

WEB222 Assignment 4 – DOM Manipulation

Objective

Practise DOM/JavaScript coding, dynamically adding text heading, populating HTML table using DOM and generating images using DOM (rather than innerHTML property).

Specifications

To begin, download **assign4-template.zip** file from **My.Seneca/Blackboard** and unpack the zip file. In this assignment, you'll build up a front-end web app which queries data from a given array of Country objects, named **countries**, and show the results on a web page using HTML DOM API. The array of Country objects is provided in the **country-data.js** file. And your tasks are to update JavaScript code in the **myscript.js** file according to the instructions below.

BASIC REQUIREMENTS

1. You must not change the given files **assignment4.html**, and **country-data.js**. The **myscript.js** is the only file that you are allowed to update. Note: you should create event handler for `window.onload`. The level 2 heading (h2) will be generated in the **heading2** div. The text for this heading is "Country List". The table with two columns including table header will be generated inside **table** div. Again you are only allowed to modify inside the **myscript.js** file. The table header for column one is "Country" and the table header for column two is "Capital". The table data must be read from the **country-data.js** in order to generate the rows. Again you are only allowed to modify inside the **myscript.js** file. You must use DOM's `createElement` method.
2. You **must not** use the DOM/Node `innerHTML` property to populate HTML tables and creating the heading for "Country List".
3. The table data (rows with two columns) must be generated in a loop.
4. Using DOM property add a border style to **table** div. Again you are only allowed to modify inside the **myscript.js** file.
5. Next, you need to use **onclick** event listener to sense the click on the **Flag Images** link. Once, the **Flag Images** link is clicked, you need to create the flag images using DOM's `createElement` method in the 'flags' div. Again you are only allowed to modify inside the **myscript.js** file. Note that the flag images are located inside the **flags** folder. The images are of .png extension and they start with the country name, then hyphen and then the text **flag**. This pattern needs to be used when setting the **src** attribute of the images. An example could be something like this

```
var img1 = document.createElement("img");
var str= './flags/'+ countries[j].Name+ '-flag.png';
img1.setAttribute('src', str);
```

The images must be generated in a loop. Set the alt attribute to some text. Set the width and height to 200px for each image.

6. Once, the **Flag Images** is clicked and flags are generated/displayed, use DOM's `removeChild` method to remove the **Flag Images** link from the page.
7. When running your web app on a browser, no errors should occur on the browser web console.

SAMPLE OUTPUT

WEB222 - Assignment 4

Country List

Country Capital	
Canada	Ottawa
Italy	Rome
England	London
Ireland	Dublin
Russia	Moscow



Assignment submission

- Compact all your files including all directory structures into a zip file named **assignment4.zip**. Submit the **zip** file to the Blackboard (My.Seneca) before the due date.

Important note

- You are to only write code inside the `myscript.js` file. No other file requires any modification.
- Using the DOM/Node `innerHTML` property anywhere in the assignment will result in 100% penalty for the grade of your assignment.

- **NO LATE SUBMISSIONS** for assignments. Late assignment submissions will not be accepted and will receive a grade of zero (0).
- After the end (11:30pm) of the due date, the assignment submission link on the Blackboard will no longer be available.
- Do not be late – there are processing/queuing/transmission delay from your machine to blackboard server.