The artifact I created is a program that uses a database of makeup to create a look for the user. It can either build a look using a color given by the user or by choosing a random color to build the look around. It then looks for makeup that are complimentary in color to build the look. I created this program for my final project in college. I think this is a good program to include in my ePortfolio because it is a full program I designed and built from the ground up and displays a wide range of my skills. It works with plenty of algorithm and logic as well as uses a database. I feel this artifact meets the program outcomes by creating a computing solution that solves a given problem using algorithmic principles. I really learned a lot creating this project and found it to be a great learning experience. It really opened my eyes to how thorough you have to be when asking users for input to ensure that something doesn’t go wrong. It was also good to work through some more complex nested logic to accomplish tasks and ensure the program didn’t break and do something unexpected.

There were three different areas I was to show growth and knowledge in Software Design and Engineering, Algorithm and Data Structures, and Database. With my program I successfully show my abilities in all three areas. The program I designed from the ground up completely on my own showing my abilities in design and engineering. I worked to try and make it as efficient and to flow in an easy to understand way. Because of the options and logic needed to choose a random look I had to implement many algorithms and use proper structures. The additional functionality also ensured that the program was more complex than a basic program to demonstrate my abilities. Lastly I built a Database with SQL and populated it with my wife’s makeup. Along with the program getting results from the database to make the look I also added functionality to add and remove essentially giving all the CRUD functionality. All together my program demonstrates my knowledge in all these areas.