Lab 6

Objectives

- Get more practice using JavaScript to interact with HTML
- Learn how to use jQuery to perform JavaScript actions

References / Resources

- Using JavaScript to perform actions to HTML:
  - https://www.w3schools.com/js/js_htmldom_methods.asp

- Getting started with jQuery:
  - https://www.w3schools.com/jquery/jquery_get_started.asp

- Translation between JavaScript and jQuery:
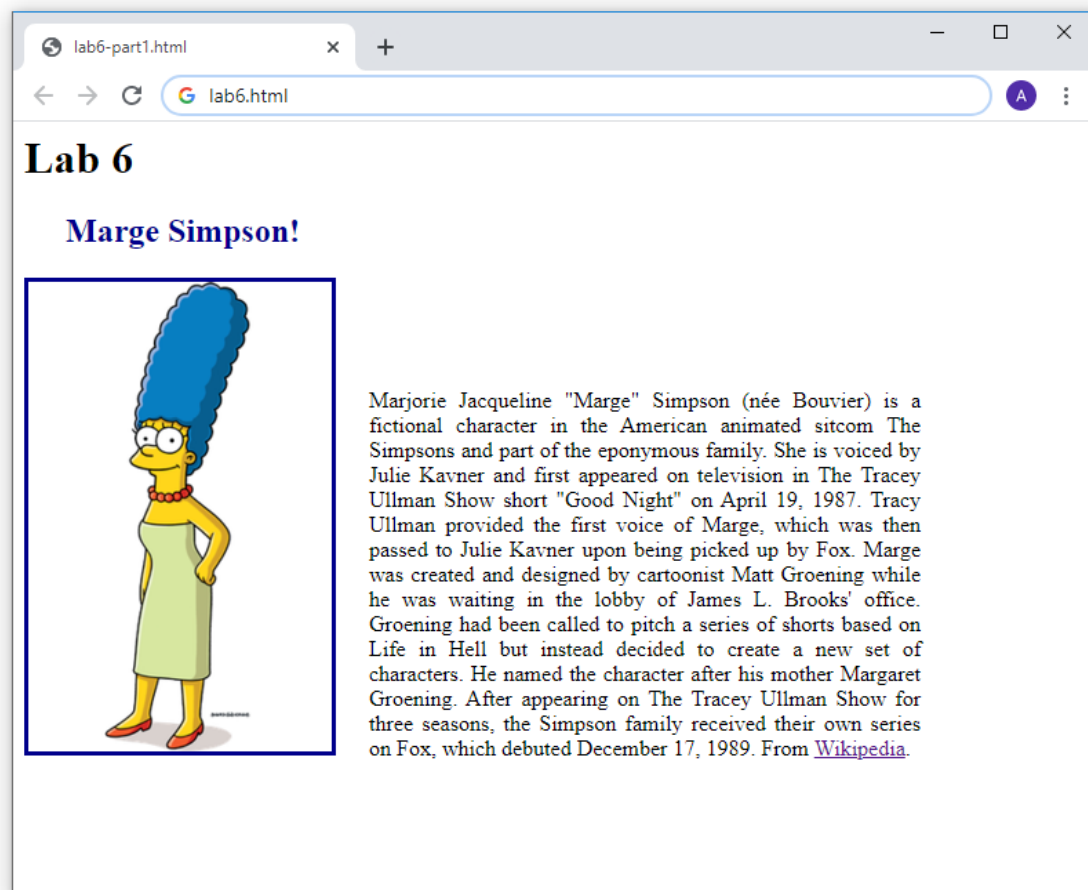   https://www.w3schools.com/js/js_jquery_selectors.asp

SETUP – Download the necessary files

1. Make a lab6 folder to save the files for this lab into.
2. From the Lab 6 on BrightSpace, download `lab6.html`, `lab6.css`, `lab6.js`, `homer.png`, and `marge.png`.
3. You should now be able to open up the `lab6.html` file in a text editor to edit the HTML, and also open it in a browser to view the web page.

1. Open up the `lab6.css` file and update the style so that heading that displays the character name (which says Marge Simpson! right now) has a **darkblue** font color, and is placed **30px** from the left side of the screen.

2. Change the border around the image so that it is **darkblue**.

3. Change the *alignment* of the character description so that it the value is **justify**. This will spread out the text so it takes up the full width on each line.

If you reload the lab6.html, it should now look like the following:

4. Open up the `lab6.js` file.

5. Add another title variable and set its value to **"Homer Simpson!"**

6. Add another image variable to store Homer's source image name: **"homer.png"**

7. Add another description variable with information about Homer Simpson:

"Homer Jay Simpson is a fictional character and the main protagonist of the American animated sitcom The Simpsons as the patriarch of the eponymous family. He is voiced by Dan Castellaneta and first appeared on television, along with the rest of his family, in The Tracey Ullman Show short \"Good Night\" on April 19, 1987. Homer was created and designed by cartoonist Matt Groening while he was waiting in the lobby of James L. Brooks' office. Groening had been called to pitch a series of shorts based on his comic strip Life in Hell but instead decided to create a new set of characters. He named the character after his father, Homer Groening. After appearing for three seasons on The Tracey Ullman Show, the Simpson family got their own series on Fox that debuted December 17, 1989. From Wikipedia."

8. Comment out the JavaScript code that changed the HTML so that it displayed the information for Marge (put a **/*** before the three lines of code, and a ***/** after).

9. Add three new lines of code similar to code you just commented out, but change it so that it displays a title, image, and description for Homer Simpson:

CHECKPOINT 1

1. In `lab6.html`, add a button between Lab6 and the character title that calls a function named `switchCharacter()` when clicked.

2. In `lab6.js`, create a variable to keep track of which character is currently being displayed. This could be a variable that is a number that goes back and forth from 0 to 1, or a string variable that goes back and forth between "marge" and "homer".

   (Ask a TA if you are unsure of how to get this part started)

3. Write the `switchCharacter()` function:

   a. This function will use both sets of the three lines you used to display Marge and Homer information, but it will switch between the two sets of three lines using an if-statement, just like how we used if-statements during lecture.

   b. It should first check whether Marge or Homer are currently being displayed (using the variable created in 2.)

   c. If the current character is Marge, it should switch so that all of the Homer information is displayed, and update the variable so that it is now representing that the current character is Homer.

   d. Otherwise, it should switch so that all of the Marge information is displayed, and update the variable so that it is now representing that the current character is Marge.

   Clicking the button should now switch between characters:

   CHECKPOINT 2

1. In the HEAD section of lab6.html, add the following so that we can use jQuery:

   `<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.6.0/jquery.min.js"></script>`

2. Comment out the old `switchCharacter()` function, and rewrite it using jQuery. Remember:

   - **`document.getElementById("content").innerHTML = x;`**

     translates to:

     `$("#content").html(x);`

   - **`document.getElementById("content").value;`**

     translates to:

     `$("#content").val();`

   - **`document.getElementById("content").src = x;`**

     translates to:

     `$("#content").attr("src", x);`

   CHECKPOINT 3 – LAB COMPLETE