Lab 1: Creating Git repository and Accessing Timberlea server [HTML, CSS]

Learning Outcomes:

- Learn to use GIT for version control.
- Learn to use Timberlea for submitting your work in the course.
- Understand the process to follow when submitting your work in this course.

Instructions:

- For this lab, you will be creating a simple webpage and exploring the use of Git and Timberlea for submitting your work. In particular, you will be creating a git repository to push your code onto it, and, learning to access the FCS Timberlea server in order to upload your code files and preview it.

  Note: It is important for you to understand how to use both Git and Timberlea, as this is how you will be expected to submit your work going forward in this course. Our rule of thumb is: "If you can preview your work through a browser following the URL specified in the lab handout, then the TAs and Instructor will also be able to view and mark your work.".

- In our labs, you will be submitting three items:

  1. A **README** file which will include the URL to your Git Lab Repo and Timberlea submission, along with any sources or citations needed for your code.

  2. A **Git Lab** repo for a given lab and/or activity submission, which the Instructor and Markers will use to mark the quality of your code. Therefore, it is important for you to ensure that you have given **maintainer access** to the Instructor and Markers BEFORE to the lab deadline. *See Lab 1 module for the Instructor's and Markers' CSIDs.*

  3. A **Timberlea** submission. Each lab you complete in this course MUST be remotely accessible through Timberlea's Web Server (not its File Server which is often used in non-web related courses). Each lab handout will include the URL through which your lab should be accessible. However, you MUST also include your Timberlea URL on your README file.

- To complete this lab, you will be expected to complete the following:

  (a) Install **FileZilla FTP client** and **Git** on your system (steps included in Lab 1 slides).

  Note: If you have never used Timberlea's Web Server before, this step will help you see the specific folder you will need to access in order to work with Timberlea's Web Server rather that its File Server. If you have

used Timberlea's Web Server before, you are free to use Terminal or Command Line to upload your work.

(b) Create a simple **html file** with some content about yourself. Use this opportunity to brush up on what you already know (e.g., HTML, CSS)

(c) Create a **git** repository on the **FCS Gitlab site** at, and clone it to your local system using the following command:

```
git clone *your repo https link*
```

(d) Copy the HTML file to the local copy of your repo and push it to the git repo using the following commands:

```
git add .
git commit -m "your commit message"
git push
```

(e) Log onto Timberlea using Filezilla, use the following login information:

Host: timberlea.cs.dal.ca
Username: Your CSID
Password: Your CSID Password
Port: 22

(f) Filezilla, navigate to your **'public_html'** folder, this folder is the root directory for a given domain name (e.g., https:// web.cs.dal.ca/), within your **'public_html'** folder, create a **'csci3172'** directory.

(g) Upload your completed **index.html** file, and any other files you have created (e.g., .css), into your **'lab1'** directory on Timberlea.

(h) Ensure you have set the proper file and folder permissions for your Lab 1 work.

Note: For your files to be accessible through a browser for testing and grading, you must ensure you are using the correct file permission settings on your files and folders. On a shared server, such as Bluenose, it is recommended to **use '755' (i.e., rwxr-xr-x) on folders**, and **'644' (i.e., rw-r--r--) on individual files**. You can set your file permissions easily through an FTP client by right clicking on the file or folder you want to set specific permission settings. Depending on your FTP client, you will need to click on **'Get Info'** or **'File Permissions'**. Once on the file permissions window, you can simply enter the numeric value described above.

(i) Visit **https://web.cs.dal.ca/~yourCSID/csci3172/lab1/** on any browser and ensure you can view your work.

Note: Failure to submit your work through Timberlea will result in a grade of **ZERO (0)**. Failure to ensure your work is remotely accessible through a web browser, using the specified URL will result in a grade of **ZERO (0)**. If you can see your work through the specified URL, then the TAs and Instructor will also be able to view and mark it.

- Regarding the look-and-feel of your assignment, you have complete creative freedom for this assignment. You are encouraged to work towards an aesthetically pleasing website that applies the design and development principles you have learned thus far in your academic and/or web development career. You may use Creative Commons images and/or logos with proper author attribution (provided through code comments, and/or **README.txt** file).

Note: Do keep in mind that as part of this assignment, you are expected to work individually, you may discuss ideas with your classmates, but do refrain from sharing any code.

