Palindrome Checker using JavaScript & Bootstrap

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Installation (make sure you Visual Code and Live Server extension installed)

EXTENSIONS: MARKETPLACE

live server

Live Server   48M ★ 4.5
Launch a development local S...
Ritwick Dey   Install
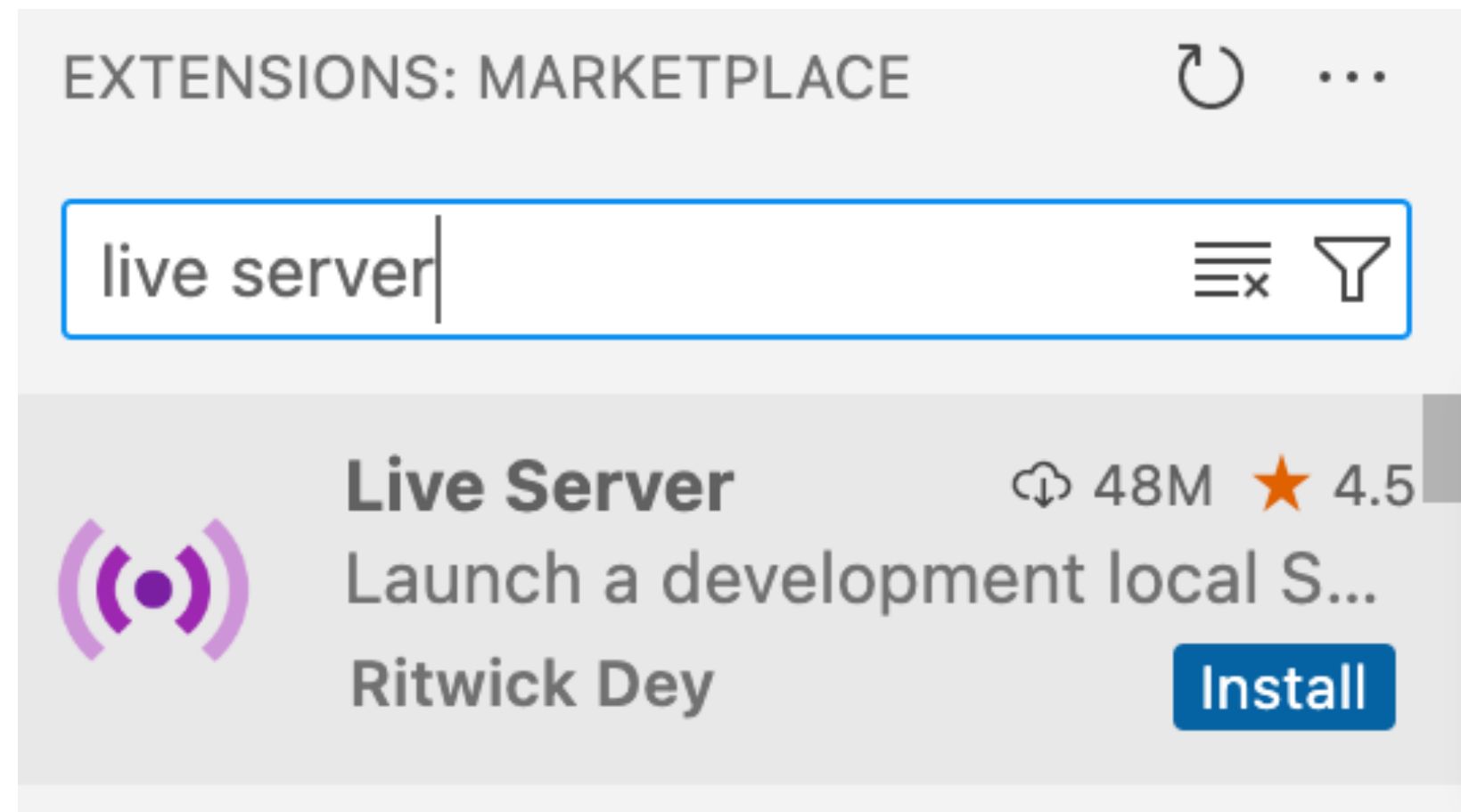
Make sure you have visual source code installed and extension called "live server" also installed

∨ Palindrome

JS index.js

<> main.html

Create an empty project like this and create two empty files inside the folder.

