

# Lab 4 – CSS, Bootstrap and Multimedia

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## Purpose

- Implement a Web Design Template (Header, Footer, and Menu) using CSS style
- Implement index.html containing the basic concept of CSS style
- Implement a Web Design Template (Header, Footer, and Menu) using Bootstrap 4
- Add Images, Audio and Video to a web page
- Upload your website to a Web server

## Due Date

- This lab must be handed in:  
**Friday June 12, 2020 – before midnight**

## Assessment

- This Lab is worth 2% of your total course mark.

## Assigned Readings

- **Lecture Slides** posted on Brightspace:
  - Module 2 -> Part 4
  - Module 2 -> Part 5
- The following chapters of **Fundamentals of Web Development** will be useful in completing this exercise:
  - Chapter 2
  - Chapter 3
  - Chapter 4

## Lab Supplies

To complete this lab you will require the following lab supplies:

- Textbook: **Fundamentals of Web Development**
- Lecture Slides (**Module 2 -> Part 4, Module 2 -> Part 5**) posted on Brightspace
- Code Samples (**CSS Sample.zip, BootstrapSamplePage.zip**)
- Eclipse, Notepad (or other text editor, or IDE)
- FileZilla (or other FTP client)

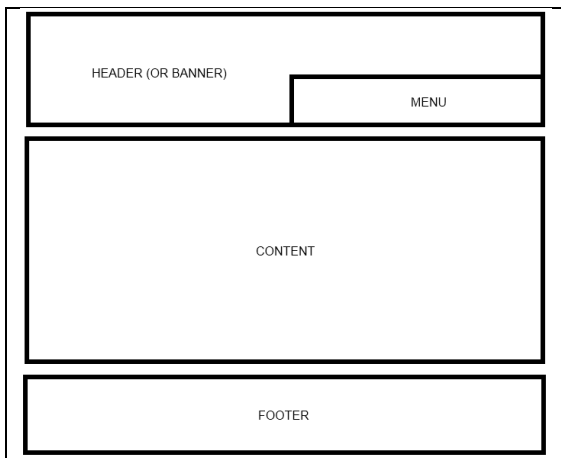
## Summary of Tasks

1. Common Look and Feel
2. Implement a Web Design Template using an EXTERNAL CSS file
3. Implement a Web Design Template using Bootstrap 4
4. Create Index.html
5. Create Multimedia.html
6. Upload your website to a webserver
7. View your webpage using a web browser
8. Submit Lab Link on Brightspace

### Task 1

Before getting started with the following tasks review the 'Common Look and Feel' materials provided on Brightspace (under: Course Content → Extra Materials). Using the knowledge gained in these materials create a 'Common Look and Feel' to be used on every page of your website.

You must implement the specified Design Template (**Course Content → Extra Materials → Common Look and Feel → Design Template4.png**) on every page of your website.



**Each page in your web site must have the following identical common elements: Header, Footer, and Menu.**

- Header
  - Program Name and Course Name
- Menu
  - Links to both Index.html and Multimedia.html
- Footer
  - Student Number, First Name, Last Name, Email Address

The Content Area in each page will be different depending on the purpose of the page (described in Task 3 and Task 4).

## Task 2

Create a file called `StyleSheet.css` that will modify your site in the following ways:

- Set the font of your website Times New Roman
- Set the size of your font 10px
- Set the background color of your web pages to white color
- Make all the content of your web page align to the center
- Modify the header3 tag
  - Set the color of every h3 tag to green
- Modify the header4 tag
  - Set the color of every h4 tag to red
- Modify the paragraph tag
  - Set the padding of the paragraph tag to 15px
- Create an ID called 'header'
  - Create CSS to style the header section of your webpage
- Create an ID called 'footer'
  - Create CSS to style the footer section of your webpage
- Create an ID called 'menu'
  - Create CSS to style the menu section of your webpage
- Create an ID called 'content'
  - Create CSS to style the content section of your webpage

## Task 3

Create a new web page named 'index.html' that implements the specified 'Design Template' for 'Common Look and Feel'. This web page needs to contain the following questions and corresponding answers:

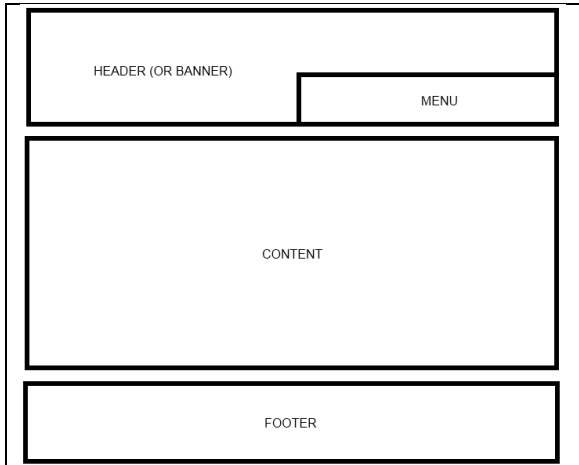
- (i) What are main benefits of using CSS?
- (ii) What are different parts of a CSS style rule?
- (iii) What are an element selector and grouped element selector in CSS? Provide an example of each.
- (iv) What are class selectors in CSS? What are id selectors in CSS?
- (v) What are contextual selectors in CSS?
- (vi) What are the three cascade principles used by browsers when style rules conflict?

Use only a HTML 'Definition-list' to display the questions and your answers. The questions and answers should be written in h3 and h4 tags respectively.

Provide an external link to the CSS file 'StyleSheet.css' to use the theme you created in Task 2.

## Task 4

Create a page named 'Multimedia.html' that implements the specified Design Template (**Course Content → Extra Materials → Common Look and Feel → Design Template4.png**) using **Bootstrap 4**.



The title of the web page will be 'Task 4 of Lab 4'. This page needs to contain:

- 9 images in a 3x3 table
- At least one embedded audio file
- At least one hyperlink to an audio file
- At least one embedded video file
- At least one hyperlink to an video file

**N.B.: The specified Design Template of Multimedia.html MUST be implemented using Bootstrap 4.**

## Task 5

Upload your website to a webserver. Use an FTP client to connect to the webserver.

Once you connect to the webserver using an FTP client, create a directory called '**/Lab4**' under '**/public\_html/CST8238**' directory. Once your personal directory has been created navigate to that new directory. Add your index.html file to this location. (Using FileZilla simply drag the index.html file into your folder)

For more information on using FileZilla please navigate to the following material in Brightspace:  
[Course Content → Extra Material → FileZilla Instruction](#)

## Task 6

View your website using a web browser. Open a web browser and navigate to the following web address:

**`http://web-server_domain_name/CST8238/Lab4/<filename>`**

For example, the web address to my page is:

<http://rejaulchowdhury.com/CST8238/Lab4/index.html>

Where 'rejaulchowdhury.com' is the domain name of the Web server, 'CST8238/Lab4' is the name of the directory I created in the Web server under '/public\_html' directory using FTP client and 'index.html' is the web page I created for this lab.

## Task 7

Once you have confirmed that your webpage is available online, you are ready to hand in your lab.

Create a word document (Lab4.doc) in which write the following Information:

- Student Number
- First Name
- Last Name
- The URL, or hyperlink, prepared in Task 5

To hand in your lab go to Brightspace and navigate to Course Content → Labs and click on 'Lab 4 – CSS and Multimedia' link.

Upload the word document (Lab4.doc) on Brightspace.

### **IMPORTANT NOTE:**

If the URL, or hyperlink, does not direct the professor to the lab you will receive a ZERO for the lab assignment.