# Lab 04 CPS530

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This lab I basically focused on using JavaScript to make somewhat an interactive webpage. I created one part that checks if different words and phrases are palindromes, and another part that lists a few of my bookmarks while showing which ones are secure or not.

Url:

https://www.cs.torontomu.ca/~b53khan/lab04.html

Html code:

```
<!DOCTYPE html>

<html lang="en">

<head>

 <meta charset="UTF-8" />

 <meta name="viewport" content="width=device-width, initial-scale=1.0" />



 <style>

   body {

     font-family: 'Trebuchet MS', sans-serif;

     margin: 0;

     background: linear-gradient(135deg, #5f0a87, #a4508b, #1f40af);

     color: #f4f4f4;

     min-height: 100vh;

   }



   header {
```

```
  text-align: center;
  padding: 50px 20px 20px;
}

header h1 {
  font-size: 2.3em;
  letter-spacing: 1px;
  color: #fff;
  text-shadow: 1px 1px 3px rgba(0,0,0,0.4);
}

header p {
  font-size: 1.1em;
  color: #ddd;
  margin-top: 5px;
}

.container {
  width: 85%;
  max-width: 800px;
  margin: 30px auto;
  background: rgba(255,255,255,0.08);
  border-radius: 12px;
  box-shadow: 0 0 10px rgba(0,0,0,0.2);
```

```
  padding: 25px 30px;
  backdrop-filter: blur(6px);
}

h2 {
  color: #fff;
  border-left: 4px solid #ffcc70;
  padding-left: 10px;
  margin-bottom: 10px;
}

p {
  color: #e0e0e0;
  font-size: 0.95em;
}

.bookmark {
  background: rgba(255,255,255,0.12);
  padding: 10px 15px;
  margin: 8px 0;
  border-radius: 6px;
}

.bookmark a {
```

```
  color: #ffd166;
  text-decoration: none;
}

.bookmark a:hover {
  text-decoration: underline;
}

.pal-line {
  background: rgba(0,0,0,0.15);
  margin: 6px 0;
  padding: 10px;
  border-radius: 5px;
  font-size: 0.95em;
}

.pal-yes {
  border-left: 5px solid #00ff99;
  color: #aaffaa;
}

.pal-no {
  border-left: 5px solid #ff6666;
  color: #ffaaaa;
```

```
  }


  footer {
    text-align: center;
    color: #ccc;
    font-size: 0.9em;
    margin-top: 40px;
    padding-bottom: 20px;
  }
 </style>


 <script src="lab04.js" defer></script>
</head>


<body>
 <header>
   <h1>JavaScript Adventures</h1>
   <p> of basim khan</p>
 </header>


 <div class="container">
   <h2>Bookmarks</h2>
   <p>here are some of my bookmarks and the program tells if each one is secure</p>
   <div id="bookmarks"></div>
```

```
 </div>



 <div class="container">

   <h2>Palindromes</h2>

   <p>some words read the same backward and forward 'lol' see what i did there;)</p>

   <div id="palindromes"></div>

 </div>



</body>

</html>
```

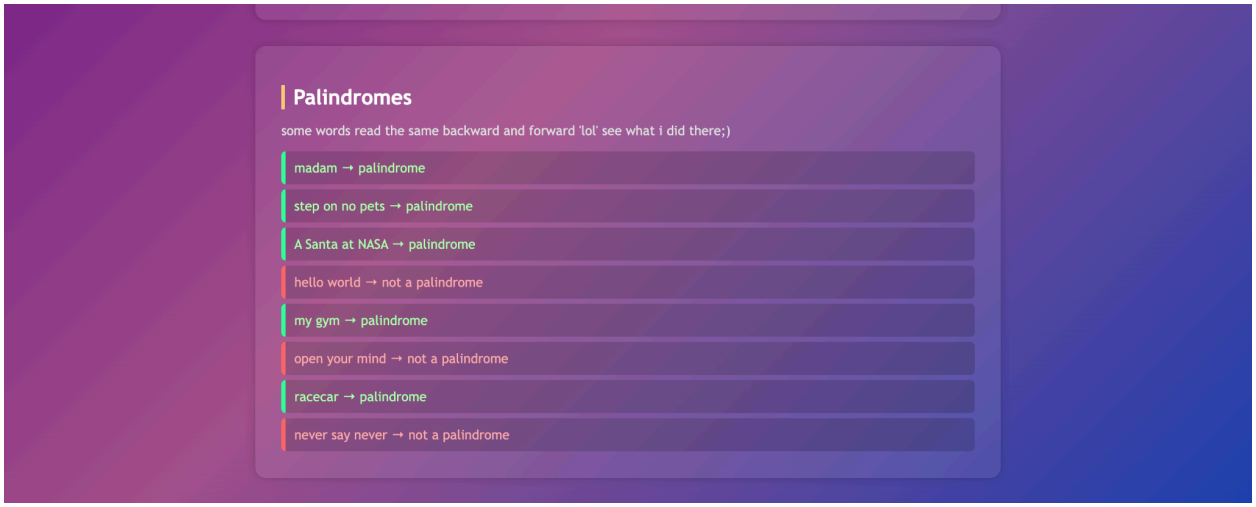
JavaScript code:

```
function loadBookmarks() {

   const favSites = [

     "https://www.mozilla.org",

     "https://www.cnn.com/",

     "https://torontomu.ca",

     "http://www.rerace.io/"

   ];

    let html = "";

   favSites.forEach(link => {

     const secure = link.startsWith("https");
```

```
    const label = secure ? "secure" : "not secure";

    html += `<div class="bookmark">${label}: <a href="${link}"
target="_blank">${link}</a></div>`;

  });

   document.getElementById("bookmarks").innerHTML = html;

}

 function cleanText(str) {

  return str.toLowerCase().replace(/[^a-z0-9]/g, "");

}

 function palindromeCheck(text) {

  const clean = cleanText(text);

  const reversed = clean.split("").reverse().join("");

  return clean === reversed;

}

 function loadPalindromes() {

  const list = [

      "madam",

      "step on no pets",

      "A Santa at NASA",

      "hello world",

      "my gym",

      "open your mind",

      "racecar",

      "never say never"
```

```
    ];



   let out = "";

  list.forEach(item => {

    const ok = palindromeCheck(item);

    out += `<div class="pal-line ${ok ? "pal-yes" : "pal-no"}">

              ${item} → ${ok ? "palindrome" : "not a palindrome"}

            </div>`;

  });

   document.getElementById("palindromes").innerHTML = out;

}

 window.onload = () => {

  loadBookmarks();

  loadPalindromes();

};
```

Webpage screenshots:


In conclusion, the lab went well overall, but the hardest part was finding websites that weren't secure since almost everything automatically redirects to HTTPS now. I had to look around for older or demo sites just to make my list work properly. Other than that, it was a little hard writing the right code for testing the palindrome part and making it work for my input sentences. If I did it again, I'd probably try adding a bit more style or a few extra links to make it look better.