Lab 3 – CSS and Multimedia

Purpose

- Implement a Web Design Template (Header, Footer, and Menu) using CSS style
- Implement index.html containing the basic concept of CSS style
- 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 May 24, 2024 – before midnight

Assessment

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

Assigned Readings

- **Lecture Slides** posted on Brightspace:
  - Module 1 -> Part 2
  - Module 1 -> Part 3

- 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 1 -> Part 2, Module 1 -> Part 3**) posted on Brightspace
- Code Samples (**CSS Sample.zip, Multimedia Sample.zip**)
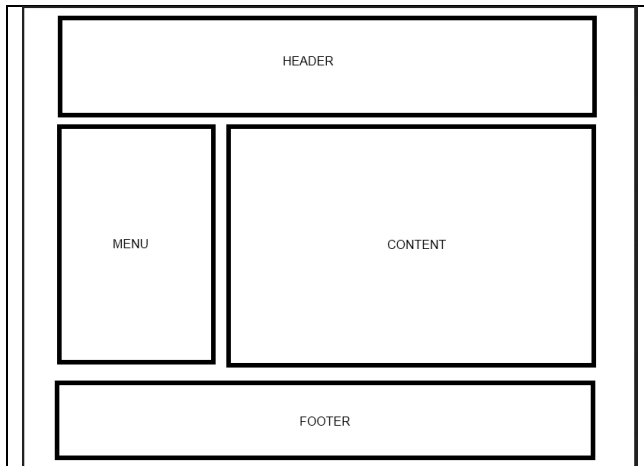- Notepad++ (or other text editor, or IDE)

Summary of Tasks

1. Common Look and Feel
2. Implement a Web Design Template using an EXTERNAL CSS file
3. Create index.html
4. Create Multimedia.html
5. Upload your website to a webserver
6. View your webpage using a web browser
7. 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 Template.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 CSS file called StyleSheet.css that will modify your site in the following ways:

- Set the font of your website Times New Roman
- 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
- 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 related CSS and corresponding answers:
 (i)   What are the different parts of a CSS style rule?
 (ii)   Define Inline Styles, Embedded Style Sheet and External Style Sheet.
 (iii)   What is an element selector? Give an example.
 (iv)   What is a class selector? Give an example.
 (v)   What is an id selector? Give an example.
 (vi)   What are contextual selectors in CSS? Give an example.
 (vii)   What is an attribute selector? Give an example.
 (viii)   What is a pseudo selector? Give an example.
 (ix)   What are the three cascade principles used by browsers when style rules conflict?
 (x)   What are CSS variables?

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.

Create Lab 3 submission folder '**Lab3**' and copy **index.html** and **StyleSheet.css** inside this folder.

Task 4

Create a page named 'Multimedia.html' that implements the Design Template specified in Task 1.

The title of the web page will be 'Multimedia Examples'. This page needs to contain:

- 4 images in a 2x2 table
- At least one embedded audio file
- At least one embedded video file

Copy **Multimedia.html** and **all images/audio/video** files inside **Lab3** folder.

N.B.: Multimedia.html MUST contain Design Template as specified in Task 1.

Task 5

Upload your websites for Lab 3 into a Web Hosting Server by uploading '**Lab3**' folder inside the 'public_html' directory of 'SiteGround' Web Hosting domain using DashBoard.

The 'File Upload' instruction is posted on Brightspace (**Course Contents -> Module 1 -> Part 2 -> SiteGround_FileUpload_Instruction.docx**).

Task 6

View your websites for Lab 3 using a web browser. Open a web browser and navigate to the following web address:

http://your_web-hosting_domain_name/Lab3/<filename>

For example, the sample URL for the Task 3 of Lab 3 on an arbitrary web hosting domain is:

rejaulc.sgedu.site/Lab3/index.html

   where '*rejaulc.sgedu.site*' is the name of an arbitrary web hosting domain, '*Lab3*' is the submission folder for Lab 3, '*index.html*' is the source code for the Task 3 of Lab 3.

Task 7

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

Create a word document (Lab3.doc) in which write the following Information:

- Student Number
- First Name
- Last Name
- The URL, or hyperlink, for the Task 3 of Lab 3

To hand in your lab go to Brightspace and navigate to Course Content → Labs and click on 'Lab 3 – CSS and Multimedia' link.

Upload the word document (Lab3.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.