

CST8285 – Assignment #5: Transforming Your Web Site [5%]

This assignment relates to the following Course Learning Requirements:

CLR 1: Write program code using structured programming, and top-down coding techniques

CLR 2: Produce tested code that executes correctly and consistently through the use of valid and invalid data.

CLR 3: Prepare program documentation using prescribed program specifications

Objective of this Assignment:

The purpose of this assignment is to enrich your website with JavaScript interaction and capabilities.

Pre-Assignment Instructions:

Big picture

In this assignment, we will tackle the main page of your website by introducing your product/service and allowing the user to search for what they are interested in. We will also revisit the “Contact Us” page, where we will save their entered data into a text file for now.

Further down the course, we will upgrade this feature to save data inside a database. It is essential to learn how to handle file input/output.

The aim here is for you to get your hands messy with the DOM, with handling events and practicing the usage of conditionals (if/else...) and loops.

Assignment Tasks:

Challenge 1

Using the resources provided to you, and as stated within this module, now is the time to construct your website's main page. You will call it "index.html". In addition, you will build the following (refer to "[Nav bar with icons](#)" on W3School -> How To section):

- A menu bar, with icons as per W3School example, covering the whole top area of the main page and all other pages; i.e. one menu bar that stays on while browsing all pages. This menu bar should include:
 - Home: pointing to your home page; i.e. index.html (the page you are editing)
 - When you hover over, it should change in colour
 - Products: a placeholder for now that does not point to any other page
 - Sub menu with title "Currency Exchange" which points to a file named "currency.php" (will come later in Assignment 7)
 - Sub menu with title "Service 2" which points to nowhere
 - Hovering over Products should drop down the 2 submenus and make Products appear in different colour
 - Contact Us: points to contact.html
 - When you hover over this menu item (no need to click), 2 submenus should appear (they point nowhere for now)
 - "Contactez-nous" (omit the double quotes)
 - With a French flag icon on its left side
 - Another "Contact Us" menu in a different language of your choice, along with its corresponding flag icon
 - Change of colour as well when hovering over
 - About: points to about.html
 - Change of colour as well when hovering over
 - Since we are starting with the example listed above at W3School website, the size and css characteristics can be very similar to the ones used there. Feel free to update them as you wish
- A text on top of the page, under the menu bar, explaining the purpose of your site and inviting the user to search for any available item desired
 - I will elaborate more about the search capabilities below so you can create your text suitable for the search feature listed below
- A text area (like the one on Google's main page) that accepts text
 - You can consult the Filters section on W3School: https://www.w3schools.com/howto/howto_js_filter_lists.asp
 - You need to have a list of your items that you want to allow the user to search on and display the result of their search in an ordered list fashion
 - Your solution needs to behave just like a Google main page; i.e. ability to enter a search text and THEN display the results. Displaying the full list up front and filtering on it based on search text is NOT an acceptable solution and will result in a deduction of 4 points; i.e. -40%. This is a key feature for the project we are building on and needs to be well worked on.

- What is acceptable is to display a filtered list as the user types in the search text and keep filtering on it while typing. So, if 'a' is entered, all records that contain an 'a' would appear, then if a 'c' is entered next to 'a', all records that contain 'ac' would only appear ... and so on.
- So, what you want to allow searching on needs to be a list of at least 50 items or more
- What type of items ? this all depends on what you are providing in term of service/product
 - If you cannot think of up to 50 items, just make them up with different names like for example
 - List of cars models
 - List of names of people
 - List of languages to translate from/to ...
 - Again, the complete list needs to be hidden and you only show the results in an ordered list fashion

Challenge 2

In this challenge, you will revisit contact.html file and using the help of examples listed through this module, you will collect all the user data from the form developed previously in a key=value format (ex. firstName=John). Once the Submit button is clicked, the default email client on the user machine needs to pop up with these key=value items as the body of the email and the TO field of the email filled with a sample email address. No need to send the email but having the default email client (Outlook, Gmail, ...) popping up with these values is enough. Many of you have had this done in A2 but if not, this is your chance.

Challenge 3

For this challenge, you will go back to index.html and add a message that will be displayed on the top right area of the page. The message should be one of the following, based on the date/time of the website visit:

- If user is visiting the website before 6:00 AM and midnight and after
 - The message would be: Good morning, you must be an early bird!
- If user is visiting the website before noon and after or exactly at 6:00 AM
 - The message would be: Good morning
- If user is visiting the website from noon till 6:00 PM
 - The message would be: Good afternoon
- If the user is visiting the website from 6:00 PM till midnight
 - The message would be: Good evening
- You need to use the Date object in JS and the message displayed needs to have a red colour and be bold

Once you are ready, you must [validate](#) the html documents again and make sure no errors are left in them.

Submission

Submit your project through Brightspace and in a **zip file** containing all the files listed below:

<index.html>

<filename.js>*

<contact.html>

<aboutme.html>

<style.css> and any added files like flags icons and others...

*: optional.

Reminders

- It is important for you to use a regular text editor like a Visual Studio Code (VS Code), Notepad, Notepad++ or something very similar to this and not an IDE; i.e. no Eclipse, no Dreamweaver and nothing like these fancy programs. I highly recommend using **VS Code**. Using other than a standard editor will result in a zero.