WEEK 6 ASSIGNMENT : REACT APP CREATION

1.Creating first react app

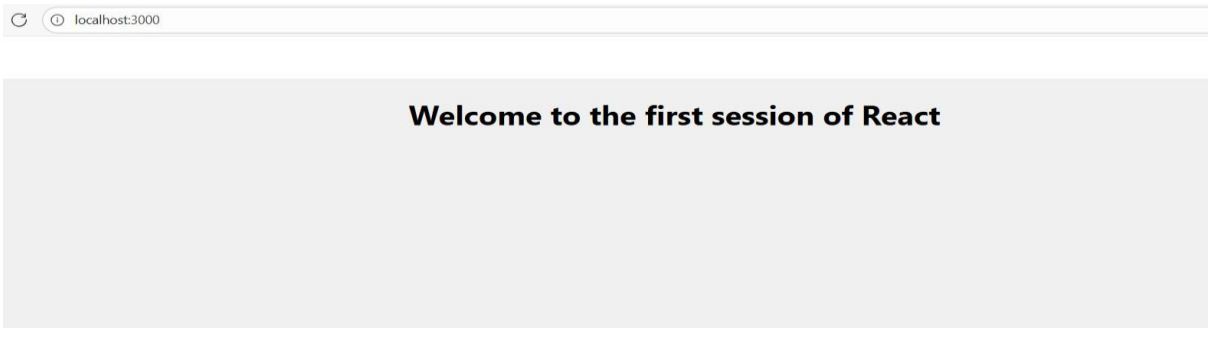
Code: App.js

```
import React from 'react';
import './App.css';  // make sure this is imported
function App() {
return (
   <div className="center">
     <h1>Welcome to the first session of React</h1>
   </div>
 );
}
export default App;
```

App.css

```
.center {
display: flex;   justify-
content: center;   align-
items: flex-start;    margin-
top: 50px;          height:
100vh;            background-
color: #f0f0f0;
}
```

OUTPUT:



2. Student Management Portal – React Application

Code:

Home.js

```
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;
```

Contact.js

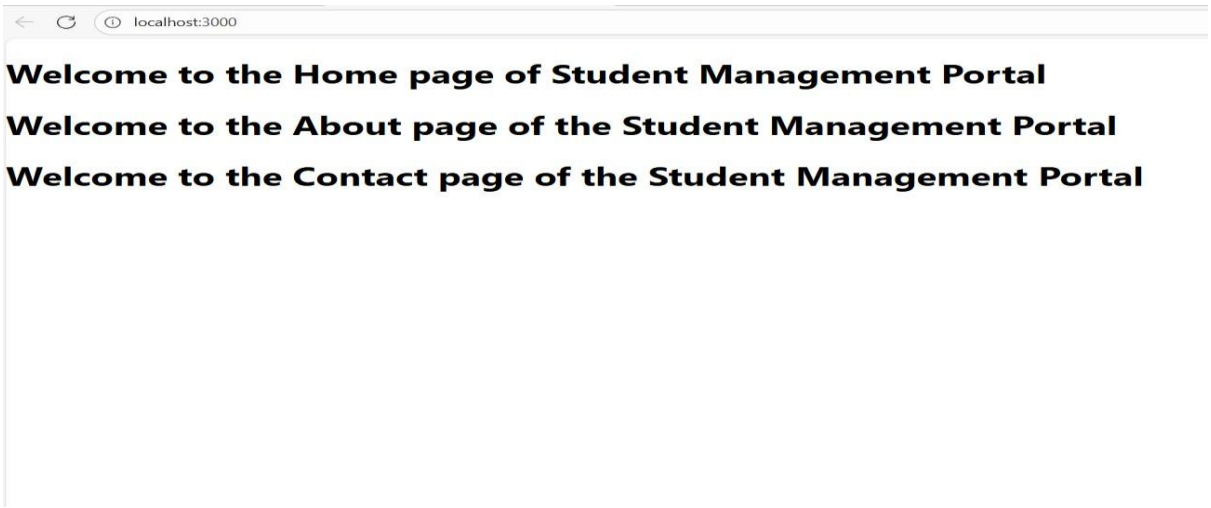
```
import React from 'react';
function Contact() {
return (
    <div>
      <h1>Welcome to the Contact page of the Student Management Portal</h1>
</div>
```

```
  );
}
export default Contact;
```

App.js

```
import React from 'react';
import Home from './Home';
import About from '. /About';
import Contact from './ Contact';
function App() {    return (
    <div>
      <Home />
      <About />
      <Contact />
    </div>
  );
}
export default App;
```

