

PICTURE

We appreciate your
presence!

WHAT'S CICSOFT?

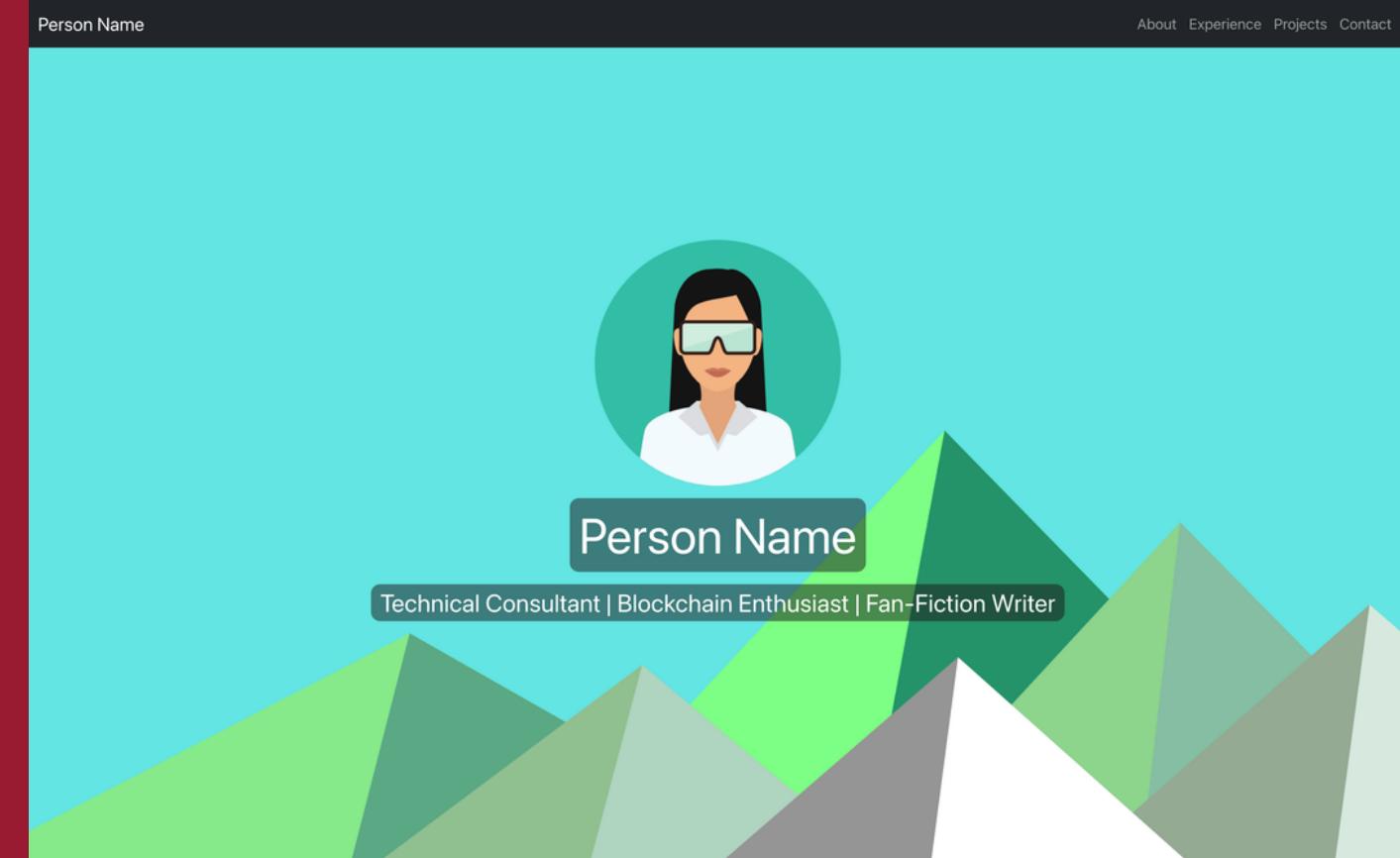
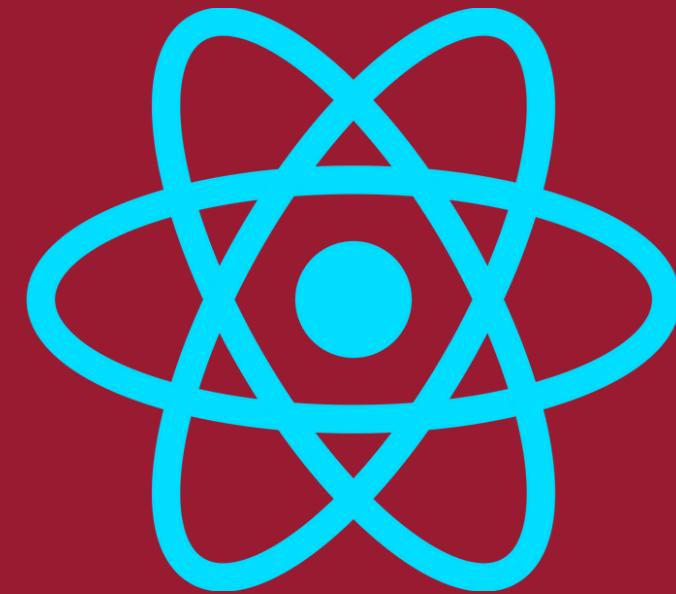
- Interest-oriented CICS organization
- Environment to enhance their technical skills
- Members learn developing applications

