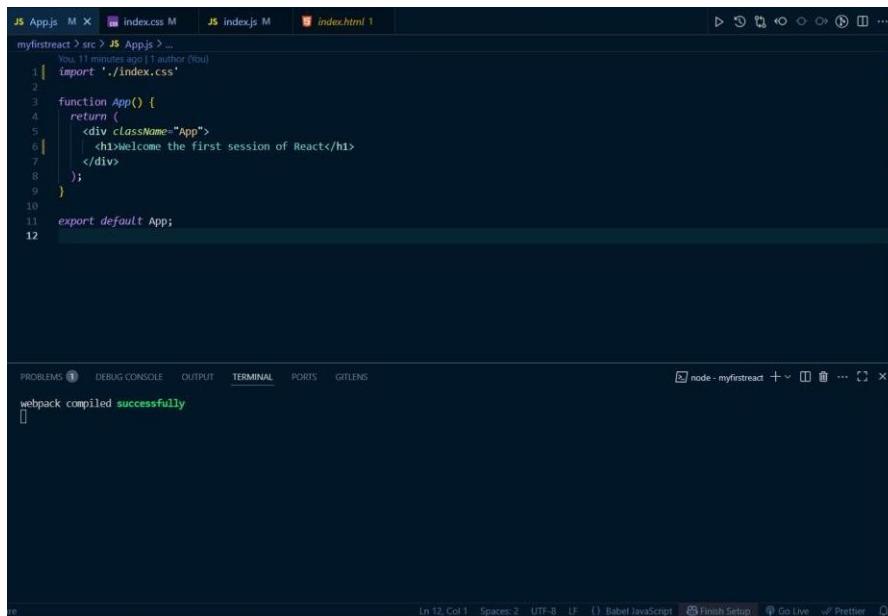


Week - 6

1. ReactJS-HOL

Create a new React Application with the name “myfirstreact”, Run the application to print “welcome to the first session of React” as heading of that page

App.js

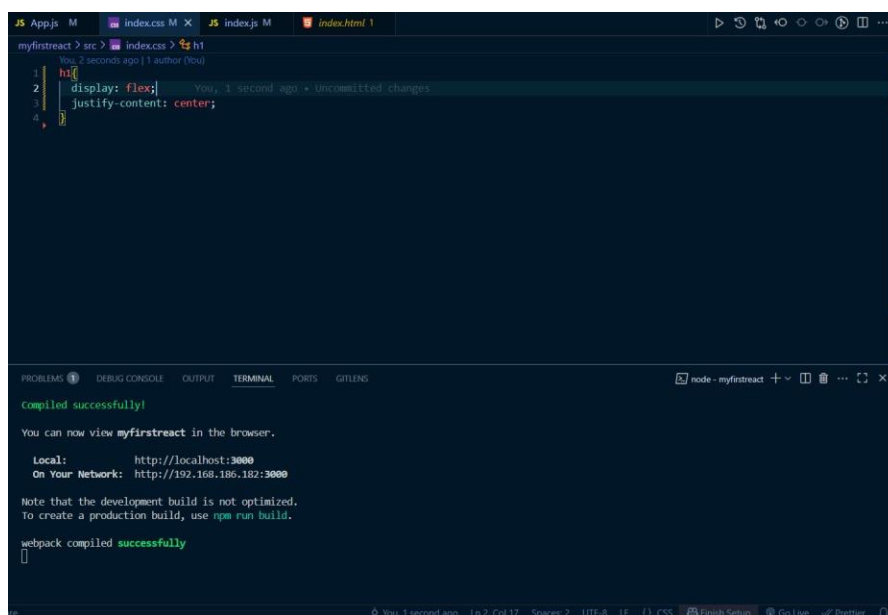


The screenshot shows a VS Code editor with a file named `App.js` open. The code defines a function `App()` that returns a JSX element: `<div className="App"><h1>Welcome the first session of React</h1></div>`. The `index.html` file is also visible in the background. The terminal at the bottom shows the command `node - myfirstreact` and the output `webpack compiled successfully`.

```
1 | import './index.css'
2 |
3 | function App() {
4 |   return (
5 |     <div className="App">
6 |       <h1>Welcome the first session of React</h1>
7 |     </div>
8 |   );
9 | }
10 |
11 | export default App;
12 |
```

node - myfirstreact
webpack compiled successfully

Index.css



The screenshot shows a VS Code editor with a file named `Index.css` open. The code contains the following styles: `h1 { display: flex; justify-content: center; }`. The terminal at the bottom shows the command `node - myfirstreact` and the output `compiled successfully!`. It also provides the local and network URLs for viewing the application: `Local: http://localhost:3000` and `On Your Network: http://192.168.186.182:3000`.

```
1 | h1 {
2 |   display: flex;
3 |   justify-content: center;
4 | }
```

compiled successfully!

