Software Engineering

Steganography Documentation

- <u>Username and Password Login</u> This function is designed for the users to log into their accounts. The function checks to see if the username with the correct password is in the database. This allows for any saved runs during the steganography process to be saved underneath their username and password. This function is good for security purposes in keeping encoded or decoded test independent to your login credentials.
- Register- The Register function takes the users to a separate page allowing the user to
 input a username and password to be stored in the database. This then will allow users
 to have their own account within the Steganography Application to be used for any
 saved execution purposes.
- Choose File The Choose File function is for the user to upload an image from their computer to the application. From this the user can decode the image and see if there is any hidden information or have the option to encode another image or a text.
- Encode Text (Drop Down)- The Encode Text drop down function displays a white box stating "Enter text to encode here... ", allowing users to enter text between 1-500 characters of length to be encoded into the original image the user uploaded through the Choose File Function.

- Encode Image (Drop Down)- The Encode Image drop down function displays another
 choose file button allowing the user to choose and upload another image file to be
 encoded into the original image uploaded using steganography techniques.
- Encode- The Encode button enables users to implement a steganography technique to the original uploaded image. This can be used by either by encoding text or another image.
- <u>Decode-</u> The Decode button performs a decoding method on an image. This will tell the user if there is any hidden information within the uploaded image. It will also tell the user if there is no message within the uploaded image.
- Reset This function is used to delete all the unsaved work the user has done. After this is performed, the user is brought back to the original screen that they began on.
- <u>Download</u>- This allows the user to save their encoded or decoded image where it can be
 downloaded for later use. With this function a person can keep their previous work
 intact, allowing them to have the ability to either change their desired image or text.
- <u>Clear Log-</u> The clear log button allows users to wipe out and clear the log that is
 displayed in the box above the button. The log displays records either events that occur
 in the operating system or other software runs.
- Zoom In This function allows the user to adjust the size of their encoded or decoded image by focusing in on their picture.
- Zoom Out The zoom out function allows the user to see their encoded or decoded image in a reduced view.