WHY?

Our aim is to empower students by delivering the means to build incredible apps and realize their ideas through code.

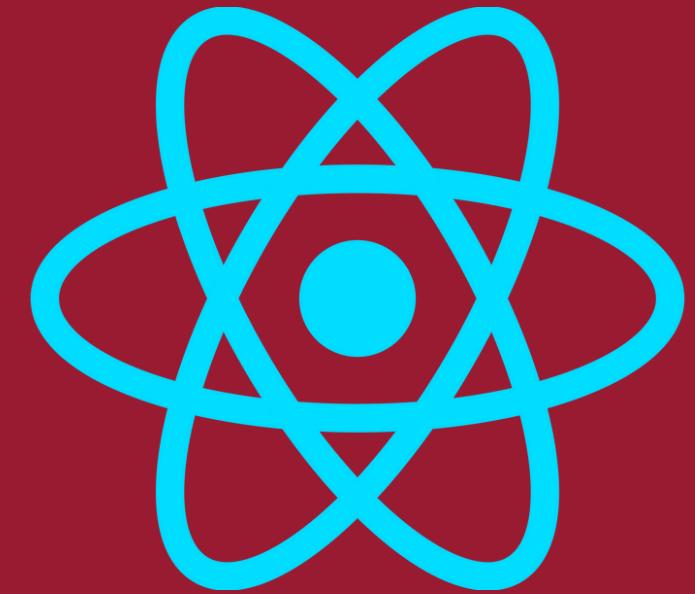
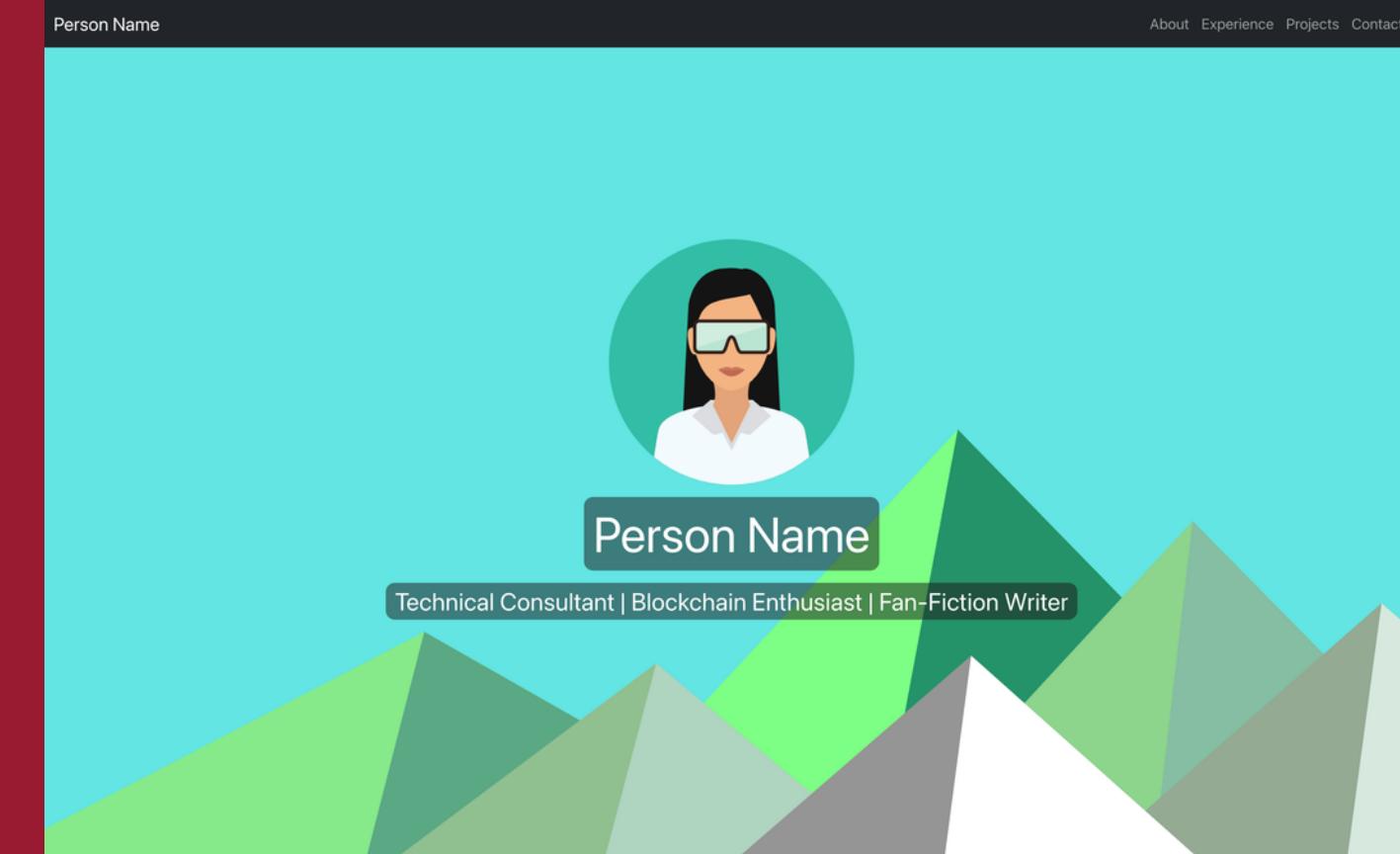
LAST TIME

