**HandsOn-1**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8" />

<title>My First React App</title>

</head>

<body>

<div id="root"></div>

</body>

</html>

import React from 'react';

function App() {

return (

<div>

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

</div>

);

}

export default App;

import React from 'react';

import ReactDOM from 'react-dom/client';

import App from './App';

const root = ReactDOM.createRoot(document.getElementById('root'));

root.render(<App />);

{

"name": "myfirstreact",

"version": "0.1.0",

"private": true,

"dependencies": {

"react": "^18.2.0",

"react-dom": "^18.2.0",

"react-scripts": "5.0.1"

},

"scripts": {

"start": "react-scripts start",

"build": "react-scripts build"

}

}

**HandsOn-2**

import React from 'react';

function Home() {

return (

<div>

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

</div>

);

}

export default Home;

import React from 'react';

function About() {

return (

<div>

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

</div>

);

}

export default About;

import React from 'react';

function Contact() {

return (

<div>

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

</div>

);

}

export default Contact;

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;

**HandsOn-3**

import React from 'react';

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

function CalculateScore(props) {

const average = props.total / props.goal;

return (

<div className="score-container">

<h2>Student Score Calculator</h2>

<p><strong>Name:</strong> {props.name}</p>

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

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

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

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

</div>

);

}

export default CalculateScore;

.score-container {

background-color: #f0f8ff;

border: 2px solid #007acc;

padding: 20px;

border-radius: 10px;

width: 400px;

margin: 30px auto;

font-family: Arial, sans-serif;

box-shadow: 2px 2px 8px rgba(0,0,0,0.1);

}

.score-container h2 {

text-align: center;

color: #007acc;

}

.score-container p {

font-size: 16px;

margin: 5px 0;

}

import React from 'react';

import CalculateScore from './Components/CalculateScore';

function App() {

return (

<div className="App">

<CalculateScore name="Ananya Sharma" school="Green Valley High School" total={430} goal={5} />

</div>

);

}

export default App;

**HandsOn-4**

class Post {

constructor(userId, id, title, body) {

this.userId = userId;

this.id = id;

this.title = title;

this.body = body;

}

}

export default Post;

import React, { Component } from 'react';

import Post from './Post';

class Posts extends Component {

constructor(props) {

super(props);

this.state = {

posts: [],

};

}

loadPosts = () => {

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

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

.then((data) => {

const postList = data.map(

(p) => new Post(p.userId, p.id, p.title, p.body)

);

this.setState({ posts: postList });

})

.catch((error) => {

throw new Error('Failed to fetch posts: ' + error.message);

});

};

componentDidMount() {

this.loadPosts();

}

componentDidCatch(error, info) {

alert('An error occurred in Posts component: ' + error.message);

}

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;

import React from 'react';

import Posts from './Posts';

function App() {

return (

<div className="App">

<Posts />

</div>

);

}

export default App;

**HandsOn-5**

// src/Post.js

import React from 'react';

class Post extends React.Component {

render() {

return (

<div style={{ marginBottom: '20px', padding: '10px', border: '1px solid gray' }}>

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

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

</div>

);

}

}

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: [],

error: null

};

}

loadPosts() {

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

.then((res) => res.json())

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

.catch((err) => this.setState({ error: err.message }));

}

componentDidMount() {

this.loadPosts();

}

componentDidCatch(error, info) {

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

}

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;

// src/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;

/\* src/App.css \*/

.App {

text-align: center;

margin: 30px;

font-family: Arial, sans-serif;

}

// src/index.js

import React from 'react';

import ReactDOM from 'react-dom';

import './index.css';

import App from './App';

ReactDOM.render(

<React.StrictMode>

<App />

</React.StrictMode>,

document.getElementById('root')

);

**HandsOn-6**

.box {

width: 300px;

display: inline-block;

margin: 10px;

padding: 10px 20px;

border: 1px solid black;

border-radius: 10px;

}

dt {

font-weight: 500;

}

// src/CohortDetails.js

import React from 'react';

import styles from './CohortDetails.module.css';

const CohortDetails = ({ cohort }) => {

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;

// src/App.js

import React from 'react';

import CohortDetails from './CohortDetails';

const App = () => {

const cohorts = [

{ name: 'React Basics', status: 'ongoing', startDate: '2025-07-01', endDate: '2025-07-31' },