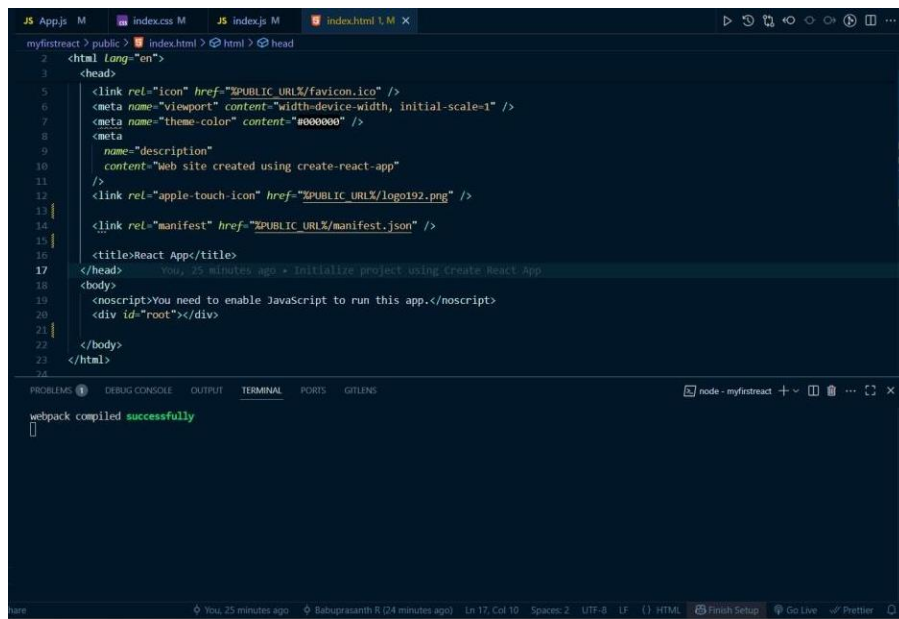
You can now view myfirstreact in the browser.

Local: http://localhost:3000
On Your Network: http://192.168.186.182:3000

Note that the development build is not optimized.
To create a production build, use `npm run build`.

webpack compiled successfully

Index.html

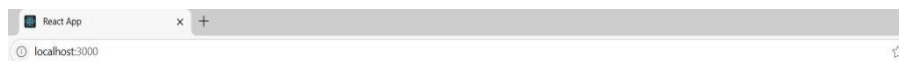


The screenshot shows a VS Code editor with the 'index.html' file open. The code is as follows:

```
1 <html lang="en">
2 <head>
3   <link rel="icon" href="%PUBLIC_URL%/favicon.ico" />
4   <meta name="viewport" content="width=device-width, initial-scale=1" />
5   <meta name="theme-color" content="#000000" />
6   <meta
7     name="description"
8     content="Web site created using create-react-app"
9   />
10  <link rel="apple-touch-icon" href="%PUBLIC_URL%/logo192.png" />
11  <link rel="manifest" href="%PUBLIC_URL%/manifest.json" />
12  <title>React App</title>
13 </head>
14 <body>
15   <noscript>You need to enable JavaScript to run this app.</noscript>
16   <div id="root"></div>
17 </body>
18 </html>
```

The terminal at the bottom shows the message: 'webpack compiled successfully'.

Output

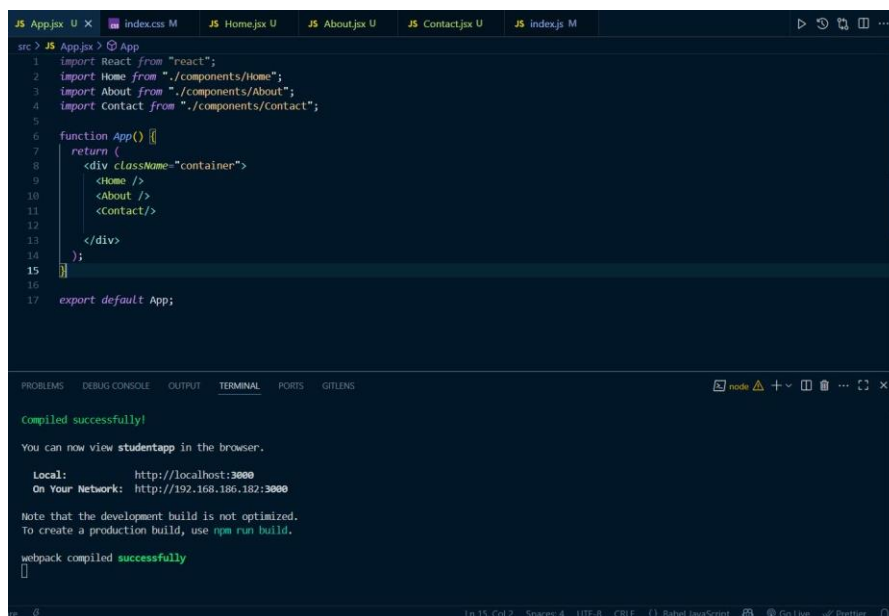


Welcome the first session of React

2. ReactJS-HOL

Create a react app for Student Management Portal named StudentApp and create a component named Home which will display the Message “Welcome to the Home page of Student Management Portal”. Create another component named About and display the Message “Welcome to the About page of the Student Management Portal”. Create a third component named Contact and display the Message “Welcome to the Contact page of the Student Management Portal”. Call all the three components