- React:
 - Why?
 - File Structure
 - Components
- Portfolio Website
 - Create-React-App
 - Build navigation bar
 - Design profile page



THIS TIME

- Portfolio Website
 - Build navigation logic
 - Design more pages
 - Route between pages
- React:
 - Routing
 - Logic & Data Binding
 - Lifecycle & Hooks

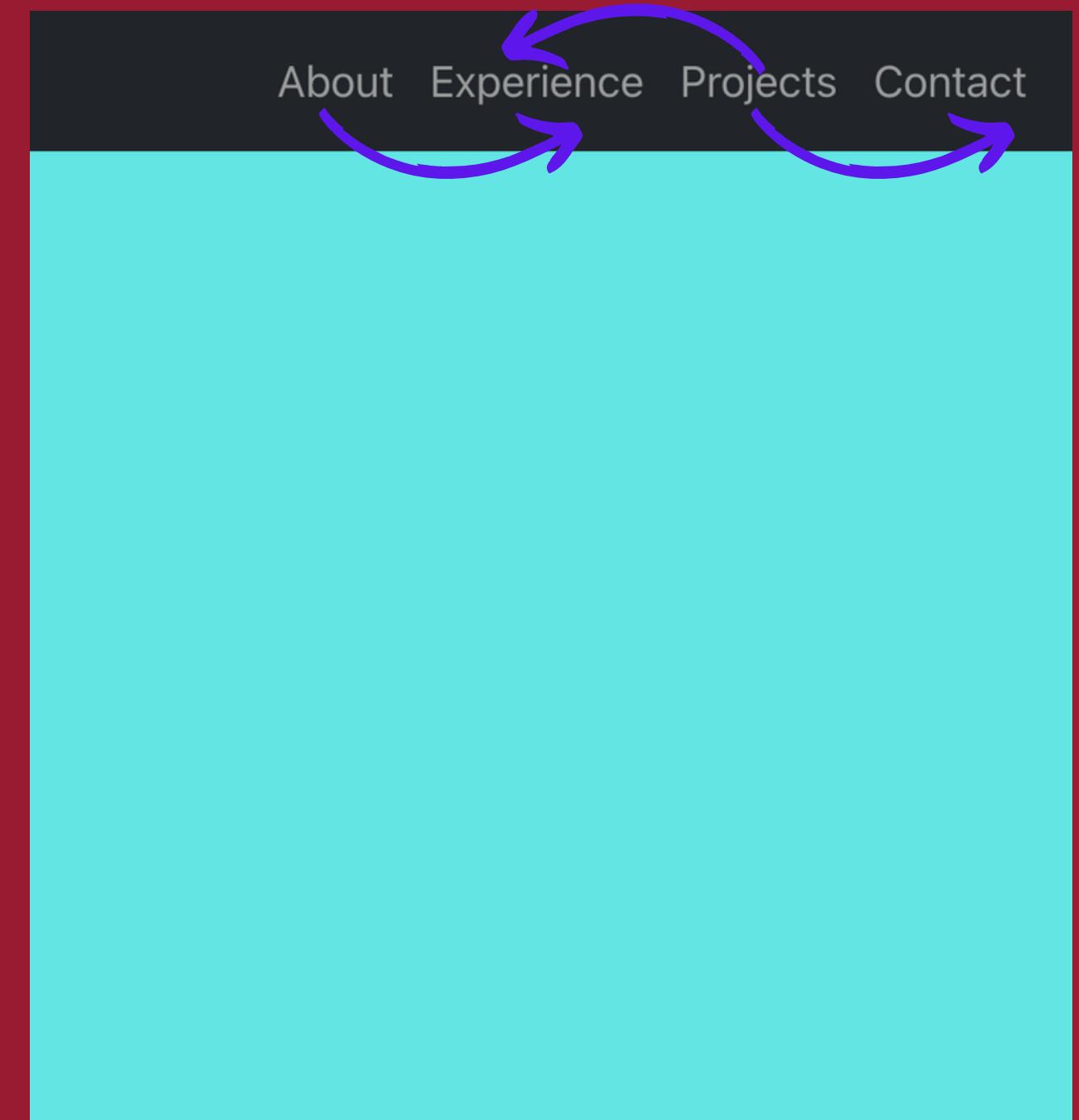


NAVIGATION LOGIC

- Navigate between various pages
- What is needed?
 - Install react-router-dom



```
1 npm install react-router-dom
```



PAGES MARKUP - #1

PAGES/ABOUT/INDEX.JS



```
1 import React from 'react';
2 import { Container } from 'react-bootstrap';
3 import styles from '../page.module.css';
4
5 const About = () => {
6   return (
7     <Container fluid className={styles.container}>
8       <h1 className={styles.heading}>About</h1>
9     </Container>
10 );
11 };
12
13 export default About;
14
```

PAGES/CONTACT/INDEX.JS



```
1 import React from 'react';
2 import { Container } from 'react-bootstrap';
3 import styles from '../page.module.css';
4
5 const Contact = () => {
6   return (