OUTPUT:



3.Calculating Average Score-React Application

Code:

CalculateScore.js

```
import React, { useState } from 'react';
import '../Stylesheets/mystyle.css';
function CalculateScore() {
const [name, setName] = useState('');
const [school, setSchool] = useState('');
const [total, setTotal] = useState('');
const [goal, setGoal] = useState('');
const [average, setAverage] = useState(null);

  const handleCalculate = () => {
const totalNum = parseFloat(total);
const goalNum = parseFloat(goal);

if (!name || !school || isNaN(totalNum) || isNaN(goalNum) || totalNum <= 0) {
alert('Please enter valid inputs');
return;
    }

    // average = (goal / total) * 100
 const avgScore = (goalNum / totalNum) * 100;
setAverage(avgScore.toFixed(2));
  };

  return (
    <div className="container">
```

```
      <h2>Student Score Calculator</h2>
      <div className="form-group">
        <label>Name:</label>
        <input type="text" value={name} onChange={(e) => setName(e.target.value)}
.       placeholder="Enter student name"
        />
      </div>

      <div className="form-group">
        <label>School:</label>
        <input type="text" value={school}  onChange={(e) => setSchool(e.target.value)}
.         placeholder="Enter school name"
        />
      </div>

      <div className="form-group">
        <label>Total Marks:</label>
        <input type="number" value={total} onChange={(e) => setTotal(e.target.value)}
placeholder="Enter total marks"
        />
      </div>

      <div className="form-group">
        <label>Goal Marks:</label>
        <input type="number" value={goal} onChange={(e) => setGoal(e.target.value)}
placeholder="Enter goal marks"
        />
      </div>
```

```
      <button onClick={handleCalculate}>Calculate Average Score</button>

      {average !== null && (
        <div className="result">
          <h3>Result</h3>
          <p>
            Student <strong>{name}</strong> from <strong>{school}</strong> has
an average score of <strong>{average}%</strong>.
          </p>
        </div>
      )}
    </div>
  );
}

export default CalculateScore;
```

mystyle.css

```
.container {

max-width: 400px;
margin: 30px auto;
padding: 20px;
border: 2px solid #4caf50;
border-radius: 8px;
background-color: #f9f9f9;
font-family: Arial, sans-serif;
}

h2 {
```

```
text-align:    center;
color: #4caf50;
}

.form-group {
margin-bottom: 15px;
}

label {
display: block;
margin-bottom: 6px;
font-weight: bold;
}

input[type="text"],
input[type="number"]   {
width: 100%;
padding: 8px;
box-sizing:border-box; }


button {
background-color: #4caf50;
color: white;
padding: 10px 15px;
border: none;
border-radius: 4px;
cursor: pointer;
width: 100%;
```

```
font-size: 16px;
}

button:hover {
background-color: #45a049;
}

.result {
margin-top: 20px;
padding: 15px;
background-color: #dff0d8;
border: 1px solid #3c763d;
border-radius: 5px;
color: #3c763d;
font-weight: bold;
}
```

