**Week-6\_React\_Hands\_On**

**Exercise-1**

OUTPUT:

A screenshot of a computer

AI-generated content may be incorrect.

**Exercise-2**

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.

**Home.js**

import React from 'react';

function Home() {

return (

<div>

<h2>Welcome to the Home page of Student Management Portal</h2>

</div>

);

}

export default Home;

**About.js**

import React from 'react';

function About() {

return (

<div>

<h2>Welcome to the About page of the Student Management Portal</h2>

</div>

);

}

export default About;

**Contact.js**

import React from 'react';

function Contact() {

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;

**OUTPUT:**

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**Exercise-3**

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.

**CalculateScore.js**

import React from 'react';

import '../Stylesheets/mystyle.css';

function CalculateScore({ name, school, total, goal }) {

const average = total / goal;

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="average"><strong>Average Score:</strong> {average.toFixed(2)}</p>

</div>

);

}

export default CalculateScore;

**mystyle.css**

.score-card {

background-color: #f2f2f2;

padding: 15px;

margin: 20px auto;

border-radius: 10px;

max-width: 400px;

box-shadow: 0px 4px 8px rgba(0,0,0,0.2);

}

.score-card h2 {

text-align: center;

color: #333;

}

.score-card p {

font-size: 16px;

margin: 8px 0;

}

.average {

font-size: 18px;

color: #2e8b57;

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="Green Valley High"

total={450}

goal={500}

/>

</div>

);

}

export default App;

**OUTPUT:**

**A screenshot of a computer

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**Exercise-4**

**Post.js**

import React from 'react';

class Post extends React.Component {

render() {

return (

<div className="post">

<h3>{this.props.title}</h3>

<p>{this.props.body}</p>

</div>

);

}

}

export default Post;

**Posts.js (List of Posts)**

import React from 'react';

import Post from './Post';

class Posts extends React.Component {

constructor(props) {

super(props);

this.state = {

posts: []

};

}

loadPosts() {

fetch('https://jsonplaceholder.typicode.com/posts')

.then(response => response.json())

.then(data => this.setState({ posts: data }))

.catch(error => console.error('Error fetching posts:', error));

}

componentDidMount() {

this.loadPosts();

}

componentDidCatch(error, info) {

alert('An error occurred: ' + error);

console.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">

<h1>Welcome to BlogApp</h1>

<Posts />

</div>

);

}

export default App;

**OUTPUT:**

**A screenshot of a computer

AI-generated content may be incorrect.**

**Exercise-5**

My Academy team at Cognizant want to create a dashboard containing the details of ongoing and completed cohorts. A react application is created which displays the detail of the cohorts using react component. You are assigned the task of styling these react components.

**App.js**

import React from "react";

import CalculateScore from "./Components/CalculateScore";

import "./Stylesheets/mystyle.css";

function App() {

return (

<div className="App">

<h1>🎓 Student Management Portal</h1>

<CalculateScore

name="John Doe"

school="ABC High School"

total={450}

goal={500}

/>

<CalculateScore

name="Sarah Lee"

school="XYZ Public School"

total={380}

goal={500}

/>

<CalculateScore

name="Mike Smith"

school="Central Academy"

total={420}

goal={500}

/>

</div>

);

}

export default App;

**Components/CalculateScore.js**

import React from "react";

import "../Stylesheets/mystyle.css";

function CalculateScore({ name, school, total, goal }) {

const average = ((total / goal) \* 100).toFixed(2);

return (

<div className="score-box">

<h2>{name}</h2>

<p><strong>School:</strong> {school}</p>

<p><strong>Total Marks:</strong> {total}</p>

<p><strong>Goal:</strong> {goal}</p>

<p><strong>Average Score:</strong> {average}%</p>

</div>

);

}

export default CalculateScore;

**Stylesheets/mystyle.css**

.App {

text-align: center;

font-family: Arial, sans-serif;

margin: 20px;

}

.score-box {

border: 2px solid #444;

border-radius: 10px;

padding: 15px;

margin: 15px auto;

width: 300px;

background-color: #f9f9f9;

box-shadow: 2px 2px 8px rgba(0,0,0,0.2);

}

.score-box h2 {

margin: 0;

color: #2e8b57;

}

.score-box p {

margin: 5px 0;

}

OUTPUT:

A screenshot of a computer

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