

Web Development Assessment 3: JavaScript

Create a dynamic web page using JavaScript which will allow the user to play a game to randomly select a superhero character, and for a short biography of that character to appear on the page. The characters can be from any genre of superheroes – Marvel, DC Comics, Anime, etc.

The webpage should consist of:

- A **main heading** – *this text can be changed from the sample text shown below.*
- A **menu button** that can expand the menu showing at least two additional links
 - The links should point to websites relating to the superheroes you are referencing in this project.
 - The menu button and the links can be styled up in CSS to your preferences, those shown below are only samples.
 - The menu should expand on either clicking or moving the mouse over the button to activate the expansion.
 - The menu should also restore to the one button either by clicking again or moving the mouse off the area.
- An **image** in the first column on the left that when you move the mouse over the image it changes and when you remove the mouse from over it, the image reverts back to the original.
- An **input box** to allow the user to enter their favourite character, when the user clicks on the button below the input box, the text they entered should be displayed in different font settings (e.g. different colour, size of text, etc.) in a paragraph below the button.
- An **input range bar** should be inserted into the first column below the menu button, to allow the user to Rate your website.
 - A function should be called when the pointer changes, and you should code in about 3 – 4 different responses for the user.
- You have the option of adding in a comparison button to compare the character value that you entered in at the top of the page against the randomly generated character and have a win message appear on the screen if they match.
- To **play the game**, a button should be on screen for the user to click it and the browser calls the function to randomly select one of the characters.
 - You should have at least 3 characters that can be randomly selected when the user clicks the button.
 - A JavaScript event listener will call the function to randomly select a number between 1 – 3 (or more), then based on that number will display the information about one of the characters.
 - When the random number is selected by the function, it should contain data to fill in relevant sections on the webpage to provide the biography for the selected character. *Remember that you can mark the areas of HTML where*

you want the information to be entered using `id=""`, and if necessary enclosing the id in a `` or `<div>`.

An image of the character should also appear beside the biographical information. **Hint:** resize all the character images to the same dimensions (width x height).

The Game – more details

- A superhero should be randomly selected when the user clicks a button on screen to play the game.
- Information about the character should also display on the page,
 - For example: name, image of superhero, alias (if relevant), weapon of choice (if relevant), actor/actress playing or voicing the character, etc.
 - This information should be displayed below the button and styled up using CSS.
 - You may add additional biographical information if you wish.
 - You should select at least 3 characters.
- You can style the webpage using your own choice of fonts, colours and images.

Requirements

1. It is preferred that you enter the JavaScript code in an External JS file as well as embedding some code in the HTML file. (*Suggestion: embed any Event Listeners in the HTML file and put all the functions in the External JS file*)
2. All HTML content must be marked up using HTML5.
3. Addressing to resources (e.g. Images) must use relative addressing¹.
4. Pages must be **HTML5 compliant**. Validate using <http://validator.w3.org>.
5. CSS should be added using External Stylesheets as in the previous assignment.
 - a. The background image, background colours, font colours and types are all your choice. These can reflect the colour scheme that may be associated with the characters/ movie that you have chosen to use in the game.
6. Your web page should contain a "**housekeeping**" section e.g. contains copyright information and contact details (e.g. email address) for the website developer.
7. If you are looking for icons, please refer to reliable websites such as <http://iconspedia.com> paying particular attention to the licenses. For example, if the license requires attribution for the icon, then please include it in your website. Do not use Google's Image Search to search for icons because you cannot be sure of the associated licenses.
8. Any images used must be referenced in the comments of your code. Please ensure to use the **actual website** the image is from and not just Google.

Project due @ 23:59 Wednesday 20th December 2023

Zip your project folder into one file and upload it through Canvas
using the link for your class group.

¹ No absolute addressing allowed, e.g. `h:/r000012345/webdev/project/images/car.png` is not allowed.

Sample Browser Views:

Please note that the sample browser views below are provided as a guide only. You do not have to use the same styles, text, colours or images as used here.

