## Final Project CS2830 – Documentation

## My Project:

https://ec2-54-234-241-15.compute-1.amazonaws.com/Ajm9ccFinalProjectF20/

My final project is a web application that describes two kinds of ciphers and can use them to encode or decode a message. The information tab is accessible without logging in and contains descriptions of the Caesar cipher method or the Vigenere cipher method, along with videos explaining the ciphers. When a user logs in to the site, they have the ability to use the ciphers. The ciphers take a normal message and encodes it, or decodes a ciphered message using either the Caesar cipher method or the Vigenere cipher method.

## Requirements:

- 1. All web pages that are displayed in the application use HTML5 and CSS3. The web pages shown on the site have the 5 required tags.
- 2. The different pages of the application have a common theme. The background, navbar, and jQuery UI theme are shared among all pages.
- 3. Both main pages of the web application use jQuery UI tabs() to properly and cleanly sort information. There is a navbar among all of the pages that highlights which page you are on, all sharing a dynamic jQuery function.
- 4. The home page of the application is available to users that are not logged in. Users that are not logged in can learn about the different ciphers and watch videos to learn more.

- To use the message encoder/decoder the user must be logged in and will be redirected if attempting to go to this page.
- 5. The username "test" and the password "pass" allows the user to use login functionality.
- 6. PHP is used throughout the application to redirect the user, check login information, and to encode and decode the messages.
- 7. POST is used for login information to handle sensitive data. The messages that the user wants to encode are passed to the php file with GET.
- 8. Besides the login form, form elements are used for inputting a message and key to encode the data.
- 9. There are placeholders and error messages to tell the user what to enter in the available fields and whether they have made a mistake.
- 10. There are photos on the information tab showing the user a visualization of the ciphers.
- 11. There are two YouTube videos that explain to the user the different types of Ciphers.
- 12. The web application utilizes JavaScript for variables and if statements.
- 13. The web application uses jQuery to handle buttons, element changes, and ajax calls.
- 14. The application utilizes jQuery UI tabs() to separate the information of the different ciphers.
- 15. The web application utilizes AJAX to send the user input message to the php file and return it in the output box below.
- 16. I find the idea of encoding and decoding messages very interesting and I have done it in the past for fun and for hidden information in a show I watched. I am proud of this application and feel it is a good showcase of my skills.