- **Your lab MUST be responsive.** The level of responsiveness of your lab is dependent on the design you decide to implement. As such, you are expected to test your lab on multiple browsers, platforms, and devices.

- **Your assignment MUST be W3C compliant**, i.e., it must pass W3C front-end validations tests (e.g., HTML and CSS).

Note: Failure to submit valid code will result in a possible maximum grade of 50%. Any validation warnings WILL NOT affect your grade.

- **Include in your README.txt or README.md file,** the URL from which your lab can be accessed. All pages you develop for this assignment will need to be accessible through that link.

Note: If you decide to use and modify any existing code, e.g., code found on online or printed sources or code used during in-class/tutorial examples, you are expected to provide author attribution in your code comments, and a more detail explanation of your sources in your README file (i.e., providing an explanation of why the piece of code is necessary for your work, where, how and why the code or section of code was modified). Keep in mind that simply stating "code was modified" does not provide sufficient information required in your programming assignments.

Submission:

- For this lab, you will need to **submit your work through Timberlea, Brightspace, and GITLab as follows:**

To submit your work to Timberlea:

- As part of this lab, you will need to create a **'csci3172'** directory on Timberlea inside of your **'public_html'** folder. Your **'public_html'** folder is the root directory for a given domain name (e.g., https:// web.cs.dal.ca/). For this purpose, you will need to connect to Timberlea using the following information:

  a. **If using an FTP Client:**

  Host: timberlea.cs.dal.ca
  Username: Your CSID
  Password: Your CSID Password
  Port: 22

  Note: Your FCS Account IS NOT the same as your Dalhousie Account. Each student enrolled in a CS course is given their own FCS account which provides them with exclusive access to FCS Resources. If you have not changed your FCS account's password then your password will be your B00 number. If you are still unable to log onto Timberlea, it may be due to your personal firewall, please contact the FCS Help Desk at cshelp@dal.ca as they will be able to assist you.

  b. **If using command line, such as Terminal:**

  ```
  ssh -l CSID timberlea.cs.dal.ca
  ```

- Within your **'csci3172'** directory, create a **'lab1'** directory.

- Once you have completed your lab, upload your work into your **'lab1'** directory on Timberlea.

  Note: For this lab, you will be expected to include one **index.html** file.

- Ensure you have set the proper file and folder permissions for your Lab 1 work.

  Note: For your files to be accessible through a browser for testing and grading, you must ensure you are using the correct file permission settings on your files and folders. On a shared server, such as Bluenose, it is recommended to **use '755' (i.e., rwxr-xr-x) on folders**, and **'644' (i.e., rw-r--r--) on individual files**. You can set your file permissions easily through an FTP client by right clicking on the file or folder you want to set specific permission settings. Depending on your FTP client, you will need to click on **'Get Info'** or **'File Permissions'**. Once on the file permissions window, you can simply enter the numeric value described above.

- Visit **https://web.cs.dal.ca/~yourCSID/csci3172/lab1/** on any browser and ensure you can view your work.

  Note: Failure to submit your work through Timberlea will result in a grade of **ZERO (0)**. Failure to ensure your work is remotely accessible through a web browser, using the specified URL will result in a grade of **ZERO (0)**.

- Test your lab to ensure cross-browser compatibility.

To submit your work to Git Lab:

- Visit the Dal FCS Git Lab site (**https://git.cs.dal.ca/**) and create a new project for **CSCI 3172.** Create a GitLab folder structure for Individual deliverables, such as Labs and Activities that resembles a structure similar to that illustrated on Figure 1.

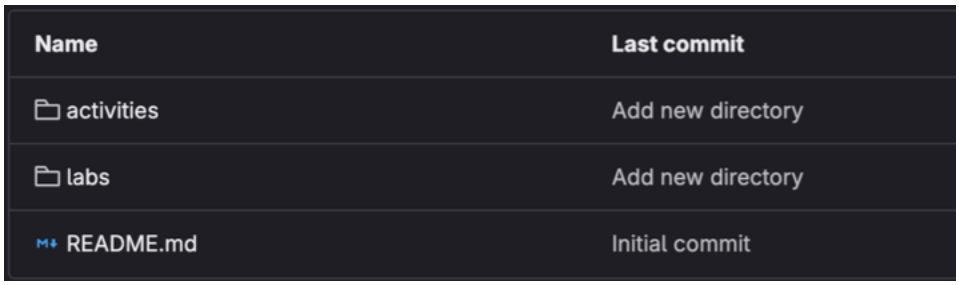

Figure 1. *GitLab Folder Structure Example.*

- Setup your **CSCI 3172** project as a '**private project**'.