App.jsx



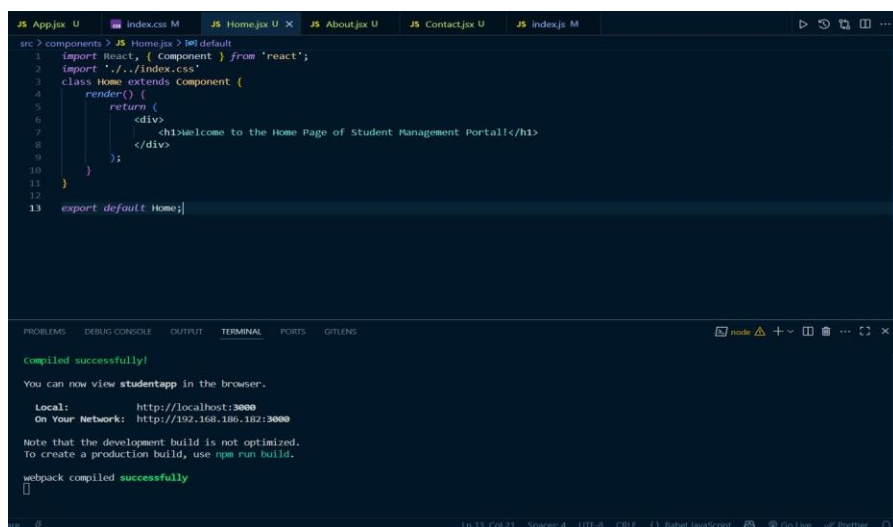
The screenshot shows a VS Code editor with a file explorer on the left containing 'App.jsx', 'index.css', 'Home.jsx', 'About.jsx', 'Contact.jsx', and 'index.js'. The main editor displays the code for 'App.jsx'.

```
1 import React from "react";
2 import Home from "../components/Home";
3 import About from "../components/About";
4 import Contact from "../components/Contact";
5
6 function App() {
7   return (
8     <div className="container">
9       <Home />
10      <About />
11      <Contact />
12    </div>
13  );
14}
15
16 export default App;
```

The terminal at the bottom shows the following output:

```
Compiled successfully!
You can now view studentapp in the browser.
Local:      http://localhost:3000
On Your Network:  http://192.168.186.182:3000
Note that the development build is not optimized.
To create a production build, use npm run build.
webpack compiled successfully
```

Component/Home.jsx



The screenshot shows a VS Code editor with a file explorer on the left containing 'App.jsx', 'index.css', 'Home.jsx', 'About.jsx', 'Contact.jsx', and 'index.js'. The main editor displays the code for 'Component/Home.jsx'.

```
1 import React, { Component } from 'react';
2 import '../index.css';
3 class Home extends Component {
4   render() {
5     return (
6       <div>
7         <h1>Welcome to the Home Page of Student Management Portal!</h1>
8       </div>
9     );
10  }
11}
12
13 export default Home;
```

The terminal at the bottom shows the following output:

```
Compiled successfully!
You can now view studentapp in the browser.
Local:      http://localhost:3000
On Your Network:  http://192.168.186.182:3000
Note that the development build is not optimized.
To create a production build, use npm run build.
webpack compiled successfully
```

Component/About.jsx

```
JS App.jsx U  index.css M  JS Home.jsx U  JS About.jsx U X  JS Contact.jsx U  JS index.js M
src > components > JS About.jsx > About > render
1 import React, { Component } from 'react';
2 import './index.css'
3 class About extends Component {
4   render() {
5     return (
6       <div>
7         <h1>Welcome to the About Page of Student Management Portal!</h1>
8       </div>
9     );
10   }
11 }
12
13 export default About;
```

Compiled successfully!

You can now view studentapp in the browser.

Local: http://localhost:3000
On Your Network: http://192.168.186.182:3000

Note that the development build is not optimized.
To create a production build, use `npm run build`.

webpack compiled successfully

Component/Contact.jsx

```
JS App.jsx U  index.css M  JS Home.jsx U  JS About.jsx U  JS Contact.jsx U X  JS index.js M
src > components > JS Contact.jsx > Contact > render
1 import React, { Component } from 'react';
2 import './index.css'
3 class Contact extends Component {
4   render() {
5     return (
6       <div>
7         <h1>Welcome to the Contact Page of Student Management Portal!</h1>
8       </div>
9     );
10   }
11 }
12
13 export default Contact;
```

Compiled successfully!

