JavaScript First Unique Character in a String

Challenge

Given a string s, find the first non-repeating character in it and return its index. If it does not exist, return -1.

1st Example

```
Input: s = 'super'
Output: 0
```

2nd Example

```
Input: s = 'supsuperklok'
Output: 6
```

3rd Example

```
Input: s = 'aabb'
Output: -1
```

Constraints

- 1 <= s.length <= 10⁵
- s consists of only lowercase English letters.

Solution

```
const firstUniqChar = (s) => {
    const map = {};

    for (let char of s) {
        map[char] ? map[char] ++ : map[char] = 1;
    }

    for (let i = 0; i < s.length; i++) {
        if (map[s[i]] === 1) return i;
    }

    return -1;
};</pre>
```

Explanation

I've written a function called firstUniqChar that takes a string s as input. Its purpose is to find the index of the first unique character in the string. If there is no unique character, it returns -1.

Inside the function, an empty object called map is initialized. This object will be used to store the count of each character in the string.

A for loop is used to iterate through each character char in the string s. Within the loop, a ternary operator is used to check if the character char already exists as a key in the map object. If it exists, the count is incremented by 1. If it doesn't exist, a new key char

is added to the map object with a value of 1.

After the first loop, the map object will contain the count of each character in the string.

Another for loop is used to iterate through each character in the string using the index i. Within this loop, an if statement is used to check if the count of the character at index i in the map object is equal to 1. If it is, it means that the character is unique and the index i is returned.

If no unique character is found in the string, the function returns -1.

In summary, the firstUniqChar function counts the occurrences of each character in the string using an object, and then finds and returns the index of the first unique character in the string.

Author: Trevor Morin

Copyright 2024 Superklok Labs