

Assignment: Working with Strings in Arrays

Instructions:

You are given an array of strings, where each string represents a word or a phrase. Use the provided string functions and array methods (`filter()` and `map()`) to complete the tasks below. Write the solutions in JavaScript.

Problem Statement

1. Filter Long Strings

Use the `filter()` method to create a new array called `longStrings` that contains only strings with a length greater than 5 characters.

2. Convert to Uppercase

Use the `map()` method to create a new array called `upperCaseStrings`, where each string in the array is converted to uppercase.

3. Find Strings Containing a Specific Character

Use the `filter()` method to create an array called `containsA` that contains only the strings that have the letter "a" (case insensitive).

4. Concatenate Strings

Use the `map()` method to append the text " - Processed" to each string in the original array and store it in a new array called `processedStrings`.

Sample Input:

```
const strings = ["apple", "banana", "cherry", "date", "elderberry", "fig",  
"grape"];
```

Expected Outputs:

1. `longStrings`:

Example: `["banana", "cherry", "elderberry"]`

2. `upperCaseStrings`:

Example: `["APPLE", "BANANA", "CHERRY", "DATE", "ELDERBERRY", "FIG", "GRAPE"]`

3. `containsA`:

Example: `["apple", "banana", "grape"]`

4. `processedStrings`:

Example: `["apple - Processed", "banana - Processed", "cherry - Processed", ...]`

Submission Guidelines:

- Ensure all the tasks are implemented in JavaScript.
 - Test your code for the given input and verify the outputs.
 - Share your code snippets and results.
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This assignment will help you practice using string functions along with array methods like `filter()` and `map()` to manipulate strings effectively.