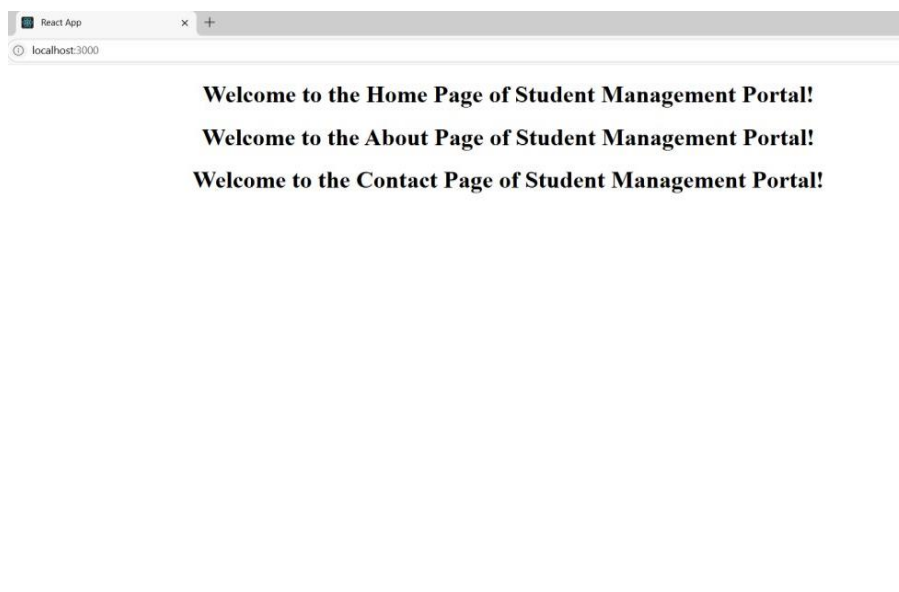
You can now view studentapp in the browser.

Local: http://localhost:3000
On Your Network: http://192.168.186.182:3000

Note that the development build is not optimized.
To create a production build, use `npm run build`.

webpack compiled successfully

Output



3. ReactJS-HOL

Create a react app for Student Management Portal named scorecalculatorapp and create a function component named “CalculateScore” which will accept Name, School, Total and goal in order to calculate the average score of a student and display the same.

App.js

```
JS App.js M X JS CalculateScore.js U index.html 1 index.css M JS index.js M
src > JS App.js > App
You, 2 minutes ago | 1 author (You)
1
2 import { CalculateScore } from './components/CalculateScore';
3
4 function App() {
5   return (
6     <div className="App"> You, 20 minutes ago • Initialize project using Create React App
7       <CalculateScore Name = ("Steve")
8         School = ("DMV Public School")
9         total = (284)
10        goal = (3)
11      />
12    </div>
13  );
14 }
15
16 export default App;
17
```

PROBLEMS DEBAG CONSOLE OUTPUT TERMINAL PORTS GITLENS

node + - - - - -

Compiled successfully!

You can now view scorecalculatorapp in the browser.

Local: http://localhost:3000
On Your Network: http://192.168.186.182:3000

Note that the development build is not optimized.
To create a production build, use `npm run build`.

webpack compiled successfully

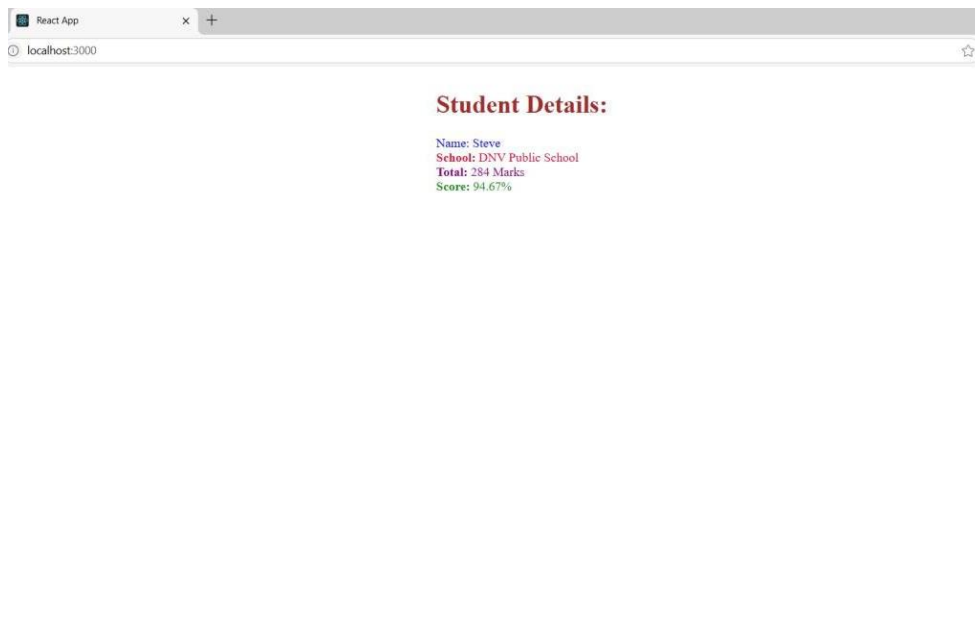
Components/CalculateScore.js

```
JS App.js M JS CalculateScore.js U X index.html 1 index.css M JS index.js M
src > components > JS CalculateScore.js > ...
2 export const CalculateScore = ({ Name, School, total, goal }) => {
3
4   };
5
6   const calcScore = (total, goal) => {
7     return percentageDecimal(total / goal);
8   };
9
10  return (
11    <div className="formatstyle">
12      <h1>
13        <font color="Brown">Student Details:</font>
14      </h1>
15      <div className="Name">
16        <b>
17          <span>Name: </span>
18        </b>
19        <span>{Name}</span>
20      </div>
21      <div className="School">
22        <b>
23          <span>School: </span>
24        </b>
25        <span>{School}</span>
26      </div>
27      <div className="Total">
28        <b>
29          <span>Total: </span>
30        </b>
31        <span>{total}</span>
32        <span> Marks</span>
33      </div>
34      <div className="Score">
35        <b>Score: </b>
36        <span>{calcScore(total, goal)}</span>
37      </div>
38    </div>
39  );
40 }
```