7     <Container fluid className={styles.container}>
8       <h1 className={styles.heading}>Contact</h1>
9     </Container>
10 );
11 };
12
13 export default Contact;
14
```

PAGES MARKUP - #2

PAGES/EXPERIENCE/INDEX.JS

```
● ● ●  
1 import React from 'react';  
2 import { Container } from 'react-bootstrap';  
3 import styles from '../page.module.css';  
4  
5 const Experience = () => {  
6   return (  
7     <Container fluid className={styles.container}>  
8       <h1 className={styles.heading}>Experience</h1>  
9     </Container>  
10   );  
11 };  
12  
13 export default Experience;  
14
```

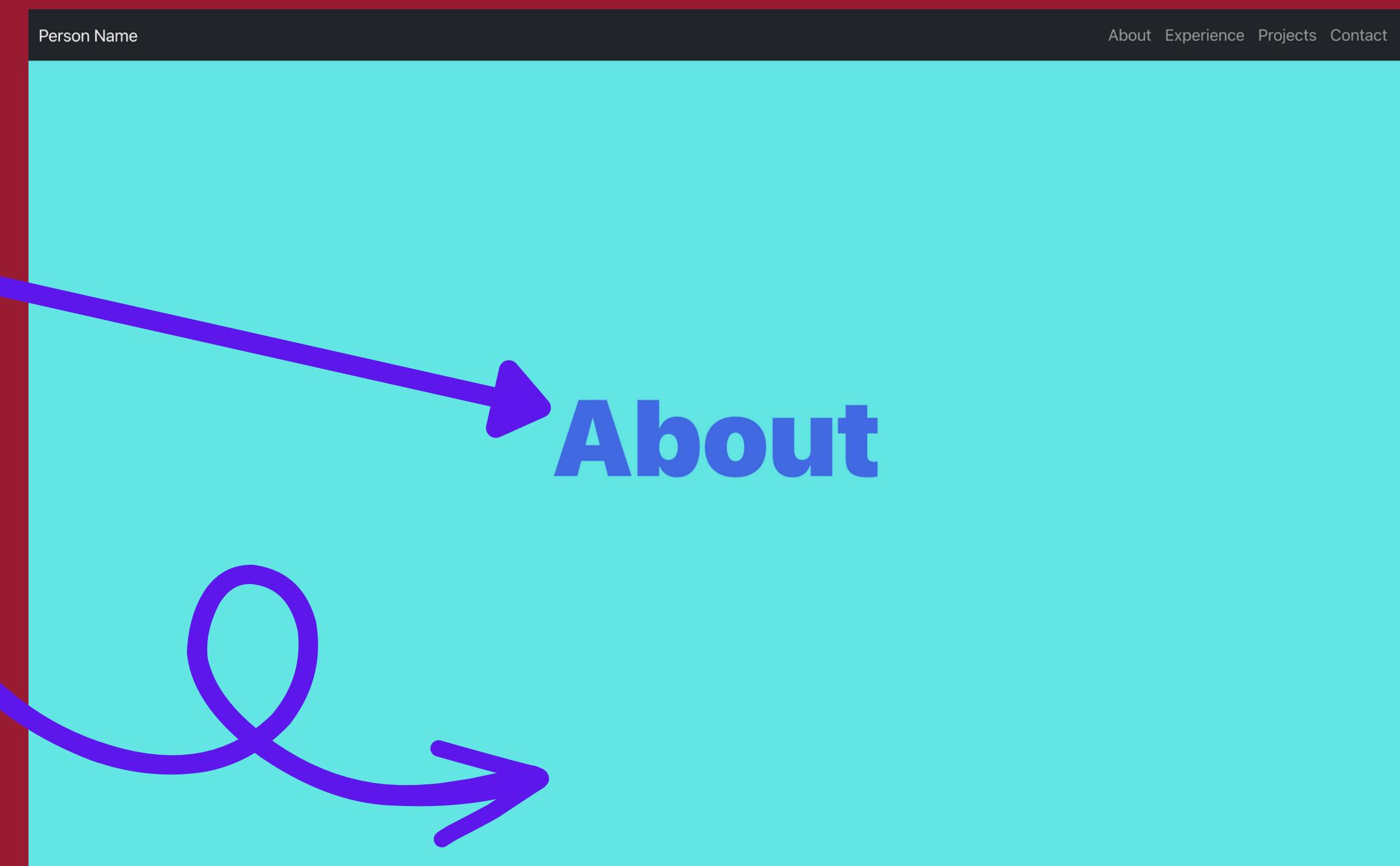
PAGES/PROJECTS/INDEX.JS

```
● ● ●  
1 import React from 'react';  
2 import { Container } from 'react-bootstrap';  
3 import styles from '../page.module.css';  
4  
5 const Projects = () => {  
6   return (  
7     <Container fluid className={styles.container}>  
8       <h1 className={styles.heading}>Projects</h1>  
9     </Container>  
10   );  
11 };  
12  
13 export default Projects;  
14
```

