WEB222 - Assignment 4 [25 marks]

Due: Sunday, March 20, 2022 @ 23:59pm

Note: This is an individual Assignment.

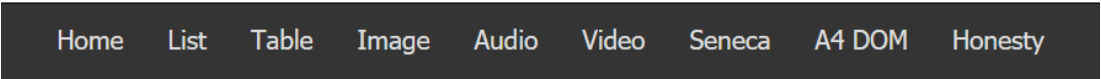**Objective**:

- Practice DOM programming.
- Publish webpages to Matrix account.

Specification:

1. For Assignment 4, you are provided a template including html, js, css, and other files as a zip file. Make a copy of your Assignment 3 work (website). Extract Assignment 4 files to your Assignment 3 workplace. (Copy of Assignment 3 stays untouched.) Leave the file structure as is. You will add a menu item "A4 DOM" to your Assignment 3 website menu (index.html), as follows:
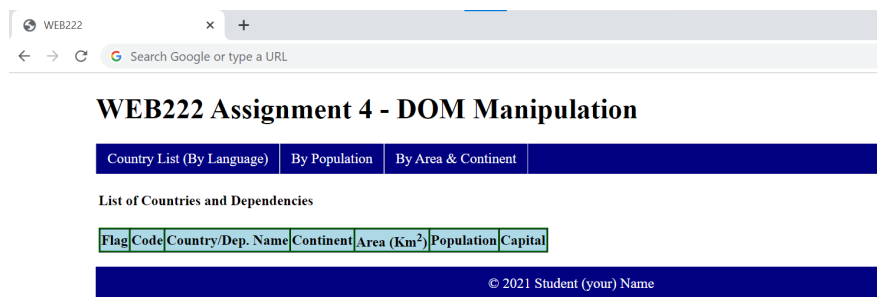

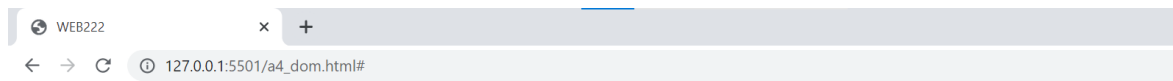*Figure 1:* *Add menu item A4 DOM to A3 work*

2. Click the menu item "A4 DOM" will open the page a4_dom.html

Figure 2: *a4_dom.html screenshot*

3. The main job of this assignment will be the following:

   (1) In a4.zip, you will find **a4_dom.html**, which shows figure 2.

   (2) Put your name for the footer "copyright 2021 Student (your) Name.

   (3) In a4.zip, you will find a4.js under the directory ./js. Referring to the following screenshots, implement the tasks as instructed in a4.js.
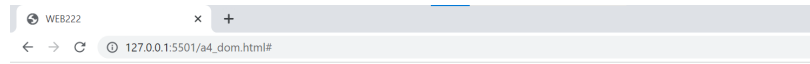

Figure 3: *result after clicking menu item "Country List (By Language) -> English". Note the heading above the table, shows: List of Countries …, in English. If click other language, it will change correspondingly. See Figure 4.*
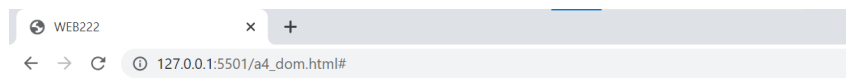
Figure 4: *result after clicking menu item "Country List (By Language) -> Chinese". Note the heading above the table, shows: List of Countries …, in Chinese. If click other language, it will change correspondingly.*

Figure 5: *result after clicking menu item "By Population …. > 100,000,000".*

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Figure 6: *result after clicking menu item "By Area & Continent -> 1 million Km, Americas"*

(4) In summary:

Complete the code in a4_src/js/a4.js to make the table and menus interactive:

- add functionality to all of the stubbed-out functions/methods based on comments in the code.
- make it possible to click on any of the menu items and have the table's contents update to show the requested data. The table takes the following form:
- Flag - an <img> with the flag for the country. All flag images are located in src/flags/ and named according to the country code.
- Code - a string with the country's code

- Country/Dep. Name - a string with the name of the country. This will either be in English, or whatever language the user requests.
- Continent - a string with the continent for this country
- Area (Km2) - a number with the area in square km
- Population - a number with the population of the country
- Capital - a string with the name of the country's capital

All country data comes from a4_src/js/countries-data.js (see this file for format details). The complete array of countries is available via countries.all in a4_src/js/a4.js.
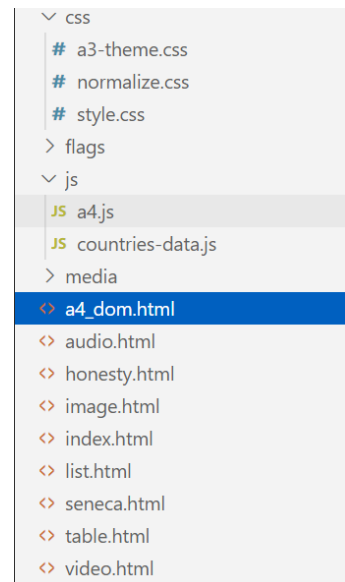
Note:
Re-clarification of the logic and steps:
1. When you work locally, you make a copy of A3 and add A4 work there. The point is to keep a copy of A3 untouched.
2. When you copy/ upload A4 to matrix, you can only upload A4 work (a4_dom.html, js, flags, css folders etc) to the existing A3, since your website has the same home page and the structure (index.html, list.html, and other pages).
3. You only need to add the link to a4_dom.html from home page (index.html) menu and won't change anything else of A3 work. So A3 will work as before no matter how A4 works.
   ```
   <li> <a href="a4_dom.html">A4 DOM </a> </li>
   ```
4. As for A4, you copy the files and folders to matrix as the same structure as the right-side screenshot.