Build the HTML Page

main.html ●

Color-Buttons > main.html

```
1    ht|
         🔧 html
         🔧 html:5
         🔧 html:xml
```

main.html ✕

Color-Buttons > main.html > html

```
1    <!DOCTYPE html>
2    <html lang="en">
3    <head>
4        <meta charset="UTF-8">
5        <meta name="viewport" content="width=device-width, initial-scale=1.0">
6        <title>Document</title>
7    </head>
8    <body>
9
10   </body>
11   </html>
```

Inside main.html file, use a tag html:5, and this will create a basic HTML page as shown below.

Update the page

```html
<> main.html ✕

Palindrome > <> main.html > ⬡ html
1   <!DOCTYPE html>
2   <html lang="en">
3
4   <head>
5       <title>Palindrome Checker</title>
6   </head>
7
8   <body>
9
10  </body>
11
12  </html>
```

Update the HTML code a shown with head and body tag to keep things simple.

Next press "Go Live" button at the bottom of your VS Code, this will open a new chrome web page for you as shown below.

Go Live

Update the page

```
1   <!DOCTYPE html>
2   <html lang="en">
3
4   <head>
5       <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/css/bootstrap.min.css" rel="stylesheet">
6       <title>Palindrome Checker</title>
7   </head>
8
9   <body style="background-color:☐powderblue;">
10      <h1>Palindrome Checker</h1>
11
12          <div class="input-group mb-3 w-50">
13              <span class="input-group-text">Enter</span>
14              <input type="text" id="check-pal" class="form-control" placeholder="Enter word or a sentence">
15              <button class="btn btn-primary btn-md">Check</button>
16          </div>
17
18      <script src="index.js"></script>          ⟵——————  Make sure to include index.js file
19  </body>
20
21  </html>
```

We need to make our HTML Page nicer. For this, lets use Bootstrap. So bootstrap is a free library which we can using which we can get nicer looking and responsive UI (will work on desktop and mobile devices). For this, in header, simply link stylesheet of latest bootstrap library as shown. This is the link you can copy : <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/css/bootstrap.min.css" rel="stylesheet"> In the div class, we are using w-50, which means make the width as 50 pixels.

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Update the page

The UI will look like this.

This is to set the width of 50pix and mb-3 is margin. We will use id of the input type to get the content typed by user.

```html
<body style="background-color:powderblue;">
    <h1>Palindrome Checker</h1>

        <div class="input-group mb-3 w-50">
            <span class="input-group-text">Enter</span>
            <input type="text" id="check-pal" class="form-control" placeholder="Enter word or a sentence">
            <button class="btn btn-primary btn-md">Check</button>
        </div>


    <script src="index.js"></script>
</body>
```
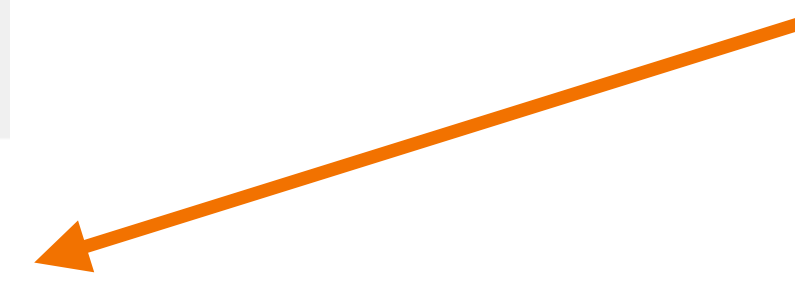
Update the page

JS index.js ✕   <> main.html

Palindrome > JS index.js > ⬡ isPalindrome

```javascript
1   const userinput = document.getElementById("check-pal");
2
3   function isPalindrome(){
4       const value = userinput.value;
5       alert(value);
6   }
```