PAGES STYLING

PAGES/PAGE MODULE.CSS

```
1 .heading {  
2   font-weight: 900;  
3   font-size: 8em;  
4   color: royalblue;  
5 }  
6  
7 .container {  
8   display: flex;  
9   flex-direction: column;  
10  background-color: #62e5e3;  
11  height: 100vh;  
12  width: 100vw;  
13  justify-content: center;  
14  align-items: center;  
15 }  
16
```



INDEX LAYOUT



```
1 import React from 'react';
2 import ReactDOM from 'react-dom/client';
3 import { createBrowserRouter, RouterProvider } from 'react-router-dom';
4 import routes from './routes';
5
6 import './index.css';
7 import 'bootstrap/dist/css/bootstrap.min.css';
8
9 const root = ReactDOM.createRoot(document.getElementById('root'));
10 const router = createBrowserRouter(routes);
11
12 root.render(
13   <React.StrictMode>
14     <RouterProvider router={router} />
15   </React.StrictMode>
16 );
17
```

INDEX.JS

- Index imports a configuration 'routes' describing which URL displays what (Line 4)
- Index creates a browser router with the 'routes' configuration (Line 10)
- Index provides the browser router to a RouteProvider for navigation (Line 14)

APPLICATION LAYOUT



```
1 import React from 'react';
2 import { Outlet } from 'react-router-dom';
3 import NavigationBar from './components/NavigationBar';
4
5 const App = () => {
6   return (
7     <React.Fragment>
8       <NavigationBar />
9       <Outlet />
10      </React.Fragment>
11    );
12  };
13
14 export default App;
15
```

