Name: Timia Davis

Advisor: Dr. Hayes

Expected Graduation Date: May 2022

**Problem Statement:** The problem for this project would be trying to incorporate everything into a working program. (Have you ever wanted to know if the password you entered was a legit sufficient password?) Well try my password meter website, all you have to do is make sure you have a working computer and click the link index file provided. Once the index file is clicked, you will then be prompted to enter some information. Once all the information is filled out, the website will output a score based on the information entered. This password meter will allow you to know if the password you want to use is a low scoring, medium scoring, or high scoring password. There will be a break down underneath by each category which will give you a score beside each one and can help the passwords be improved. The purpose of this Visual Studio program is to help create a safe way to know if the password the user has entered meets the minimum requirements of a password. First the program will ask the user for their personal information.

**Project Description:** The project I chose to do is a password meter using HTML, CSS, JavaScript, and jQuery. I will create a website to give users the ability to enter their personal information as well as their preferred password and the website will output a score. The user will have access to the website and will be required to enter their name, age and phone number first. They will have to be sure that their personal information such as their name, age and phone number is not contained in the password or they will not be able to proceed. An example would be the user entering their name, password, age, and phone number and the website will display a score based on the information entered. Below the score will be a breakdown of each categories and a score by each. The website is either for windows users or mac users therefore, it would be registered to either computer system.

**Proposed Implementation Languages:**

Visual Studio Code, Windows or Mac computer, HTML, CSS, jQuery, JavaScript

**Libraries, Packages, Development Kits, etc.:**

Personal Motivation:

This project put my skills to test based on what I have learned over the years. I had to dive deeper into what I was taught and piece everything together. I feel as though, this project will help prepare for what I will be doing in my career field. I chose this project to show students how fun it can be being a cybersecurity major considering cybersecurity has to do with hacking, networks, data breaches, attacks, threats, etc.

**Requirements:**

* Access name entered by user (how the website will be able to make sure the name is not contained the password)
* Access age entered by user (how the website will be able to make sure the age is not contained the password)
* Access phone number entered by user (how the website will be able to make sure the phone number is not contained the password)
* Set the password requirements (Minimum of 8 characters in length, a symbol, uppercase letter, and lowercase letter)
* Create the actual website (how the user will be able to enter their information and test to see the score on the website)
* Display the password score (this will provide the user with a score that way if the password score needs to be improved then they can modify the password)
* Refresh page and information should be saved except for the password and password score (that way the user won’t have to keep entering their information)
* Be able to access folders on computer (this will allow the user to run the index file)

**Outline of Future Research Efforts:**

I would have to do research on how to incorporate jQuery, HTML, CSS, and JavaScript all into one program.

From research, I will create the website for users with Visual Studio code which has the ability to incorporate HTML, CSS, JavaScript and jQuery into one website. I learned based off research that jQuery and JavaScript are slightly different from regular Java that I am familiar with. Therefore, since I am very familiar with JavaScript then it should be an easy transition from Java to JavaScript code. Visual studio has a lot of built in features that will make building this website easy as long as I get the basic foundations down and implementing different things such as the different categories, a score beside each category, font size, etc.

**Schedule:**

**\*Meet with Dr. Hayes every week\***

8/31/2021 – Know what type of project I am doing

9/14/2021 – Put finishing touches on draft

9/21/2021 – Know for sure what languages I am using

9/28/2021 – Continue adding onto proposal

10/6/2021 – Submit final proposal

10/13/2021 – Work out any kinks from code and have the main functionality working

10/20/2021 – Get Dr. Hayes to review code so far

10/27/2021 – Based on what’s done begin running the website

11/03/2021 – Depending on how far we are get additional assistance if needed and continue to code more

11/05/2021 – Have users test the website

11/10/2021 – Work on minor kinks with Dr. Hayes if there are any and keep moving forward.

11/9/2021 – Refresh working and information saving except password and score

11/10/2021 – Add more features to enhance the website and get the output that the users entered

11/10 – Be completely done with coding

11/17 - Finalize project documentation

11/22 - Dry run of defense presentation

12/03 - project defense.