



Exercise 11: React or Vue

Upload a zip file named *USPnumber1.USPnumber2.zip*.

The format for a late upload (if you uploaded your incomplete version during the class) is *late.USPnumber1.USPnumber2.zip*.

Remove the `node_modules` folder before sending the zip.

1. A real-time search function means that as soon as you type a term into a search box, the results are displayed in real-time. We are going to implement a search component with this functionality. It has a fixed list of entries (at least 20 items) and, when you type a term in the search field, the results are displayed. Starting from the `index.html` file (Appendix 1 at the end of this document), make this widget work using React or Vue. Appendix 2 has the setup for local development.

Search

Results

Search

Results



Appendix 1 (index.html):

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <title>Search</title>
  </head>
  <body>
    <div id="app" class="container-fluid">
      <h1>React/Vue.js Search</h1>

      <div class="form-group">
        <input type="text" class="form-control"
          placeholder="Search term">
      </div>

      <div class="result-container">
        <h2>Results<span></span></h2>
        <ul class="list-group">
          <li class="list-group-item" </li>
        </ul>
      </div>

    </div>
  </body>
</html>
```



Appendix 2: Create setup locally

1. React Setup:

- Install Node.js and npm if you haven't already. You can download Node.js from the official website.
- Install Create React App globally on your machine by using the command:
`npm install -g create-react-app`
- Create a new React application by running the command: `create-react-app book-listing`
- Navigate to your new project folder (`cd book-listing`) and start the development server (`npm start`). Your browser should open a new tab pointing to `localhost:3000` with the text "Edit src/App.js and save to reload."

2. Vue Setup:

- Install Node.js and npm if you haven't already. You can download Node.js from the official website.
- Install Vue CLI globally on your machine by using the command: `npm install -g @vue/cli`
- Create a new Vue application by running the command: `vue create book-listing`
- Navigate to your new project folder (`cd book-listing`) and start the development server (`npm run serve`). Your browser should open a new tab pointing to `localhost:8080` with the Vue logo and the message "Welcome to Your Vue.js App".



Use these files only if you cannot create the setup locally

Hello World in Vue

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <title>Vue.js Hello World</title>
    <!-- Include Vue.js from CDN -->
    <script
src="https://cdn.jsdelivr.net/npm/vue@2/dist/vue.js"></script>
    <!-- Optional: Include Bootstrap CSS for styling -->
    <link
      rel="stylesheet"

href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css"
    />
  </head>
  <body>
    <div id="app" class="container-fluid">
      <h1>Vue.js Hello World</h1>
      <div class="hello-world">
        <h2>{{ message }}</h2>
      </div>
    </div>

    <!-- Vue instance script -->
    <script>
      new Vue({
        el: '#app',
        data: {
          message: 'Hello World!',
        },
      });
    </script>
  </body>
</html>
```



Hello World in React

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <title>React Hello World</title>
    <!-- Include React and ReactDOM from CDN -->
    <script
      crossorigin
      src="https://unpkg.com/react@17/umd/react.development.js"
    ></script>
    <script
      crossorigin
      src="https://unpkg.com/react-dom@17/umd/react-dom.development.js"
    ></script>
    <!-- Include Babel to transpile JSX -->
    <script
      src="https://unpkg.com/@babel/standalone/babel.min.js"></script>
    <!-- Optional: Include Bootstrap CSS for styling -->
    <link
      rel="stylesheet"
      href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css"
    />
  </head>
  <body>
    <div id="app" class="container-fluid">
      <h1>React Hello World</h1>
    </div>

    <!-- React script -->
    <script type="text/babel">
      function App() {
        return (
          <div className="hello-world">
            <h2>Hello World!</h2>
          </div>
        );
      }
    </script>
  </body>
</html>
```



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SCC0219 - Introduction to Web Development

```
    );  
  }  
  
  ReactDOM.render(<App />, document.getElementById('app'));  
</script>  
</body>  
</html>
```

Good luck!