Index.css

```
src > index.css > App
You, 2 minutes ago (1 author) (You)
1  .Name{
2    font-weight : 300;
3    color: blue;
4  }
5
6  .School{
7    color : crimson;
8  }
9
10 .Total {
11   color: darkmagenta;
12 }
13
14 .formatStyle{
15   text-align: center;
16   font-size: large;
17 }
18
19 .Score{
20   color: forestgreen;
21 }
22
23 .App{
24   display: flex;
25   justify-content: center;
26 }
```

Output

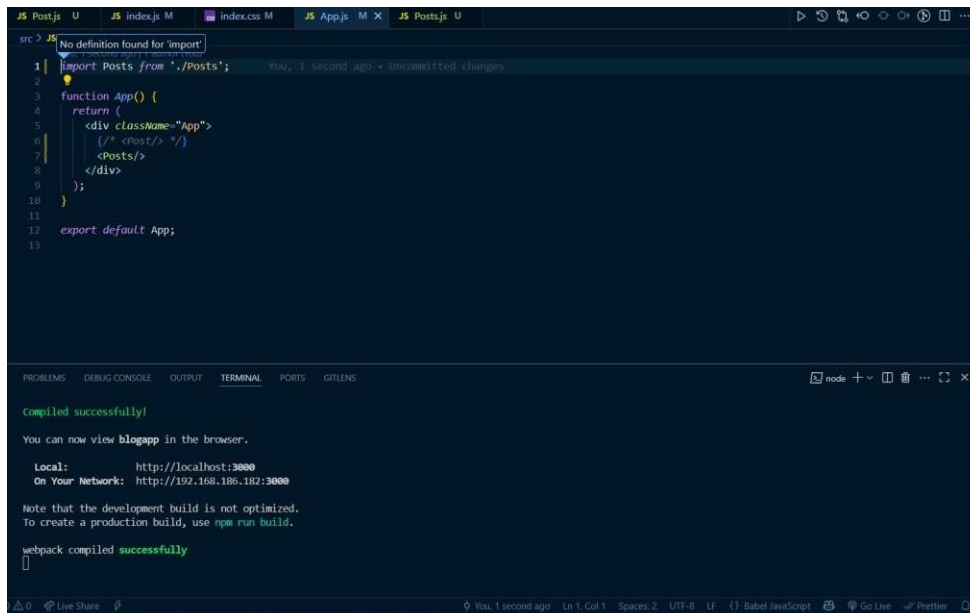


4. ReactJS-HOL

Implement componentDidMount() hook

Implementing componentDidCatch() life cycle hook.

App.js



The screenshot shows a VS Code editor with a file named `App.js` open. The code defines a function `App()` that returns a React element. The element consists of a `div` with `className="App"` containing a `Post` component. The `Post` component is imported from `./Posts`. The `App` function is exported as the default export. Below the editor, the terminal shows the output of a build command, indicating successful compilation and providing local and network URLs to view the application in a browser.

```
src > JS
1 | import Posts from './Posts';
2 |
3 | function App() {
4 |   return (
5 |     <div className="App">
6 |       { /* <Post /> */ }
7 |     <Posts />
8 |   </div>
9 | );
10 | }
11 |
12 | export default App;
13 |
```

Compiled successfully!

