EECS 348 Software Engineering Lab 7
Web Programming: HTML, CSS, JavaScript, PHP

1. Prepare the environment

We need to use the cycle server to finish this lab, and we have discussed how to connect to your cycle server at lab 1. Now, let's discuss how to prepare for the environment and finish your first page quickly.

After logging into your cycle server, there should be a folder called **public_html**. If you don't find it, please create it by yourself.

Then, open your terminal and execute the following commands in the terminal:

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

After that, open your browser and visit the link: https://people.eecs.ku.edu/~l367r860/ (Change my KU network ID l367r860 to yours!)

You will finish the first step if you can visit the following page. When creating a new file, you must run the command `bash grant_permission.sh` again. In my index file, I have four links to our four practices, and if you want to use my index file, you must name your HTML files as practice1.html, practice2.html, practice3.html, and practice4.html.

You can find lots of useful resources from W3School. You can check my example if you don't understand any practice.

Before starting the practice, I want to explain some questions. The explanation doesn't affect your practice so you can pass this.

At first, what do that three commands mean? The first is to download the index file, the second is to download the script, and the third is to run the script. So, I want you to have an HTML file and make sure you can access it. It works like a "Hello World" program.

Then, what does the link https://people.eecs.ku.edu/~l367r860/ mean? As we know, a URL is used to represent an IP address, which means one(or more) servers. So, https://people.eecs.ku.edu/ is server 129.237.87.16. HTTP service's default port is 80. So when you access https://people.eecs.ku.edu/, you are accessing 129.237.86.16:80. More precisely, the service running at this port gives you the file /var/www/html/index.html. But this file's behavior will be based on the following KU network ID to forward you to the cycle server /home/l367r860/public_html. That's the reason why you must put your files in this folder.

Next, why do you need to run the script I give you? When you access a page using your browser, it just downloads that page, then parses it for you, which means converting the HTML codes to the page you see. So, you must make sure others can access your files. Otherwise, they can't

visit that page, I.e., I can't grade you! In short, the script just set the permission to 644, so others can access your file. You will find out that even if you don't run the script, you can still access your site because the default permission of a new file is 644. So the script is to make sure the permission if correct.

```
l367r860@cycle3:~/public_html$ ls -al
total 1076
drwxr-xr-x  5 l367r860         48    4096 Apr  4 15:12 .
drwxr-x--x 29 l367r860 l367r860_g    4096 Apr  4 17:03 ..
drwxr-xr-x  7 l367r860 l367r860_g    4096 Apr  3 17:22 backup
drwxr-xr-x  2 l367r860         48    4096 Aug 25  2022 cgi-bin
-rw-r--r--  1 l367r860 l367r860_g    1553 Apr  3 17:21 functions.js
-rw-r--r--  1 l367r860 l367r860_g     147 Nov  3 09:31 grant_permission.sh
-rw-r--r--  1 l367r860 l367r860_g     422 Apr  4 11:49 index.html
drwxr-xr-x  2 l367r860 l367r860_g    4096 Oct 31 11:28 pictures
-rw-r--r--  1 l367r860 l367r860_g    1160 Apr  3 17:10 practice1.html
-rw-r--r--  1 l367r860 l367r860_g     889 Apr  3 17:29 practice2.html
-rw-r--r--  1 l367r860 l367r860_g     362 Apr  3 17:30 practice3.html
-rw-r--r--  1 l367r860 l367r860_g     261 Apr  4 11:48 practice4.html
-rw-r--r--  1 l367r860 l367r860_g     549 Nov  6 21:21 practice4.php
-rw-r--r--  1 l367r860 l367r860_g 1044480 Apr  4 15:12 share.tar
-rw-------  1 l367r860 l367r860_g     372 Oct 31 11:26 style.css
```

Finally, you may find the site doesn't change after changing your files. The server needs some time to update, and you need to refresh your browser.

I want to say it again: you must use your cycle server to finish this lab!

2. Practice One: HTML EECS Profiles (10 points)

Make a profile page that is styled with CSS. Have fun with this. In your profile, you need to include your name, a photo, and contact info and showcase anything good for your professional career, e.g., courses, projects, and work experience… You could also use JS and PHP in this practice. At the same time, you must include at least one link and video.

3. Practice Two: CSS Font Control (10 points)

Create a web page that has a paragraph with some dummy text. Near the paragraph, have a text field to accept the following values: red/green/blue values for the paragraph and red/green/blue values for the border. You also need to control the width of the border.

4. Practice Three: JavaScript Password Verification (10 points)

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.

5. Practice Four: PHP Multiplication Table (10 points)

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.

6. Publish Your Exercises (5 points)

You need to publish your practices to GitHub. At the same time, you need to make sure Tas can access your EECS People Link.