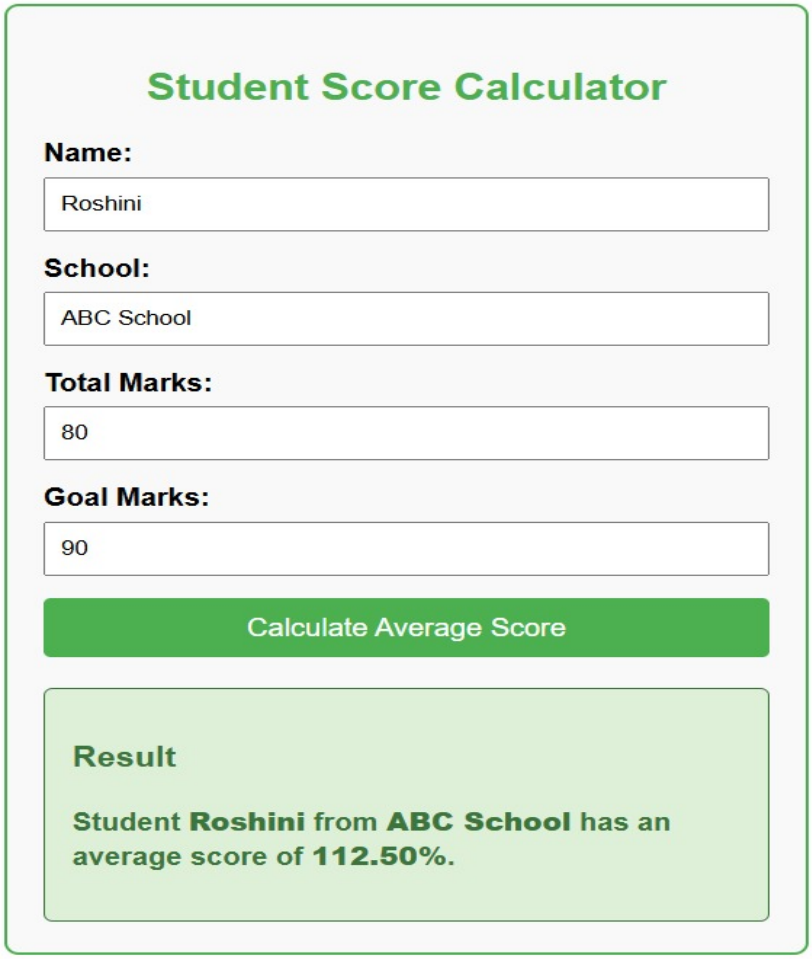
App.js

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

function App() {
return (
   <div>
     <CalculateScore />
   </div>
 );
}
```

export default App;

OUTPUT:



4.BLOG APP- React Application

Code: Post.js

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

Posts.js

```
import React, { Component } from 'react';
import Post from './Post';
class Posts extends Component {
constructor(props) {
super(props);
this.state = {
posts: [],
error: null
    };
  }

  // Method to fetch posts using Fetch API
loadPosts() {
fetch('https://jsonplaceholder.typicode.com/posts')
      .then(response => {
        if (!response.ok) {
 throw new Error('Network response was not OK');
```

```
        }
        return response.json();
      })
      .then(data => {
        // Convert JSON data to array of Post instances
const posts = data.map(p => new Post(p.id, p.title, p.body));
this.setState({ posts });
      })
      .catch(error => {
this.setState({ error });
      });
  }

  // Called automatically after component is mounted
componentDidMount() {
    this.loadPosts();
  }

  // Catch any error in rendering
componentDidCatch(error, info) {
alert('An error occurred: ' + error.message);
  }

  render() {
const { posts, error } = this.state;

    if (error) {
     return <h2>Error loading posts</h2>;
    }
```

```
    return (
      <div>
        <h1>Blog Posts</h1>
        {posts.map(post => (
          <div key={post.id} style={{ border: '1px solid #ccc', marginBottom: '10px', padding: '10px' }}>
            <h2>{post.title}</h2>
            <p>{post.body}</p>
          </div>
        ))}
      </div>
    );
  }
}
export default Posts;
```

App.js

```
import React from 'react';
import Posts from './Posts';
function App() {
return (
    <div className="App">
      <Posts />
    </div>
  );
}
export default App;
```

OUTPUT:


Blog Posts
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5.Cohort Dashboard with Conditional Styling-React Application

Code:

CohortDetails.module.css

```
.box {
width: 300px;
display: inline-block;
margin: 10px;
padding: 10px 20px;
border: 1px solid black;
border-radius: 10px;
} dt {
font-weight: 500;
}
```

CohortDetails.js

```
import React from 'react';
import styles from './CohortDetails.module.css'; // Import the CSS module

function CohortDetails({ cohort }) {    const { name, trainer,
status, startDate, endDate } = cohort;

  // Determine the color for the <h3> based on cohort status
const titleColor = status.toLowerCase() === 'ongoing' ? 'green' : 'blue';

  return (
    <div className={styles.box}>
      <h3 style={{ color: titleColor }}>{name}</h3>
      <dl>
        <dt>Trainer:</dt>
```

```
        <dd>{trainer}</dd>
        <dt>Status:</dt>
        <dd>{status}</dd>
        <dt>Start Date:</dt>
        <dd>{startDate}</dd>
        <dt>End Date:</dt>
        <dd>{endDate}</dd>
      </dl>
    </div>
  );
}
export default CohortDetails;
```

App.js

```
import React from 'react';
import CohortDetails from './components/CohortDetails';
function App() {
const cohorts = [
    {
      name: 'React Bootcamp', trainer: 'John Doe', status: 'ongoing',  startDate: '2025-07-01',
endDate: '2025-08-01',
    },
    {
      name: 'Node.js Mastery', trainer: 'Jane Smith', status: 'completed', startDate: '2025-05-15',
endDate: '2025-06-15',
    },
  ];
 return (
    <div>
      {
```

```
        cohorts.map((cohort, index) => (
        <CohortDetails key={index} cohort={cohort} />
      ))}
    </div>
  );
}
export default App;
```

OUTPUT: