

# WEB222 - Assignment 4 [25 marks]

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

**Note:** This is an individual Assignment.

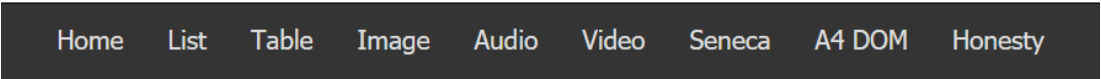
## Objective:

- 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:

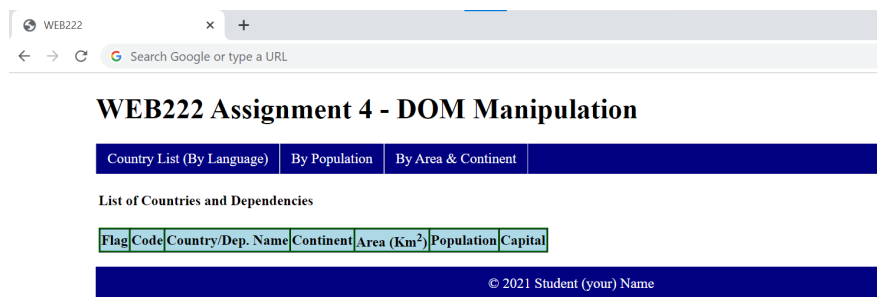
## Web Programming Assignment



Home List Table Image Audio Video Seneca A4 DOM Honesty

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

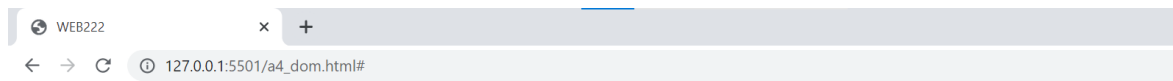
2. Click the menu item “A4 DOM” will open the page a4\_dom.html



*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.



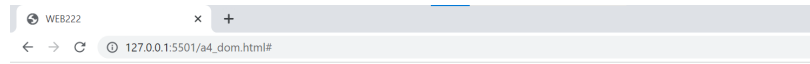
## WEB222 Assignment 4 - DOM Manipulation

| Country List (By Language) | By Population | By Area & Continent |
|----------------------------|---------------|---------------------|
|----------------------------|---------------|---------------------|








List of Countries and Dependencies - Country/ Dep. Name in English

| Flag  | Code | Country/Dep. Name   | Continent  | Area (Km <sup>2</sup> ) | Population | Capital          |
|---|------|---------------------|------------|-------------------------|------------|------------------|
|    | AF   | Afghanistan         | Asia       | 652230                  | 35530081   | Kabul            |
|    | AL   | Albania             | Europe     | 28748                   | 2930187    | Tirana           |
|    | DZ   | Algeria             | Africa     | 2381741                 | 41318142   | Algiers          |
|   | AD   | Andorra             | Europe     | 468                     | 76965      | Andorra la Vella |
|  | AO   | Angola              | Africa     | 1246700                 | 29784193   | Luanda           |
|  | AI   | Anguilla            | Americas   | 91                      | 14909      | The Valley       |
|  | AQ   | Antarctica          | Antarctica | 14000000                |            | Antarctica       |
|  | AG   | Antigua and Barbuda | Americas   | 442                     | 102012     | St. John's       |
|  | AR   | Argentina           | Americas   | 2780400                 | 44271041   | Buenos Aires     |
|  | AM   | Armenia             | Asia       | 29743                   | 2930450    | Yerevan          |
|  | AW   | Aruba               | Americas   | 180                     | 105264     | Oranjestad       |
|  | AU   | Australia           | Oceania    | 7692024                 | 24450561   | Canberra         |
|  | AT   | Austria             | Europe     | 83871                   | 8735453    | Vienna           |
|  | AZ   | Azerbaijan          | Asia       | 86600                   | 9827589    | Baku             |
|  | BS   | Bahamas             | Americas   | 13943                   | 395361     | Nassau           |

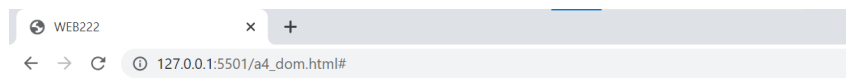
**Figure 3:** result after clicking menu item “Country List (By Language) -> English”. Note the heading above the table, shows: List of Countries ..., in English. If click other language, it will change correspondingly. See Figure 4.













