

WEEK_6-REACT

1.

```
npm install -g create-react-app
```

```
npx create-react-app myfirstreact
```

```
cd myfirstreact
```

Src/App.js

```
import React from 'react';
```

```
function App() {
```

```
  return (
```

```
    <div>
```

```
      <h1>Welcome to the first session of React</h1>
```

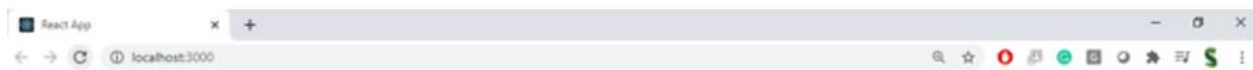
```
    </div>
```

```
  );
```

```
}
```

```
export default App;
```

```
npm start
```



Welcome the first session of React

2.

```
import React from 'react';
```

```
function Home() {
```

```
  return (
```

```
    <div>
```

```
      <h1>Welcome to the Home page of Student Management Portal</h1>
```

```
    </div>
```

```
  );
```

```
}
```

```
export default Home;
```

About.js

```
import React from 'react';
```

```
function About() {
```

```
  return (
```

```
    <div>
```

```
      <h1>Welcome to the About page of the Student Management Portal</h1>
```

```
    </div>
```

```
  );
```

```
}
```

```
export default About;
```

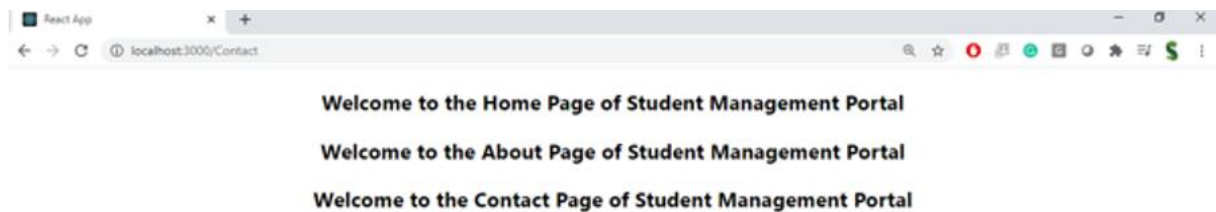
App.js

```
import React from 'react';
```

```
import Home from './Components/Home';  
import About from './Components/About';  
import Contact from './Components/Contact';
```

```
function App() {  
  return (  
    <div>  
      <Home />  
      <About />  
      <Contact />  
    </div>  
  );  
}
```

```
export default App;
```



3.

Src/Components/CalculateScore.js

```
import React from 'react';  
import './Stylesheets/mystyle.css';
```

```
function CalculateScore({ name, school, total, goal }) {  
  const average = (total / goal).toFixed(2);  
  
  return (  
    <div className="score-card">  
      <h2>Student Score Calculator</h2>  
      <p><strong>Name:</strong> {name}</p>  
      <p><strong>School:</strong> {school}</p>  
      <p><strong>Total Marks:</strong> {total}</p>  
      <p><strong>Goal Marks:</strong> {goal}</p>  
      <p className="highlight"><strong>Average Score:</strong> {average}</p>  
    </div>  
  );  
}
```

```
export default CalculateScore;
```

Src/Stylesheets/mystyle.css

```
.score-card {  
  border: 2px solid #4CAF50;  
  padding: 20px;  
  margin: 20px auto;  
  border-radius: 10px;  
  width: 350px;  
  background-color: #f9f9f9;  
  text-align: left;
```

```
font-family: Arial, sans-serif;
}
```

```
.score-card h2 {
  text-align: center;
  color: #4CAF50;
}
```

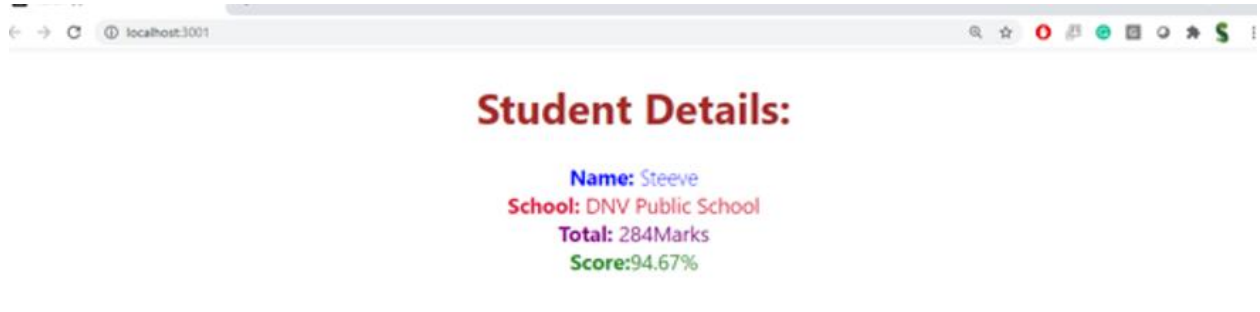
```
.highlight {
  color: #d9534f;
  font-weight: bold;
}
```

