

CSCI 311 Spring 2020: Lab 1

In this first lab, students will set up their web development environment as well as their lab directory structure. All entry points for labs will be created and password protected.

Learning Objectives:

- Set up `public_html` permissions
- Create course home page
- Create landing pages for all labs
- Set up password protection for all labs (eventually, see `CSCI311PasswordStudentInstructions.pdf`)

What to hand in:

- submit the following files to VIU Learn no later than Jan. 18, 18:00:
- .zip file containing all source code:
 - Entire `csci311` directory structure for all labs
- Text file containing:
 - Brief summary of challenges encountered (if any) during the lab

Note:

- late submissions will be penalized 20% per day
- All work must be individual.
- Plagiarized work will result in a mark of 0. Further penalties may apply.

Marking Scheme:

- Specifications: 4 marks
- Requirements: 4 marks
- Code standards: 4 marks

Instructions:

In this lab, students will configure their files and folders on otter in order to be able to serve web pages. In particular, students will create a location for labs to be located and served.

Preliminary stuff:

- Log in to your account
 - if you're not already set up with linux account and password, see instructor for assistance

Set up `public_html` directory:

- Create a directory named `public_html` in your home directory
- Set the permissions of your home and `public_html` directories
 - navigate to your home folder
 - `cd ~`
 - set the home directory to be world/group searchable
 - `chmod go+x ./`
 - set the `public_html` directory as world/group searchable
 - `chmod go+x public_html`

Set up csci311 directory:

- Create your `csci311` directory and labs directories
 - Within the `public_html` directory, create a directory named `csci311`
- Create a `labs` directory within `csci311`
 - Within this directory, create `index.html`
- Your `index.html` file will include your name, your section, and a list of links to each lab file. We will create these files next step.

Set up all lab directories:

- In `public_html/csci311/labs/`
- Within this directory, create a default html file: `index.html`
 - From it, link to each of the lab directories. Use the list code below if you like.

```
<ul>
  <li><a href="./lab1/">Lab 1</a></li>
  ...
  <li><a href="./lab7/">Lab 7</a></li>
</ul>
```
- Create a directory for each lab, named `lab1`, `lab2`, `lab3`, ... `lab7`
 - Within each of these directories create a default html file: `index.html`

Create a first web page

- For lab one you will create an html file that meets the following specifications.
 - Name it `lab1.html`
 - It must be located in the `lab1` directory
 - It must be linked to from your `./lab1/index.html` landing page
 - The structure of the page will be as follows (in this order, using the indentation as indication of nesting):
 - A head block with a link to an external css file
 - In the body block
 - a header element, with a level 1 heading
 - a div with the id set to "main_body"
 - a section
 - a level 2 heading with the heading of your choice
 - one or more paragraphs of text
 - an image
 - a section
 - a level 2 heading with the heading of your choice
 - an unordered list of links (anchor elements)
 - a footer element that includes your name, the date, and copyright information
 - The content of the page is up to you, but should logically make sense
 - It could be about your favourite game, book, movie...
 - It could be a homage to your pet
 - It could be about somewhere you've travelled
 - Style the page
 - Use inline css to set the font of all text in the body
 - Use an external css file to style
 - the list

- change the list marker
- anchors
 - give a hover effect
- headings
 - center all heading text
- footer
 - make footer text very small and centered
- Use internal css to style the background the text colour of the content of the div with id "main_body"

Specifications:

- `public_html` directory created in home directory
- `csci311` directory created in `public_html` directory
- `labs` directory is created in `public_html/csci311` directory
- Individual directories for each lab created in `public_html/csci311/labs` directory
- All folders contain default `index.html` file
- Lab 1 html file meets all structure specifications described above
- Lab 1 html file content logically flows

Requirements:

- All submitted code must be error free
- All permissions correctly set
- Submission followed all instructions

Code Readability, and Comments:

- Code adheres to all course code standards

Resources:

- CSS: <http://www.w3schools.com/css/>
- HTML: <http://www.w3schools.com/html/>
- Indentation: <https://www.granneman.com/webdev/coding/formatting-and-indenting-your-html/#best-method-indent-textcontent->
- HTML Entities: https://www.w3schools.com/html/html_entities.asp