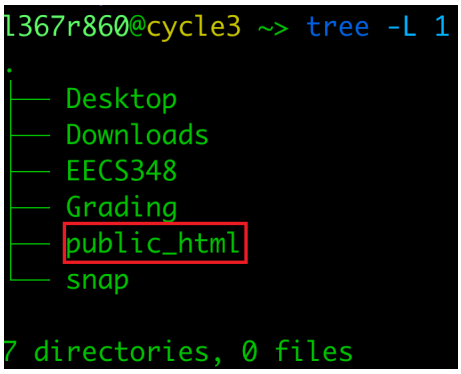
EECS 348: Software Engineering I, Fall 2025

Lab 3: Web Programming: HTML, CSS, JavaScript, PHP

1. Prepare the environment

To complete this lab, you will need access to either the cycle server or the lab machine. Now, let's go over how to set up the environment and efficiently complete your index page.

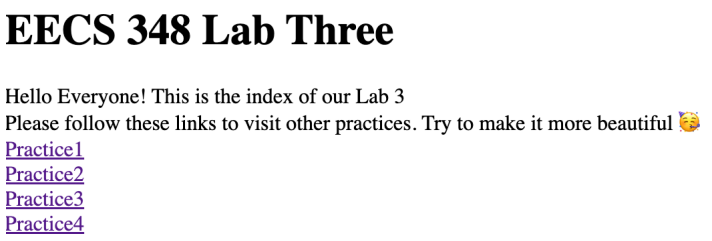


After logging into the cycle server (or using the lab machine), locate the *public_html* folder. If it does not exist, create it. Next, open your terminal and run the following commands exactly as provided—do not modify the Canvas ID:

```
wget people.eecs.ku.edu/~l367r860/index.html
wget people.eecs.ku.edu/~l367r860/grant_permission.sh
bash grant_permission.sh
```

Don't copy and paste from this PDF file, as you may lose some letters.

Finally, open your browser and visit the following link: https://people.eecs.ku.edu/~l367r860/ (Replace l367r860 with your Canvas ID.). If you can access the following page, you have successfully completed the first step. When creating a new file, remember to run the command bash grant_permission.sh again.



The index file includes four links to our four practice exercises. If you choose to use my index file, ensure that your HTML files are named practice1.html, practice2.html, practice3.html, and practice4.html. For additional guidance, you can find useful resources on W3Schools. If any practice is unclear, feel free to refer to my example for clarification.

2. Understand how People link works

Before starting the practice, I want to clarify a few points. The following explanations will not affect your practice, so feel free to skip them if you'd like.

What do the three commands mean? The first command downloads the index file. The second command downloads the script. The third command runs the script, which ensures that you have an HTML file and that it is accessible.

What does the link `https://people.eecs.ku.edu/~l367r860/represent?` A URL (Uniform Resource Locator) represents an IP address, which corresponds to one or more servers. In this case, `https://people.eecs.ku.edu/` points to the server at 129.237.87.16. The default port for HTTP services is 80, so when you access `https://people.eecs.ku.edu/`, you are actually reaching 129.237.87.16:80. The server then serves the file located at */var/www/html/index.html*. However, the server uses the KU network ID to forward you to your cycle server directory, specifically: */home/l367r860/public_html*. That's why you must place your files in this folder—so they can be accessed through your web link.

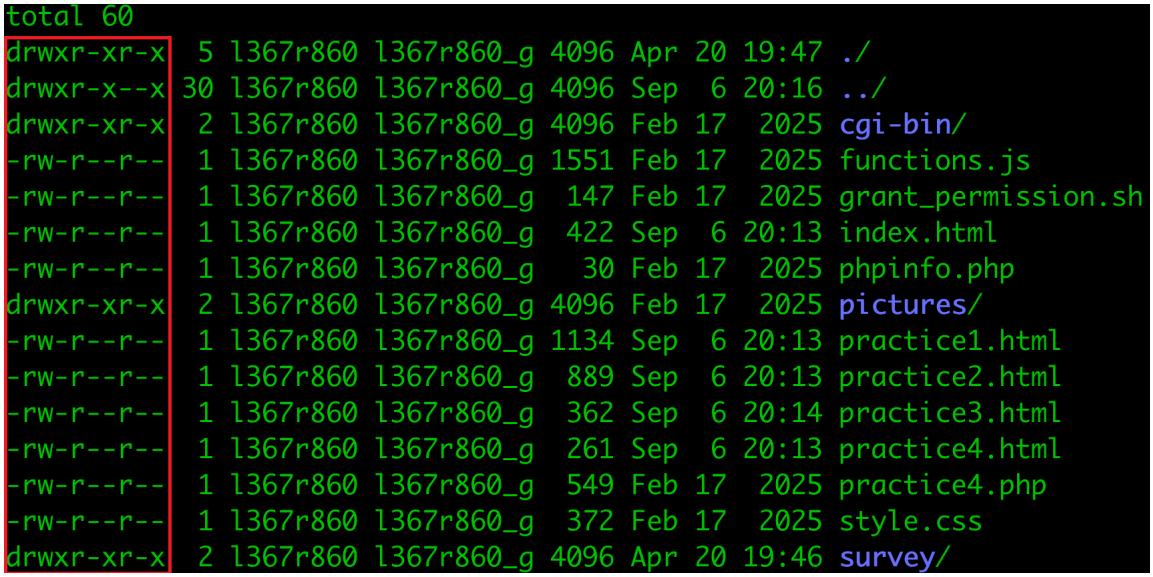
Why do you need to run the script? When you visit a webpage, your browser downloads and parses the HTML, rendering it visually. However, for others (including me) to access your files, you must ensure they have the correct permissions. The script sets the file permission to 644, which means: You (the owner) can read and write the file ; Others can only read the file. Even if you don't run the script, you may still be able to access your site because new files are usually created with 644 permissions by default. However, the script ensures that the permission is correctly set, preventing potential access issues. If your files are not accessible, I won't be able to grade your work! So, always run the script after creating a new file.

Why doesn't the site change after changing my files? The server needs some time to update, and you need to refresh your browser. Important Reminder. You must ensure that your files are placed inside the public_html folder! If your files are not in this folder, they will not be accessible, and I won't be able to grade your work.

3. Practices

1. HTML profiles Create a profile page that is styled with CSS. Have fun with this! In this page, you must include some text, a photo, a hyper link and a video.

2. CSS Font Control Create a web page that has a paragraph with some



dummy text. Near the paragraph, have a text field to accept RGB values to form any colors for the paragraph and the border. You also need to control the width of the border.

3. JavaScript Password Verification Create a JavaScript program that allows the user to enter a password two times to verify them. If the password is not at least eight characters long or if two passwords are different, alert the user. Otherwise, tell the user that two passwords are matched.

4. PHP Multiplication Table Create a PHP program that receives a number and displays a multiplication table from 1 to the number. You also need to print the row and column indexes in the table.

5. Publish Your Exercises You need to publish your practices to both People link and GitHub. At the same time, you need to make sure TAs can access your People Link.