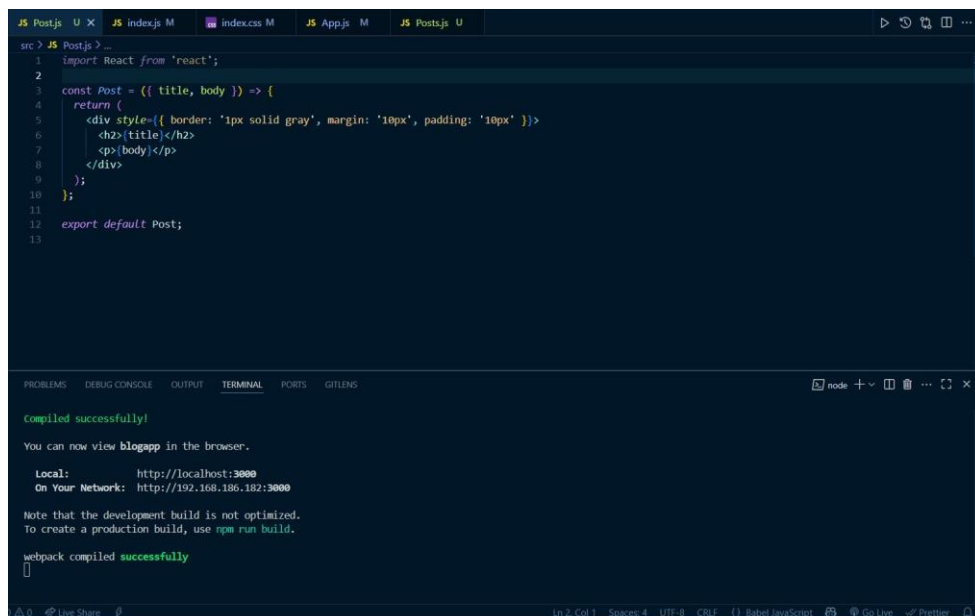
You can now view **blogapp** in the browser.

Local: http://localhost:3000
On Your Network: http://192.168.186.182:3000

Note that the development build is not optimized.
To create a production build, use `npm run build`.

webpack compiled successfully

Post.js



The screenshot shows a VS Code editor with a file named `Post.js` open. The code defines a `Post` component that takes `title` and `body` as props. It returns a React element consisting of a `div` with a border and padding, containing an `h2` tag for the title and a `p` tag for the body. The `Post` component is exported as the default export. Below the editor, the terminal shows the output of a build command, indicating successful compilation and providing local and network URLs to view the application in a browser.

```
src > JS Post.js > ...
1 | import React from 'react';
2 |
3 | const Post = ({ title, body }) => {
4 |   return (
5 |     <div style={{ border: '1px solid gray', margin: '10px', padding: '10px' }}>
6 |       <h2>{title}</h2>
7 |       <p>{body}</p>
8 |     </div>
9 |   );
10 | };
11 |
12 | export default Post;
13 |
```

Compiled successfully!

You can now view **blogapp** in the browser.

Local: http://localhost:3000
On Your Network: http://192.168.186.182:3000

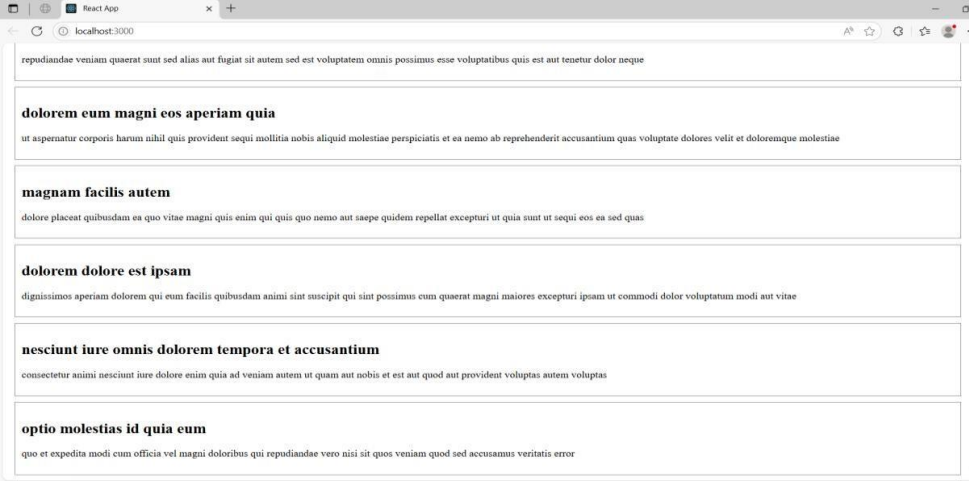
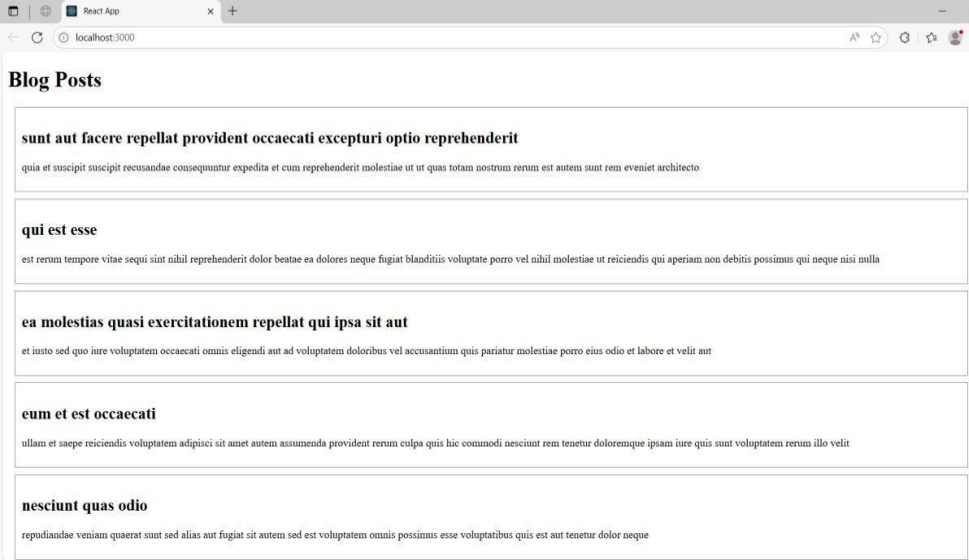
Note that the development build is not optimized.
To create a production build, use `npm run build`.

