PY 3

This is a Prove Yourself (PY). It allows you to showcase all of the topics that you have learned so far. You can use any of the previous projects (website and curriculum) that you have completed to help complete this PY.

The Sensei can give hints and minimal help because the goal of a PY is to have the student showcase their own unique solution to the problem.

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1. Write HTML Code in between <body> </body>

1.1 make a button with the id of "**submit**". Attach the **onclick** event to the button. When the button is clicked on, the JS function called "**validate()**" is called.

1.2. make a search bar using the **<input>** tag. The id of this **<input>** tag is "**search_bar**".

2. Write CSS Code in between the <style> </style>

2.1. style the button as follows

color : #ffffff
background-color : #c0c0c0;
font-size : 20px;

2.2. style the **<input>** as follows

color : #ff0000
background-color : #c0c0c0;
font-size : 20px;
width : 150px;

3. Write JS Code in between the <script> </script>

Inside the JS function definition of **"validate()",**

3.0. declare an array and name it "sData". Next, make it an empty array.

3.1. Use `document.getElementById()` to link JS code to the HTML element whose id is "**search_bar**"

3.2. load the "**value**" of the search bar into the variable **sData**

3.3. declare a variable and name it `letterCount` and load the data 0 into it.

3.4. create a digital key. Declare a variable named **i** and load the data 0 into it

3.5. Use a "**for**" loop and a digital key of **i** to loop through the array and start at index 0

3.5.1. use the name of the array, square brackets, and digital key to access the data at the index **i**

3.5.2. check if the data from 3.5.1. is equal to the letter "a"

if true, increment the `letterCount` by 1

3.6. after the "**for**" loop, send an alert and print out the amount of times the letter "a" appears in the search bar field