

COMP 9783 Front-end Development

Lab-3-3 - React Component Lab. (1% of the course mark)

Name:

Student Number:

The React Component Lab is designed to provide an immersive, hands-on learning experience focused on mastering React components, the building blocks of React applications. Participants will explore functional components and learn best practices for creating reusable and efficient components.

Lab objectives:

1. Learn how to create functional-based components.
2. Use functional-based components to build reusable parts of a web app.

Create a react app:

1. On **VSCode**, open the **terminal** and type **npm create vite@latest react-component-app -- --template react** and **press enter**. This should create a basic react app.
2. **Build** and **start the app** by typing:
 - a. **cd react-component-app**
 - b. **npm install**
 - c. **npm run dev**
3. On the **src** folder, **delete** the following files: **App.css** and **index.css**.
4. On **src/main.jsx** delete this: **import './index.css'** and **save the changes**.
5. **Modify ./public/index.html** and **update** the **title** html code and **save the changes**:

```
<title>react-component-app</title>
```

6. This lab will use **bulma** as the **css frontend**. To install **bulma** type: **npm install bulma** and **press enter**.
7. Overwrite **App.jsx** with the following code and **save the changes**:

```
import "bulma/css/bulma.min.css";
import Header from "../components/Header";
import Content from "../components/Content";
import Footer from "../components/Footer";

function App() {
  return (
    <div>
      <Header></Header>
      <Content></Content>
      <Footer></Footer>
    </div>
  );
}

export default App;
```

8. Inside the **src** folder create a folder named: **components**.
9. Inside the **components folder**, create a file named: **Content.jsx** and add the following code below:

```
function Content() {
  return (
    <section className="hero is-primary">
      <div className="hero-body">
        <p className="title">Primary hero</p>
        <p className="subtitle">Primary subtitle</p>
        <p>
          Lorem ipsum dolor sit amet, consectetur adipiscing elit. Aenean
          efficitur vel lacus vel accumsan. Aliquam ac finibus massa. Sed sed
          hendrerit eros, in accumsan eros. Fusce nec lectus eu lectus tincidunt
          ornare eget nec erat. Maecenas egestas faucibus hendrerit. Orci varius
        </p>
      </div>
    </section>
  );
}
```

```

    natoque penatibus et magnis dis parturient montes, nascetur ridiculus
    mus. Cras dui eros, viverra sed facilisis sit amet, vulputate
    fringilla diam. Nullam maximus ex a velit vehicula maximus. Curabitur
    molestie feugiat felis, a egestas neque venenatis at. Nunc mollis
    metus nec sapien venenatis, ac aliquet sapien porttitor. Aliquam sit
    amet mi nulla. Donec molestie aliquam luctus.
    </p>
  </div>
</section>
);
}

export default Content;

```

10. Inside the **components** folder, create a file named: **Footer.jsx** and add the following code below:

```

function Footer() {
  return (
    <footer className="footer has-background-dark has-text-light">
      <div className="content has-text-centered">
        <p className="is-size-5">Footer text...</p>
      </div>
    </footer>
  );
}

export default Footer;

```

11. Inside the **components** folder, create a file named: **Header.jsx** and add the following code below:

```

function Header() {
  return (
    <nav
      className="navbar is-dark"

```

```

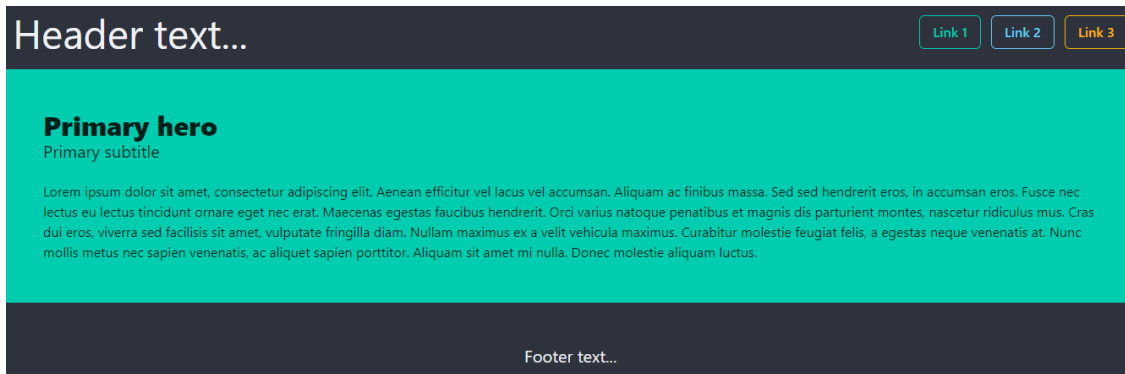
    role="navigation"
    aria-label="main navigation"
  >
    <div className="navbar-brand">
      <a className="navbar-item is-size-1" href="#fake">
        Header text...
      </a>
    </div>

    <div className="navbar-end">
      <div className="navbar-item">
        <div className="buttons">
          <a className="button is-primary is-outlined" href="#fake">
            Link 1
          </a>
          <a className="button is-info is-outlined" href="#fake">
            Link 2
          </a>
          <a className="button is-warning is-outlined" href="#fake">
            Link 3
          </a>
        </div>
      </div>
    </div>
  </nav>
);
}

export default Header;

```

12. **Open** your **browser** and **navigate** to: <http://localhost:5173/> this should display a web app (**see below**). Make sure that your app is working before proceeding to the next step.



13. Use: <https://bulma.io> as guide on making changes to the html codes of the following files: **Content.jsx**, **Footer.jsx** and **Header.jsx**. **Save the changes** when finished.
14. Navigate to <http://localhost:5173/> and take a screenshot of the changes made.

Submission:

1. Use the html template: **index.html** and **write HTML codes for each screenshot**:
 - a. Write a title and short description.
 - b. Display the screenshot.

Note: Feel free to use any component from a CSS framework of your choice.

2. Create a new folder named **html** and copy all the **HTML**, **CSS** and **PNG** files used in the previous step.
3. Create a **zip file** of the **html** folder.
4. Submit the **zip file** to **GBC - D2L**.