Use onclick() to call the above function.

```html
<body style="background-color:☐powderblue;">
    <h1>Palindrome Checker</h1>

        <div class="input-group mb-3 w-50">
            <span class="input-group-text">Enter</span>
            <input type="text" id="check-pal" class="form-control" placeholder="Enter word or a sentence">
            <button class="btn btn-primary btn-md" onclick="isPalindrome()">Check</button>
        </div>

    <script src="index.js"></script>
</body>
```
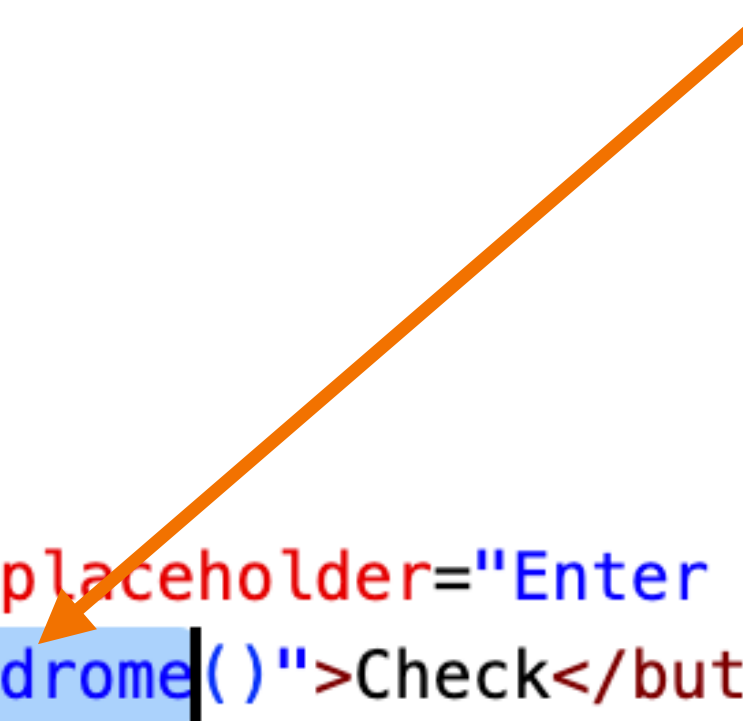
Palindrome Checker

Enter | Testing | Check

127.0.0.1:5500 says

Testing

OK

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Update the page

Finally update the index.js page. Steps are:

1) Lower the input string given by user.
2) Create a check function, and inside create a dummy empty array
3) Iterate through input string, if the char is valid between a-z, append the char at dummy empty array
4) Iterate through created dummy array and if front and end character is not same return false, else return true
5) Finally set alert to the user as well as reset the user input

```js
JS index.js    ×

Palindrome > JS index.js > ...
1    const userinput = document.getElementById("check-pal");
2
3    function check(value){
4        str = []; //create an empty array and build a list
5        for(let i=0; i < value.length; i++){
6            achar = value.charAt(i); //char at index
7            if(achar >= 'a' && achar <= 'z'){ //make sure it's between a-z
8                str.push(achar); //append to the str array
9            }
10       }
11       //above could also be achieved by str= value.split(""), but we want
12       //show array is built from a string
13
14       start = 0;
15       end = str.length -  1;
16       while(start < end){
17           if(str[start] != str[end]){ //if char do not match
18               return false;
19           }
20           start++;
21           end--;
22       }
23       return true; //default
24   }
25
26   function isPalindrome(){
27       let value = userinput.value;
28       value = value.toLowerCase(); //make lower case
29       if (check(value)) { //if true
30           alert(value + " is a Palindrome")
31       } else {
32           alert(value + " is NOT a Palindrome")
33       }
34       //reset the input string, this will reset
35       //at the UI screen input type text to nil
36       userinput.value = ""
37   }
```

Update the page

Do testing and see program works, and that's it.

Palindrome Checker

Enter | MADAM | Check

127.0.0.1:5500 says

madam is a Palindrome

OK

Palindrome Checker

Enter | madam sss MAdaM | Check

127.0.0.1:5500 says

madam sss madam is a Palindrome

OK

Full Code

```html
1  <!DOCTYPE html>
2  <html lang="en">
3
4  <head>
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6      <title>Palindrome Checker</title>
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9  <body style="background-color:powderblue;">
10     <h1>Palindrome Checker</h1>
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13             <span class="input-group-text">Enter</span>
14             <input type="text" id="check-pal" class="form-control" placeholder="Enter word or a sentence">
15             <button class="btn btn-primary btn-md" onclick="isPalindrome()">Check</button>
16         </div>
17
18     <script src="index.js"></script>
19  </body>
20
21  </html>
```

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Full Code

```javascript
1   const userinput = document.getElementById("check-pal");
2
3   function check(value){
4       str = []; //create an empty array and build a list
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6           achar = value.charAt(i); //char at index
7           if(achar >= 'a' && achar <= 'z'){ //make sure it's between a-z
8               str.push(achar); //append to the str array
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```

Thank you !!!