  Note: Failure to setup your csci-3172 project as private will result in a **50% grade deduction**.

- Add the course and/or Instructor and TA's **CSIDs as 'Maintainers'** *(See the Lab 1 live session module for the Instructor's and Markers' CSIDs)* for your **CSCI 3172 project.**
- Ensure all your lab files for Lab 1 are included in your **lab1** Git Lab folder

  Note: For this lab, you will be submitting your GitLab Repository link, along with the URL from which to access your lab in the **README.txt or README.md** file you will be submitting through BrightSpace.

- Setup your GITlab repo as a private project and add the course **Teaching Assistants (TAs) and Instructor as 'Maintainers'** to your project, using their **CS IDs.**

  Note: The CSIDs for this course will be provided during our lab session. Failure to add the course CS ID as 'Maintainer' for your work on GitLab will result in a maximum possible grade of 50%.

To submit your work to Brightspace:

- Download the **README template** available on Brightspace. *See Resources section* on left-hand side menu on Brightspace. There are TWO versions of this template, you may use whichever you feel more comfortable with.
- Edit the README template to include any citations for your code and/or images used for this Lab.

  Note: If the work you are submitting as part of your Lab is work done by you without the use of any external sources, then please specify so within your README file.

- Depending on the version of the template you chose, rename your README file as:
  L#_LastName_FirstName_README.txt

  Note: Ensure your README file includes the URL to your Lab and git repo for remote access.

- Submit your README file through the corresponding lab assignment dropbox on Brightspace.

Marking Rubric:

The following grading criteria will be used for marking your lab:

Dimensions	Does Not Meet Expectations	Meets Expectations	Exceeds Expectations
HTML (5%)	Student's index file is empty or does not render properly or at all. **(1 - 2 points)**	Student's index file fails to properly implement HTML tags that correctly mark-up the structure of the web document, i.e., uses the wrong tags such as <table> for defining a layout. **(3 - 4 points)**	Student's index file successfully implements HTML tags that properly markup the structure of the web document. **(5 points)**
CSS (5%)	Student's style.css file is empty or does not render properly or at all. Student did not customize any CSS frameworks used. **(1 - 2 points)**	Student's style.css file fails to properly render or is not cross-browser compatible, i.e., looks different on different browsers. Layout is not responsive. **(3 - 4 points)**	Student's style.css file successfully renders and is cross-browser compatible. Lab is responsive. Student properly customized any CSS frameworks used in this lab. **(5 points)**
Design (10%)	Student's overall design is not consistent, or aesthetically pleasing. Design includes broken elements, e.g., images, links. **(1 - 2 points)**	Student's overall design is somewhat consistent. Includes some broken elements but it is not an overall distracting or confusing design. **(5 - 9 points)**	Student's overall design is consistent and aesthetically pleasing. The implemented design is overall very easy to use. **(10 points)**
Cross-Browser Compatibility (15%)	Student's lab is not cross-browser compatible, noticeable and distracting differences are visible. **(0 points)**		Student's lab is cross-browser compatible, no noticeable or distracting differences visible. **(15 points)**
Git repository (45%)	Code is not pushed to repo or Student did not provide access to their Lab's GitLab repository **(0 points)**		Code is properly pushed to git repo, and student provided access to their Lab/s GitLab repository.. **(45 points)**
Timberlea (20%)	Code is not uploaded on Timberlea OR the URL doesn't load the HTML file **(0 points)**	Code is properly uploaded on Timberlea but the URL is not as per requirements. **(10 - 15 points)**	Code is properly uploaded on Timberlea and URL to file is provided as per requirements **(20 points)**
README.txt	Student's did not submit a README.txt file and/or did not edit the template as expected. **(-100 points)**		Student's submitted a README.txt file properly edited to include all sources used. **(0 points)**