App.js

```
import React from 'react';
import CalculateScore from './Components/CalculateScore';

function App() {
  return (
    <div>
      <CalculateScore name="John Doe" school="ABC High School"
total={450} goal={500} />
    </div>
  );
}
```

```
export default App;
```



4.

Src/Post.js

```
// Post class to represent a Post object
```

```
class Post {  
  constructor(userId, id, title, body) {  
    this.userId = userId;  
    this.id = id;  
    this.title = title;  
    this.body = body;  
  }  
}
```

```
export default Post;
```

Src/Posts.js

```
import React, { Component } from 'react';  
import Post from './Post';
```

```
class Posts extends Component {  
  constructor(props) {  
    super(props);  
    this.state = {  
      posts: []  
    };  
    this.loadPosts = this.loadPosts.bind(this);  
  }  
}
```

// Step 6: loadPosts() method

```
loadPosts() {  
  fetch('https://jsonplaceholder.typicode.com/posts')  
    .then(response => response.json())  
    .then(data => {  
      const posts = data.map(p => new Post(p.userId, p.id, p.title, p.body));  
      this.setState({ posts });  
    })  
    .catch(error => {  
      console.error('Error fetching posts:', error);  
      alert('Failed to load posts!');  
    });  
}
```

// Step 7: componentDidMount()

```
componentDidMount() {
```

```
    this.loadPosts();  
  }  
  
}
```

```
// Step 9: componentDidCatch()  
componentDidCatch(error, info) {  
  console.error("Error in Posts component:", error, info);  
  alert("An error occurred while rendering Posts!");  
}
```

```
// Step 8: render()  
render() {  
  return (  
    <div>  
      <h1>Blog Posts</h1>  
      {this.state.posts.map(post => (  
        <div key={post.id} style={{ marginBottom: '20px' }}>  
          <h3>{post.title}</h3>  
          <p>{post.body}</p>  
        </div>  
      ))}  
    </div>  
  );  
}
```

```
export default Posts;
```


Src/App.js

```
import React from 'react';  
import Posts from './Posts';
```

```
function App() {  
  return (  
    <div className="App">  
      <Posts />  
    </div>  
  );  
}
```

```
export default App;
```

5.

Src/CohortDetails.module.css

```
/* Box style for each cohort card */ .box { width: 300px; display: inline-block; margin: 10px;  
padding: 10px 20px; border: 1px solid black; border-radius: 10px; }
```

```
/* Styling for
```

```
tags */ dt { font-weight: 500; }
```

Src/components/.

```
import React from "react";  
import styles from "../CohortDetails.module.css";
```

```

const CohortDetails = ({ cohort }) => {

  // Apply conditional color based on cohort status

  const headingStyle = {

    color: cohort.status === "ongoing" ? "green" : "blue",

  };

  return (

    <div className={styles.box}>

      <h3 style={headingStyle}>{cohort.name}</h3>

      <dl>

        <dt>Status:</dt>

        <dd>{cohort.status}</dd>

        <dt>Start Date:</dt>

        <dd>{cohort.startDate}</dd>

        <dt>End Date:</dt>

        <dd>{cohort.endDate}</dd>

      </dl>

    </div>

  );

};

export default CohortDetails;

```

Example App.js

```

import React from "react";

import CohortDetails from "../components/CohortDetails";

```

```
function App() {  
  const cohorts = [  
    { name: "React Bootcamp", status: "ongoing", startDate: "2025-08-01", endDate: "2025-09-15" },  
    { name: "Spring Boot Training", status: "completed", startDate: "2025-06-01", endDate: "2025-07-15" },  
  ];  
  
  return (  
    <div>  
      <h2>Cognizant Academy Cohorts</h2>  
      {cohorts.map((c, index) => (  
        <CohortDetails key={index} cohort={c} />  
      ))}  
    </div>  
  );  
}  
  
export default App;
```