## Creating the Website

- **Step 1:** Install a localhost server environment. In this case the software installed was a software called WAMP Server 2.0.
- Step 2: Configure WAMP Server and make sure that it works.
- **Step 3:** Create a file called "index.php." When typing, "localhost" directly into the URL, it will automatically take you to the index.php file.
- Step 4: Program the code for the main page in.
- **Step 5:** Download the phpMyAdmin plugin.
- Step 6: Create a MySQL database called eggslab.
- **Step 7:** Create a table called users.
- **Step 8:** Program the code that controls the login system:
- **Step 9:** Program the code which controls the layout of the login page:
- **Step 10:** After programming step 9 begin programming the signup or register system for the signup page.
- **Step 11:** After programming the registration or "Sign up for an Account" system, program the layout and look of the registration page.
- **Step 12:** Program the homepage of the interface the users sees when they've logged in.
- **Step 13:** Program the account page of the interface the users sees when they've logged in.
- **Step 14:** Program the about page of the interface the users sees when they've logged in.
- **Step 15:** Program the logout page of the interface.
- **Step 16:** For steps 13, 14, and 15. At the top of those pages insert this script to check if the user's logged in.
- Step 17: Test the website to see if it works.
- **Step 18:** In the Wamp Server panel, click "put online" to put the website online. (The default name is its ip address.)

## Hacking the Website

- Step 1: Download a proxy server called Burpsuite.
- NOTE: A proxy is a tool used to intercept the data sent between the computer and the server the computer's communicating with.

- **Step 2:** While "burp.jar" file is or already has downloaded, connect to the website by type the name of it in the URL.
- **Step 3:** Click the login button to get to the login page.
- **Step 4:** Type in the username and type in anything in password field in order to get an error message. It is important not to click the submit button yet.
- Step 5: Open command prompt.
- **Step 6:** In order to run Burpsuite. Type: java –jar –Xmx2G C:/Users/burp.jar.
- **Step 7:** Go to settings and enable proxy. Set location to 127.0.0.1.
- **Step 8:** Configure browser settings to use a proxy.
- **Step 9:** In the login page press submit and Burpsuite should intercept the error. At this point, start the timer!
- Step 10: In Burpsuite click action and click "send to intruder."
- Step 11: In Burpsuite click the intruder tab.
- **Step 12:** Highlight the password field and click add.
- **Step 13:** In the preferences tab insert the dictionary in queue 1.
- **Step 14:** Click launch a cluster attack then click intruder at the top and click "start attack."
- Step 15: When the dictionary attack is launched check for a 202 status.
- **Step 16:** If there's a 202 status, stop the timer then enter the password that matches with the username in the login. It will then login.
- **Step 17:** Repeat steps 4, 9-16. With a second username.
- **Step 18:** Repeat steps 4, 9-16. With a third username then step 17 with a fourth, fifth, sixth, seventh, and finally eighth username since this is the total amount of accounts created for the purpose of the experiment. Make sure to record the data
- **Step 19:** To get accurate results, start another trial. To start another trial, repeat the dictionary attack for the first username, afterward follow steps 17, then step 18.
- **Step 20:** Finally, start a third trial by doing step 19. Make sure to record the data. Chart the data.