UNIVERSIDADE DE SÃO PAULO
INSTITUTO DE CIÊNCIAS MATEMÁTICAS E DE COMPUTAÇÃO
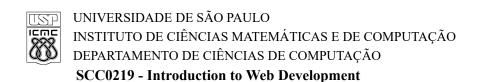DEPARTAMENTO DE CIÊNCIAS DE COMPUTAÇÃO
SCC0219 - Introduction to Web Development

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

Search term

Results

Adam Warlock

Amadeus Cho

Angel

Beast

Ben Reilly

Beta Ray Bill

Betsy Braddock

Black Bolt

Black Cat

Black Knight

Black Panther

Search

Iro

Results

Iron Fist

Iron Man

Appendix 1 (`index.html`):

```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>
```
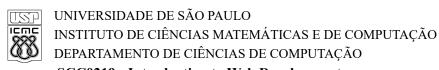
Appendix 2: Create setup locally

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."
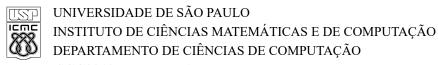2. Vue Setup:
   - Install Node.js and npm if you haven't already. You can download Node.js from the official website.
   - Install Vue CLI globally on your machine by using the command: `npm install -g @vue/cli`
   - Create a new Vue application by running the command: `vue create book-listing`
   - 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".

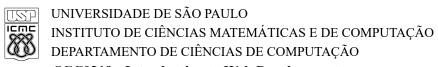Use these files only if you cannot create the setuo locally

Hello World in Vue

```html
<!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

```html
<!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>
```

```
        );
    }

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

Good luck!