## WEB222 Assignment 4 - DOM Manipulation

| Country List (By Language)   By Population   By Area & Continent                  |  |            |                         |            |                  |
|---|--|------------|-------------------------|------------|------------------|
| English   | Dependencies - Country/ Dep. Name in Chinese |            |                         |            |                  |
| Arabic  |  |            |                         |            |                  |
| 中文 (Chinese)  | Country/Dep. Name                            | Continent  | Area (Km <sup>2</sup> ) | Population | Capital          |
| French  | 阿富汗  | Asia       | 652230                  | 35530081   | Kabul            |
| Hindi   | 阿尔巴尼亚  | Europe     | 28748                   | 2930187    | Tirana           |
| Korean  | 阿尔及利亚  | Africa     | 2381741                 | 41318142   | Algiers          |
| Japanese  | 安道尔  | Europe     | 468                     | 76965      | Andorra la Vella |
| Russian   | 安哥拉  | Africa     | 1246700                 | 29784193   | Luanda           |
|   | 安圭拉  | Americas   | 91                      | 14909      | The Valley       |
|   | 南极洲  | Antarctica | 14000000                |            | Antarctica       |
|  | AG 安提瓜和巴布达                                   | Americas   | 442                     | 102012     | St. John's       |
|  | AR 阿根廷                                       | Americas   | 2780400                 | 44271041   | Buenos Aires     |
|  | AM 亚美尼亚                                      | Asia       | 29743                   | 2930450    | Yerevan          |
|  | AW 阿鲁巴                                       | Americas   | 180                     | 105264     | Oranjestad       |
|  | AU 澳大利亚                                      | Oceania    | 7692024                 | 24450561   | Canberra         |
|  | AT 奥地利                                       | Europe     | 83871                   | 8735453    | Vienna           |
|  | AZ 阿塞拜疆                                      | Asia       | 86600                   | 9827589    | Baku             |

**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.












## WEB222 Assignment 4 - DOM Manipulation

| Country List (By Language)   |       | By Population            | By Area & Continent |                         |            |               |
|--|-------|--------------------------|---------------------|-------------------------|------------|---------------|
| List of Countries and Dependencies - Population: > 100000000                                     |       |                          |                     |                         |            |               |
| Flag   | Code  | Country/Dep. Name        | Continent           | Area (Km <sup>2</sup> ) | Population | Capital       |
|               | BD    | Bangladesh               | Asia                | 147570                  | 164669751  | Dhaka         |
|               | BR    | Brazil                   | Americas            | 8515767                 | 209288278  | Brasília      |
|               | CN    | China                    | Asia                | 9640011                 | 1409517397 | Beijing       |
|               | ET    | Ethiopia                 | Africa              | 1104300                 | 104957438  | Addis Ababa   |
|               | IN    | India                    | Asia                | 3287263                 | 1339180127 | New Delhi     |
|               | ID    | Indonesia                | Asia                | 1910931                 | 263991379  | Jakarta       |
|               | JP    | Japan                    | Asia                | 377930                  | 127484450  | Tokyo         |
|               | MX    | Mexico                   | Americas            | 1964375                 | 129163276  | Mexico City   |
|               | NG    | Nigeria                  | Africa              | 923768                  | 190886311  | Abuja         |
|               | PK    | Pakistan                 | Asia                | 881912                  | 197015955  | Islamabad     |
|               | PH    | Philippines              | Asia                | 300000                  | 104918090  | Manila        |
|               | RU    | Russian Federation       | Europe              | 17098246                | 143989754  | Moscow        |
|               | US    | United States of America | Americas            | 9525067                 | 324459463  | Washington DC |
|  Country flag | World | —                        | —                   | 510072000               | 7550262101 |               |

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

## WEB222 Assignment 4 - DOM Manipulation

| Country List (By Language) By Population By Area & Continent                      |      |                                  |           |                         |            |               |
|---|------|----------------------------------|-----------|-------------------------|------------|---------------|
| List of Countries and Dependencies -1 million Km, Americas                        |      |                                  |           |                         |            |               |
| Flag  | Code | Country/Dep. Name                | Continent | Area (Km <sup>2</sup> ) | Population | Capital       |
|  | AR   | Argentina                        | Americas  | 2780400                 | 44271041   | Buenos Aires  |
|  | BO   | Bolivia (Plurinational State of) | Americas  | 1098581                 | 11051600   | La Paz        |
|  | BR   | Brazil                           | Americas  | 8515767                 | 209288278  | Brasília      |
|  | CA   | Canada                           | Americas  | 9984670                 | 36624199   | Ottawa        |
|  | CO   | Colombia                         | Americas  | 1141748                 | 49065615   | Bogotá        |
|  | GL   | Greenland                        | Americas  | 2166086                 | 56480      | Nuuk          |
|  | MX   | Mexico                           | Americas  | 1964375                 | 129163276  | Mexico City   |
|  | PE   | Peru                             | Americas  | 1285216                 | 32165485   | Lima          |
|  | US   | United States of America         | Americas  | 9525067                 | 324459463  | Washington DC |
| © 2021 Student (your) Name  |      |                                  |           |                         |            |               |

**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`.

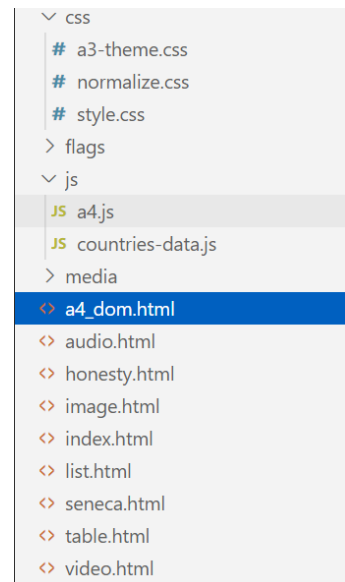
### Note:

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.



### Submission:

You do not need explicitly submit the work. Leave it on Matrix account, which will be checked after due date. **DO NOT need to email me or submit to blackboard.**

### Late submission:

10% penalty of the assignment each day, up to 5 school days. It will not be accepted after 5 school days late and will be marked zero for this assignment.