{ name: 'Advanced Node.js', status: 'completed', startDate: '2025-06-01', endDate: '2025-06-30' },

];

return (

<div>

<h1>My Academy Dashboard</h1>

{cohorts.map((cohort, index) => (

<CohortDetails key={index} cohort={cohort} />

))}

</div>

);

};

export default App;

**HandsOn-7**

// src/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;

// src/TrainersMock.js

const Trainers = [

{

TrainerId: 1,

Name: "John Doe",

Email: "john@example.com",

Phone: "1234567890",

Technology: "React",

Skills: ["Hooks", "Redux", "JSX"]

},

{

TrainerId: 2,

Name: "Jane Smith",

Email: "jane@example.com",

Phone: "9876543210",

Technology: "Angular",

Skills: ["TypeScript", "RxJS", "NgRx"]

},

{

TrainerId: 3,

Name: "Alex Johnson",

Email: "alex@example.com",

Phone: "9988776655",

Technology: "Vue",

Skills: ["Vuex", "Composition API", "Vuetify"]

}

];

export default Trainers;

// src/TrainerList.js

import React from 'react';

import { Link } from 'react-router-dom';

const TrainerList = ({ trainers }) => {

return (

<div>

<h2>Trainers List</h2>

<ul>

{trainers.map(trainer => (

<li key={trainer.TrainerId}>

<Link to={`/trainer/${trainer.TrainerId}`}>{trainer.Name}</Link>

</li>

))}

</ul>

</div>

);

};

export default TrainerList;

// src/TrainerDetail.js

import React from 'react';

import { useParams } from 'react-router-dom';

import Trainers from './TrainersMock';

const TrainerDetail = () => {

const { id } = useParams();

const trainer = Trainers.find(t => t.TrainerId === parseInt(id));

if (!trainer) return <p>Trainer not found</p>;

return (

<div>

<h2>{trainer.Name}</h2>

<p><strong>Email:</strong> {trainer.Email}</p>

<p><strong>Phone:</strong> {trainer.Phone}</p>

<p><strong>Technology:</strong> {trainer.Technology}</p>

<p><strong>Skills:</strong> {trainer.Skills.join(', ')}</p>

</div>

);

};

export default TrainerDetail;

// src/Home.js

import React from 'react';

const Home = () => {

return (

<div>

<h2>Welcome to Cognizant Academy Trainers App</h2>

<p>Manage and explore trainer information.</p>

</div>

);

};

export default Home;

// src/App.js

import React from 'react';

import { BrowserRouter, Routes, Route, Link } from 'react-router-dom';

import Home from './Home';

import TrainerList from './TrainerList';

import TrainerDetail from './TrainerDetail';

import Trainers from './TrainersMock';

const App = () => {

return (

<BrowserRouter>

<div>

<h1>Trainers App</h1>

<nav>

<Link to="/">Home</Link> | <Link to="/trainers">Trainers List</Link>

</nav>

<Routes>

<Route path="/" element={<Home />} />

<Route path="/trainers" element={<TrainerList trainers={Trainers} />} />

<Route path="/trainer/:id" element={<TrainerDetail />} />

</Routes>

</div>

</BrowserRouter>

);

};

export default App;

**HandsOn-8**

// src/Cart.js

class Cart {

constructor(itemname, price) {

this.itemname = itemname;

this.price = price;

}

}

export default Cart;

// src/OnlineShopping.js

import React, { Component } from 'react';

import Cart from './Cart';

class OnlineShopping extends Component {

constructor(props) {

super(props);

this.state = {

cartItems: [

new Cart("Laptop", 65000),

new Cart("Smartphone", 25000),

new Cart("Headphones", 3000),

new Cart("Shoes", 4000),

new Cart("Watch", 5500)

]

};

}

render() {

return (

<div>

<h2>Shopping Cart Items</h2>

<ul>

{this.state.cartItems.map((item, index) => (

<li key={index}>

<strong>Item:</strong> {item.itemname} — <strong>Price:</strong> ₹{item.price}

</li>

))}

</ul>

</div>

);

}

}

export default OnlineShopping;

// src/App.js

import React from 'react';

import OnlineShopping from './OnlineShopping';

function App() {

return (

<div className="App">

<OnlineShopping />

</div>

);

}

export default App;