We started by getting SFML to work on mac by following the online tutorials. Once we linked the libraries, we started researching and looking into the different modules SFML has on their documentation page. Once we had a basic understanding of the libraries, we came up with a plan to produce a user interface for our project. The first step was to get a test picture on the window, and so we did. The next step was to create an easy way to display text and get user input. We did this by creating a Textbox class and an Input class. Once we had those working, we decided to use MATLAB to take care of all the machine learning computations, and have it output the graphs and visuals to the project file. We did this by utilizing the system() commands. Finally, the user can type a directory from their computer, and the program will compute the “average” of the two types of file inputs, the errors using linear discriminant analysis and quadratic discriminant analysis, and the data points reduced down to 2 dimensions.