webpack compiled successfully

Posts.js

```
JS Posts.js  JS index.js M  index.css M  JS App.js M  JS Posts.js U X
src > JS Posts.js > Posts > loadPosts > [catch] callback
1 > import React, { Component } from 'react';
2 class Posts extends Component {
3   constructor(props) {
4     super(props);
5     this.state = { posts: [], hasError: false };
6   }
7   loadPosts = () => {
8     fetch('https://jsonplaceholder.typicode.com/posts')
9       .then(response => response.json())
10      .then(data => this.setState({ posts: data }))
11      .catch(error => {
12        console.error('Error fetching posts:', error);
13        this.setState({ hasError: true });
14      });
15  };
16  componentDidMount() {
17    this.loadPosts();
18  }
19  componentDidCatch(error, info) {
20    alert('An error occurred: ' + error.message);
21    this.setState({ hasError: true });
22  }
23  render() {
24    const { posts, hasError } = this.state;
25    if (hasError) {
26      return <h2>Something went wrong.</h2>;
27    }
28    return (
29      <div>
30        <h1>Blog Posts</h1>
31        {posts.slice(0, 10).map((post) => (
32          <Post key={post.id} title={post.title} body={post.body} />
33        ))}
34      </div>
35    );
36  }
37 }
38 export default Posts;
```

Output



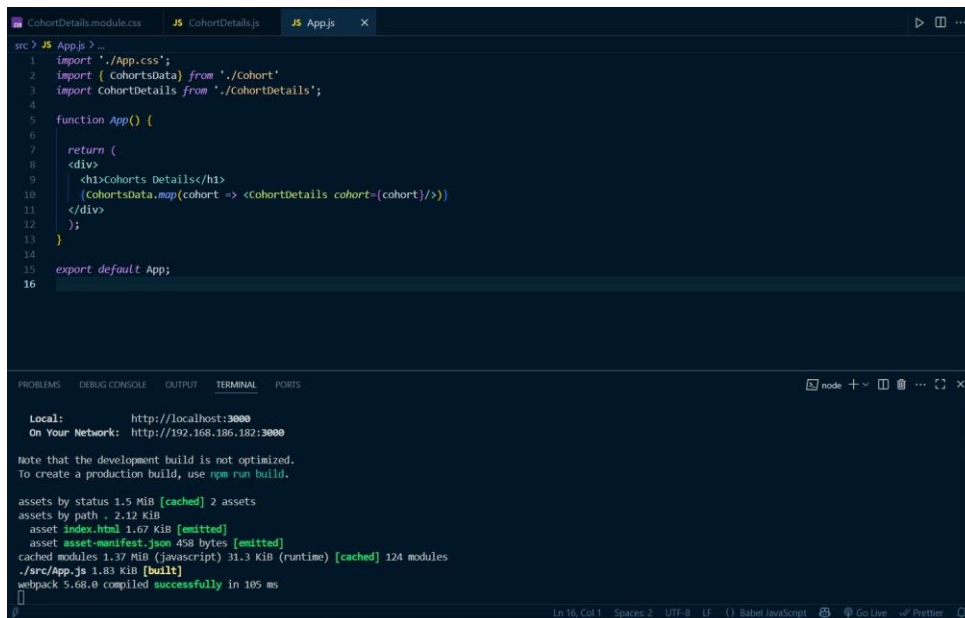
5. ReactJS-HOL

Style a react component

Define styles using the CSS Module

Apply styles to components using className and style properties

App.js



The screenshot shows a VS Code editor with three tabs: 'CohortDetails.module.css', 'JS CohortDetails.js', and 'JS App.js'. The 'App.js' tab is active, displaying the following code:

```
1 import './App.css';
2 import { CohortsData } from './Cohort';
3 import CohortDetails from './CohortDetails';
4
5 function App() {
6
7   return (
8     <div>
9       <h1>Cohorts Details</h1>
10      {CohortsData.map(cohort => <CohortDetails cohort={cohort}/>)}
11    </div>
12  );
13 }
14
15 export default App;
```

