← **accenture**   🔔 Beela Sampath ▼

🕸 Dashboard / Primer 2.0 - App Dev / Stage 1 / Web Technologies / JavaScript

Practice program: Alliteration

Code Editor   Grading view

Problem Description:

Tina and Louis play a game based on **Alliteration,** where one has to tell an **alphabet** and the other has to form a sentence containing a minimum of 3 words and a maximum of any number of words. Most importantly, all the words of the sentence must start with the **given alphabet**.

What is Alliteration?
Alliteration is described as the repetition of the **same consonants** at the beginning of words that are adjacent to each other. Exclude vowels. **Eg: She sells sea shells.** S is a consonant and every word in this sentence starts with s.

Criteria on the game score:
1. On creating a sentence exactly with 3 correct words (or) for the first 3 correct words of the sentence, the score is 2.
2. For **each** correct word that occurs after 3 words, a score of 2 is given.

CORRECT WORD: Word that starts with the given alphabet.
INCORRECT WORD: Word that does not start with the given alphabet.

Use the Label Name and the Component Id as given. All the necessary attributes for the Components should be given. If the Component Id is not provided for an HTML component, marks will not be provided for that component. All Tags, Elements and Attributes should conform to HTML5 Standards.

Design a Form "Alliteration" with the fields specified below.

Label Name	Component Id (Specify it for "id" attribute)	Description
Enter the letter	char	To get the char. **Constraints** • Use appropriate input type. • Use appropriate patterns to accept only consonants.
Enter the sentence	alliter	To get the sentence . **Constraints** • Use appropriate input type.
	alliterbtn	To submit the form **Constraints** • The type should be "submit" • The value should be "Check Alliteration".
	result	To display the output using div

JavaScript Requirement :

- On entering the key alphabet and the corresponding sentence in the given text fields, and on clicking the "Check Alliteration" button, the JavaScript method has to get invoked and executed.
- The expected output has to get displayed as shown in the screenshot given below.

Plain web page

Enter the letter   [   ]

Enter the sentence   [   ]

[Check Alliteration]

No of words < 3

Enter the letter   [s   ]

Enter the sentence   [She sells   ]

[Check Alliteration]

Invalid number of words

No of words >=3 but sentence has a word starting with a vowel

Enter the letter   [s   ]

Enter the sentence   [Ann sells shells   ]

[Check Alliteration]

Invalid sentence

A valid sentence with an INCORRECT word

Enter the letter   [s   ]

Enter the sentence   [Nisha sells sea shells]

[Check Alliteration]

Your score is 0

A valid sentence with exactly 3 CORRECT words

Enter the letter   [s   ]

Enter the sentence   [She sells shells   ]

[Check Alliteration]

Your score is 2

A valid sentence with more than 3 CORRECT words

Enter the letter   [s   ]

Enter the sentence   [She sells sea shells]

[Check Alliteration]

Your score is 4

In script.js, provide the implementation for the functions as per the requirements mentioned below:

checkAlliteration()	On clicking submit button, this function is invoked through a form (already given). 1. **Invoke** the getCount() and **send** the sentence as its parameter. The method will return the number of words. If the number of words in the sentence is <3, display the output statement: **Invalid number of words** & stop. Else, go ahead. 2. **Invoke** the validateSentence() and **send** the sentence string as its parameter. The method will return true / false. When false, display the output statement: **Invalid sentence.** When true, go ahead. 3. **Invoke** the getScore() and **send** the sentence string & the key alphabet as its parameters. The method will return the score. Display the output statement: **as shown in the screenshot.** **Note:** In all 3 cases, display the output in div with id 'result' using .innerHTML.
getCount(str)	This function will calculate the **number of words** in the sentence and returns the count to the checkAlliteration() function.

validateSentence(str)	When **any** word of str starts **with a vowel**, it is invalid and hence returns false to the checkAlliteration() function. Else, return true. str: She sells shells - **VALID SENTENCE** str: She sells **apple** - **INVALID SENTENCE**
getScore(str,char)	This method will **compare** the first letter of every word from the valid sentence with the key alphabet, **calculate** and **return** the score to the checkAlliteration() function. The score is 2 for the first 3 **correct** words and +2 for each **correct** word after that. Score 0 is returned when a mismatch is found.

IMPORTANT POINTS:

- In js, use the getElementById() or getElementsByName() function to retrieve the value of the html component.
- Do not use Jquery commands and use the var keyword instead of let / const to define the js variables.
- Do not use ES6 commands.
- You cannot place a vowel in the first text box. You cannot click on the button without specifying anything in the text fields. HTML page that's already designed restricts you from doing these.
- Remember to convert the inputs obtained through 2 text fields to all-small-case in the checkAlliteration(), before sending them as arguments to the other functions.
- Do not use console.log() to print any kind of output/message on the console unless it is mentioned in the given description. In case if it is used for debugging purpose, comment it before performing code evaluation.

◀ **Ugly Number**

Jump to...

Concert Ticket Booking ▶

Powered by Tekstac Team