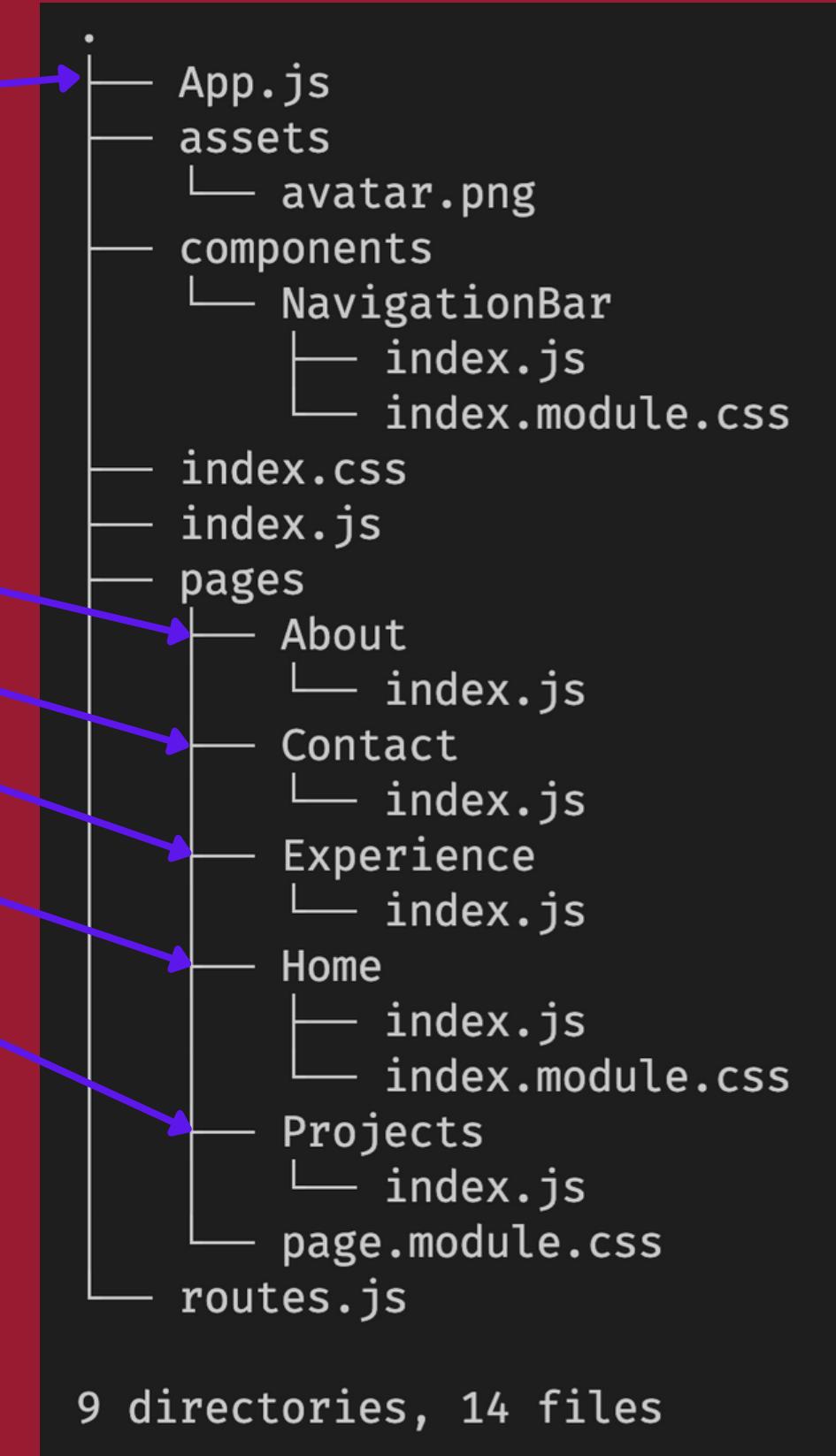
APP.JS

- App displays NavigationBar at the top (Line 8)
- App provides an Outlet for any component to be displayed via injection (Line 9)
- This Outlet will display components according to the routes configured

ROUTES CONFIG

```
● ● ●  
1 import React from 'react';
2 import App from './App';
3 import About from './pages/About';
4 import Contact from './pages/Contact';
5 import Experience from './pages/Experience';
6 import Home from './pages/Home';
7 import Projects from './pages/Projects';
8
9 const routes = [
10   {
11     path: '/',
12     element: <App />,
13     children: [
14       { path: '/', element: <Home /> },
15       { path: '/about', element: <About /> },
16       { path: '/contact', element: <Contact /> },
17       { path: '/experience', element: <Experience /> },
18       { path: '/projects', element: <Projects /> },
19     ],
20   },
21 ];
22
23 export default routes;
24
```