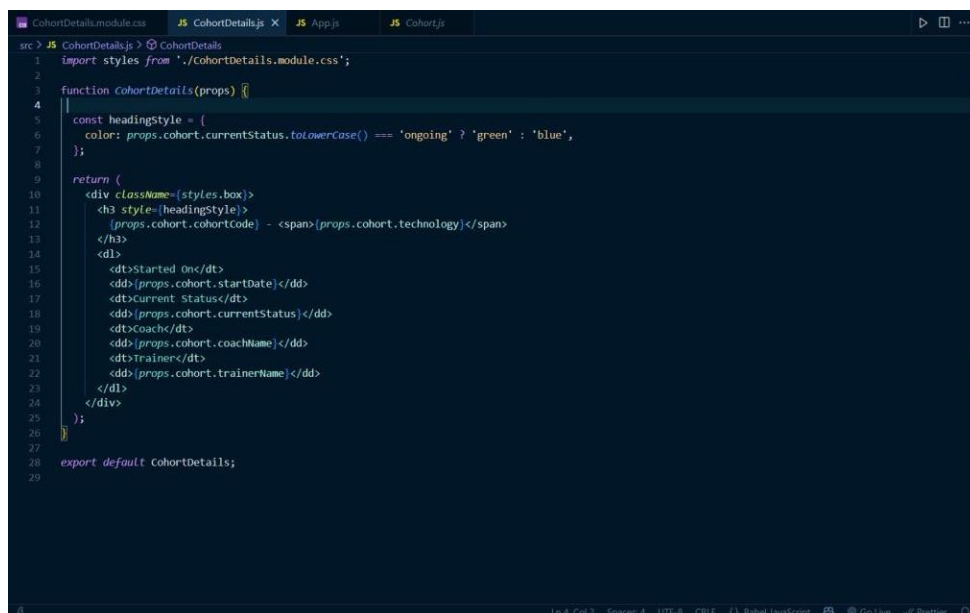
The terminal at the bottom shows the following output:

```
Local: http://localhost:3000
On Your Network: http://192.168.186.182:3000

Note that the development build is not optimized.
To create a production build, use npm run build.

assets by status 1.5 MiB [cached] 2 assets
assets by path 2.12 KiB
  asset index.html 1.67 KiB [emitted]
  asset asset-manifest.json 458 bytes [emitted]
cached modules 1.37 MiB (javascript) 31.3 KiB (runtime) [cached] 124 modules
  /src/App.js 1.83 KiB [built]
webpack 5.68.0 compiled successfully in 105 ms
```

CohortDetails.js



The screenshot shows a VS Code editor with four tabs: 'CohortDetails.module.css', 'JS CohortDetails.js', 'JS App.js', and 'JS Cohort.js'. The 'CohortDetails.js' tab is active, displaying the following code:

```
1 import styles from './CohortDetails.module.css';
2
3 function CohortDetails(props) {
4   const headingStyle = {
5     color: props.cohort.currentStatus.toLowerCase() === 'ongoing' ? 'green' : 'blue',
6   };
7
8   return (
9     <div className={styles.box}>
10      <h3 style={headingStyle}>
11        {props.cohort.cohortCode} - <span>{props.cohort.technology}</span>
12      </h3>
13      <dl>
14        <dt>Started On</dt>
15        <dd>{props.cohort.startDate}</dd>
16        <dt>Current Status</dt>
17        <dd>{props.cohort.currentStatus}</dd>
18        <dt>Coach</dt>
19        <dd>{props.cohort.coachName}</dd>
20        <dt>Trainer</dt>
21        <dd>{props.cohort.trainerName}</dd>
22      </dl>
23    </div>
24  );
25 }
26
27 export default CohortDetails;
```

CohortDetails.module.css

```
CohortDetails.module.css x JS CohortDetails.js JS App.js JS Cohort.js
src > CohortDetails.module.css > dt
1  .box {
2    width: 300px;
3    display: inline-block;
4    margin: 10px;
5    padding: 10px 20px;
6    border: 1px solid black;
7    border-radius: 10px;
8  }
9
10 dt {
11   font-weight: 500;
12 }
13
```

Output

React App

localhost:3000

Cohorts Details

INTADMDF10 - .NET FSD Started On 22-Feb-2022 Current Status Scheduled Coach Aathma Trainer Jojo Jose	ADM21JF014 - Java FSD Started On 10-Sep-2021 Current Status Ongoing Coach Apoorv Trainer Elisa Smith	CDBJF21025 - Java FSD Started On 24-Dec-2021 Current Status Ongoing Coach Aathma Trainer John Doe	INTADMJF12 - Java FSD Started On 22-Feb-2022 Current Status Scheduled Coach Ibrahim Trainer To Be Assigned
CDE22JF011 - Java FSD Started On 24-Dec-2021 Current Status Ongoing Coach Apoorv Trainer Emma Swan	INTADMDF09 - Dataware Housing Started On 22-Feb-2022 Current Status Scheduled Coach Aathma Trainer Babjee Rao	ADM22DF001 - .NET FSD Started On 10-Sep-2021 Current Status Ongoing Coach Ibrahim Trainer Marie Curie	