WEEK 6 JAVA FSE DN 4.0

EXERCISE 1: INSTALLATION

```
OUTPUT: installed
EXERCISE 2: STUDENT APP
Home.js
import React from 'react';
class Home extends React.Component {
 render() {
  return (
   <div>
     <h2>Welcome to the Home page of Student Management Portal</h2>
   </div>
  );
}
}
export default Home;
About.js
import React from 'react';
class About extends React.Component {
 render() {
  return (
   <div>
     <h2>Welcome to the About page of the Student Management Portal</h2>
   </div>
  );
 }
}
export default About;
Contact.js
import React from 'react';
class Contact extends React.Component {
 render() {
  return (
```

```
<div>
    <h2>Welcome to the Contact page of the Student Management Portal</h2>
   </div>
  );
 }
}
export default Contact;
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 className="App">
   <Home />
   <About />
   <Contact />
  </div>
 );
export default App;
EXERCISE 3: SCORE CALCULATOR APP
CalculatorScore.js
import React from 'react';
import '../Stylesheets/mystyle.css';
function CalculateScore(props) {
 const average = props.total / props.goal;
 return (
  <div className="container">
   <h2>Student Score Calculator</h2>
   <strong>Name:</strong> {props.name}
   <strong>School:</strong> {props.school}
   <strong>Total Score:</strong> {props.total}
   <strong>Goal:</strong> {props.goal}
   <strong>Average Score:</strong> {average.toFixed(2)}
  </div>
```

```
);
}
export default CalculateScore;
Mystyle.css
.container {
 border: 2px solid #007bff;
 padding: 20px;
 margin: 30px;
 border-radius: 10px;
 background-color: #f9f9f9;
 width: 400px;
 font-family: Arial, sans-serif;
}
h2 {
 color: #007bff;
 margin-bottom: 15px;
}
.highlight {
 color: green;
 font-size: 18px;
 font-weight: bold;
}
App.js
import React from 'react';
import CalculateScore from './Components/CalculateScore';
function App() {
 return (
  <div className="App">
   <CalculateScore
     name="John Doe"
     school="ABC Public School"
    total={450}
    goal={5}
   />
  </div>
);
```

```
export default App;
```

```
EXERCISE 4: BUILDING A BLOG APP
Post.is
import React from 'react';
class Post extends React.Component {
 render() {
  return (
   <div style={{ border: "1px solid #ddd", margin: "10px", padding: "10px" }}>
     <h3>{this.props.title}</h3>
     {this.props.body}
   </div>
  );
 }
}
export default Post;
Posts.js
import React from 'react';
import Post from './Post';
class Posts extends React.Component {
 constructor(props) {
  super(props);
  this.state = {
   posts: [],
   hasError: false
  };
 loadPosts() {
  fetch('https://jsonplaceholder.typicode.com/posts')
   .then(response => response.json())
   .then(data => this.setState({ posts: data }))
   .catch(error => {
    this.setState({ hasError: true });
     console.error("Error loading posts:", error);
   });
 }
 componentDidMount() {
  this.loadPosts();
```

```
}
 componentDidCatch(error, info) {
  alert("An error occurred while rendering posts.");
  console.error("Caught error:", error, info);
 }
 render() {
  return (
   <div>
     <h2>Blog Posts</h2>
    {this.state.posts.map(post => (
      <Post key={post.id} title={post.title} body={post.body} />
    ))}
   </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;
EXERCISE 5: STYLING REACT COMPONENTS USING CSS MODULES AND CONDITIONAL
INLINE STYLING
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';
function CohortDetails(props) {
 const { name, status, trainer, startDate, endDate } = props;
 const statusColor = status.toLowerCase() === 'ongoing' ? 'green' : 'blue';
 return (
  <div className={styles.box}>
   <h3 style={{ color: statusColor }}>{name}</h3>
   <dl>
     <dt>Status:</dt>
     <dd>{status}</dd>
     <dt>Trainer:</dt>
     <dd>{trainer}</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 './CohortDetails';
function App() {
 return (
  <div className="App">
   <CohortDetails
     name="React FSE Cohort"
     status="Ongoing"
```

```
trainer="Mr. Ravi"
     startDate="2025-07-10"
     endDate="2025-08-30"
   />
   <CohortDetails
     name="Java Spring Boot Cohort"
     status="Completed"
    trainer="Ms. Priya"
     startDate="2025-05-01"
     endDate="2025-06-20"
   />
  </div>
 );
}
export default App;
EXERCISE 6: TRAINERS APP
Trainer.js
class Trainer {
 constructor(trainerId, name, email, phone, technology, skills) {
  this.trainerId = trainerId;
  this.name = name;
  this.email = email;
  this.phone = phone;
  this.technology = technology;
  this.skills = skills;
 }
}
export default Trainer;
TrainersMock.js
import Trainer from './Trainer';
const trainers = [
 new Trainer(1, 'Ravi Kumar', 'ravi.kumar@example.com', '9876543210', 'React', ['JSX', 'Hooks',
'Routing']),
 new Trainer(2, 'Priya Sharma', 'priya.sharma@example.com', '9876501234', 'Java', ['Spring
Boot', 'Hibernate']),
 new Trainer(3, 'Arun Das', 'arun.das@example.com', '9876512345', 'Python', ['Flask', 'Django']),
];
```

```
export default trainers;
Home.js
import React from 'react';
function Home() {
 return (
  <div>
   <h2>Welcome to Cognizant Academy - Trainers App</h2>
   This app helps you view trainer list and details
  </div>
 );
}
export default Home;
TrainerList.js
import React from 'react';
import { Link } from 'react-router-dom';
function TrainerList({ trainers }) {
 return (
  <div>
   <h2>Trainers List</h2>
    {trainers.map(trainer => (
      <Link to={`/trainers/${trainer.trainerId}`}>{trainer.name}</Link>
      ))}
   </div>
 );
export default TrainerList;
TrainerDetails.js
import React from 'react';
import { useParams } from 'react-router-dom';
import trainers from './TrainersMock';
function TrainerDetails() {
 const { id } = useParams();
```

```
const trainer = trainers.find(t => t.trainerId === parseInt(id));
 if (!trainer) return Trainer not found;
 return (
  <div>
   <h2>{trainer.name}'s Details</h2>
   <strong>Email:</strong> {trainer.email}
   <strong>Phone:</strong> {trainer.phone}
   <strong>Technology:</strong> {trainer.technology}
   <strong>Skills:</strong> {trainer.skills.join(', ')}
  </div>
 );
}
export default TrainerDetails;
App.js
import React from 'react';
import { BrowserRouter, Routes, Route, Link } from 'react-router-dom';
import Home from './Home';
import TrainerList from './TrainerList';
import TrainerDetails from './TrainerDetails';
import trainers from './TrainersMock';
function App() {
 return (
  <BrowserRouter>
   <div>
     <nav>
      <Link to="/" style={{ margin: '10px' }}>Home</Link>
      <Link to="/trainers" style={{ margin: '10px' }}>Trainers</Link>
     </nav>
     <hr />
     <Routes>
      <Route path="/" element={<Home />} />
      <Route path="/trainers" element={<TrainerList trainers={trainers} />} />
      <Route path="/trainers/:id" element={<TrainerDetails />} />
     </Routes>
   </div>
  </BrowserRouter>
 );
}
```

export default App;

index.js

import React from 'react';
import ReactDOM from 'react-dom/client';
import App from './App';

const root = ReactDOM.createRoot(document.getElementById('root'));
root.render(<App />);