ROUTES.JS



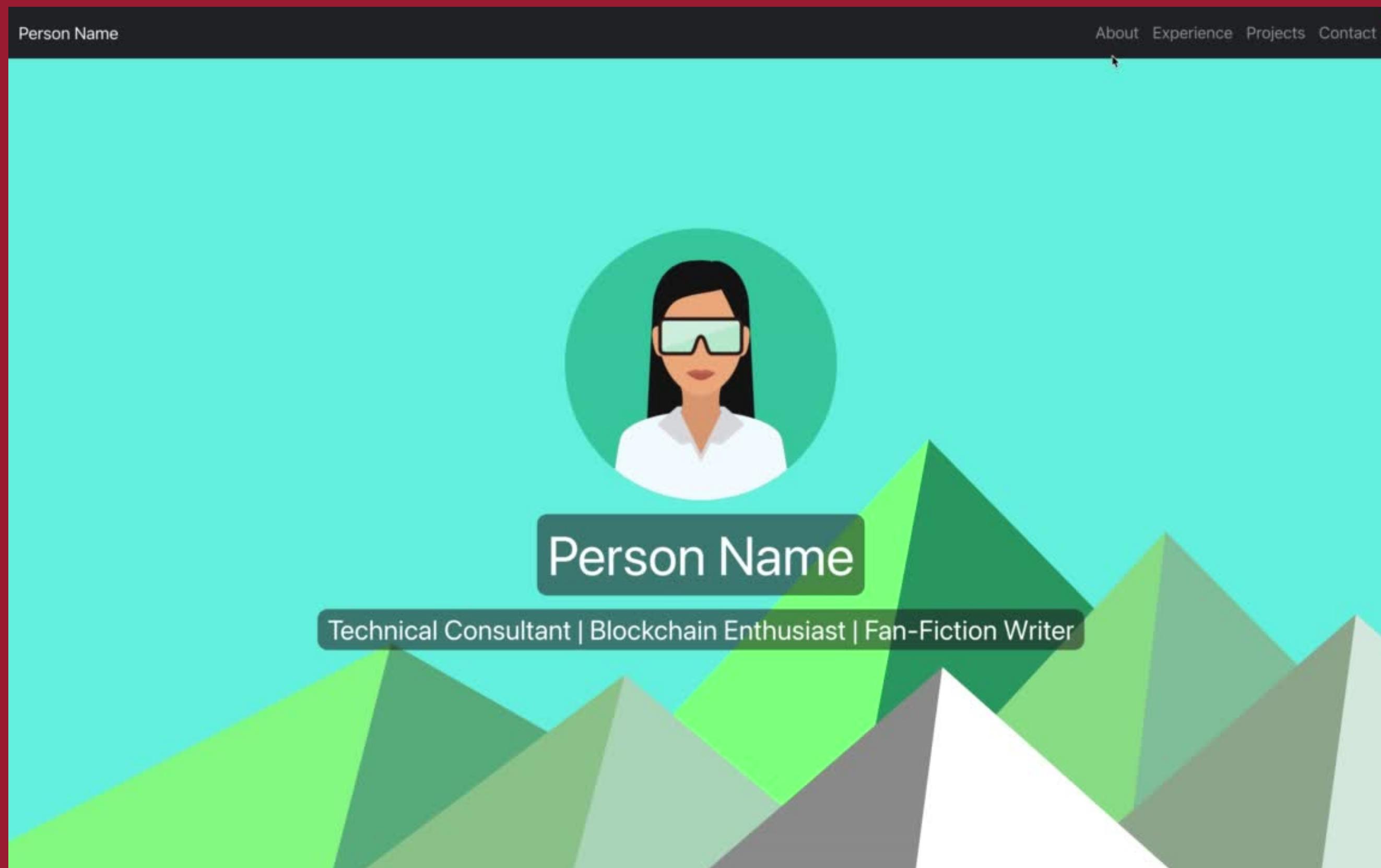
ROUTES CONFIG

```
● ● ●  
1 import React from 'react';  
2 import App from './App';  
3 import About from './pages/About';  
4 import Contact from './pages/Contact';  
5 import Experience from './pages/Experience';  
6 import Home from './pages/Home';  
7 import Projects from './pages/Projects';  
8  
9 const routes = [  
10   {  
11     path: '/',  
12     element: <App />,  
13     children: [  
14       { path: '/', element: <Home /> },  
15       { path: '/about', element: <About /> },  
16       { path: '/contact', element: <Contact /> },  
17       { path: '/experience', element: <Experience /> },  
18       { path: '/projects', element: <Projects /> },  
19     ],  
20   },  
21 ];  
22  
23 export default routes;  
24
```

ROUTES.JS

- "/" -> Display Application (NavigationBar + Outlet)
 - "/" -> Display Home (in Outlet)
 - "/about" -> Display About (in Outlet)
 - "/contact" -> Display Contact (in Outlet)
 - "/experience" -> Display Experience (in Outlet)
 - "/projects" -> Display Projects (in Outlet)

