Documentation Lead**

Tara is the technical lead, she made sure that the program was secure and valid. She also looked into the reliability and resistance of the code. Moreover, she wrote the functions that divide the rgb values into their corresponding color values by using RGB makers to see what values make which colors. She also made conditions for an outfit to be considered a match (with inspiration from Marissa!). Tara watched a 40 minute tutorial on how to read in RBGs of pixels and put them in an sstream. Tara also looked through many github repositories on texture analysis, and tried to see which were compatible with our project. Tara facilitated the majority of the documentation for this project.