ROUTING DEMO

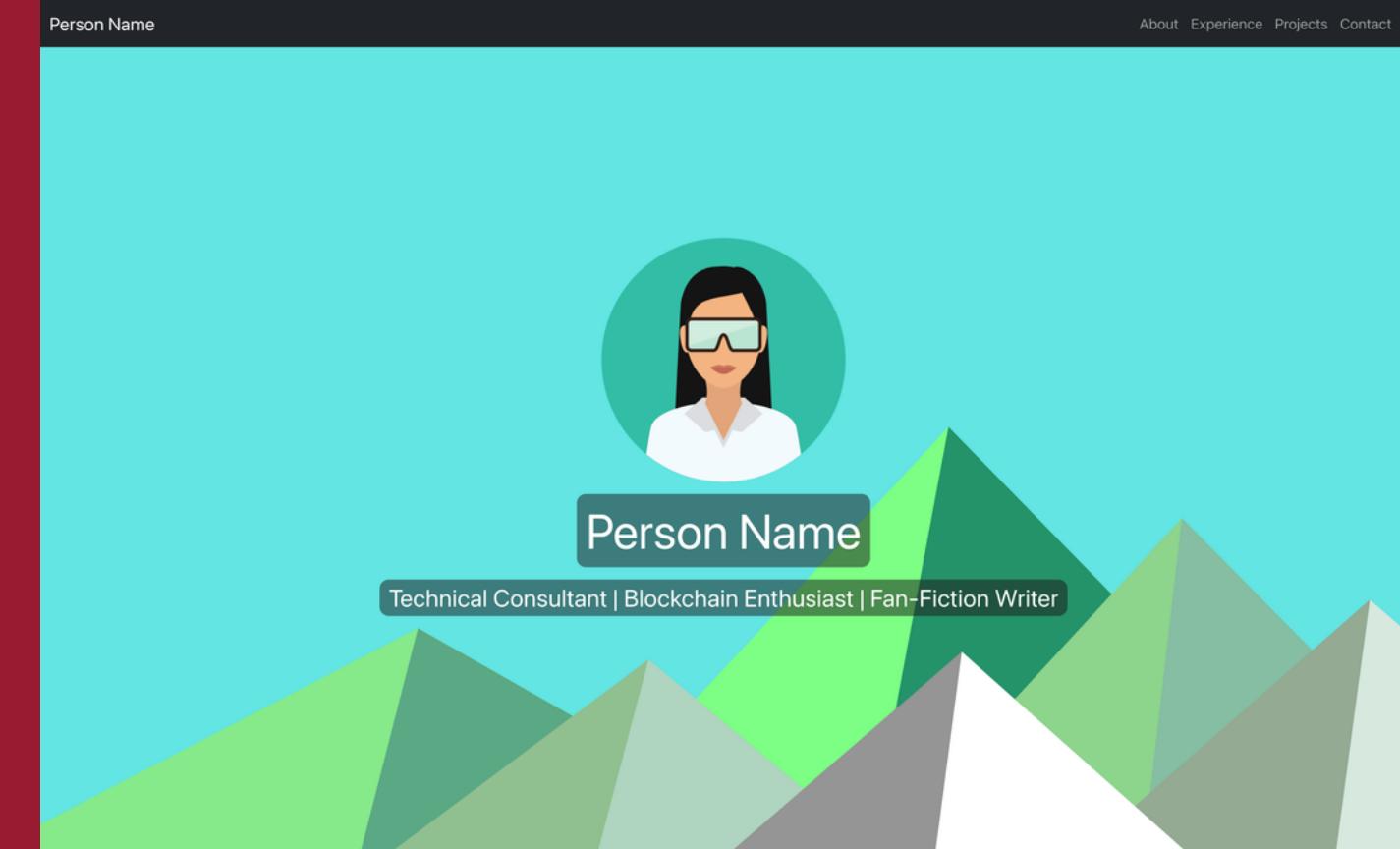
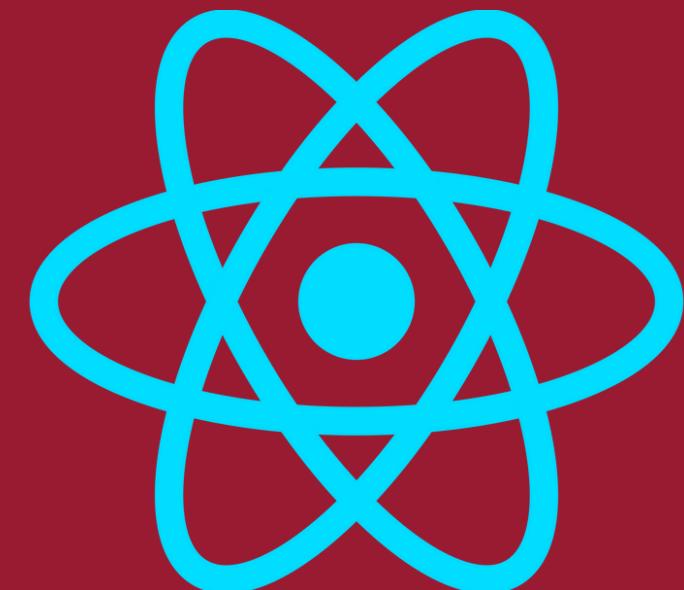


REACT SPEEDRUN!!



NEXT TIME

- Portfolio Website
 - Build out new components
 - Use lifecycle concepts
 - Integrate more complexity
- React:
 - Conditional rendering
 - Lists and Keys
 - Two-way data binding



Thank you for joining
us today!

