**1. ReactJS-HOL.docx**

**Exercise: My first React App**

**App.js**

import React from 'react';

function App() {

return (

<div className="App">

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

</div>

);

}

export default App;

**2. ReactJS-HOL.docx**

**Exercise: StudentApp**

**src/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;

**src/Components/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;

**src/Components/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;

**src/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;

**3. ReactJS-HOL.docx**

**Exercise: Score Calculator App**

**src/Components/CalculateScore.js**

import React from 'react';

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

function CalculateScore() {

const name = "Aru";

const school = "Hogwarts School of Wizardry";

const total = 450;

const goal = 500;

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

return (

<div className="box">

<h1>Score Calculator</h1>

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

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

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

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

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

</div>

);

}

export default CalculateScore;

**src/Stylesheets/mystyle.css**

.box {

width: 300px;

display: inline-block;

margin: 10px;

padding: 10px 20px;

border: 1px solid black;

border-radius: 10px;

font-family: Arial, sans-serif;

background-color: #f9f9f9;

}

p {

font-size: 16px;

margin: 5px 0;

}

**src/App.js**

import React from 'react';

import CalculateScore from './Components/CalculateScore';

function App() {

return (

<div className="App">

<CalculateScore />

</div>

);

}

export default App;

**4. ReactJS-HOL.docx**

**Exercise: Blog App**

**src/Post.js**

import React from 'react';

class Post extends React.Component {

render() {

return (

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

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

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

</div>

);

}

}

export default Post;

**src/Posts.js**

import React from 'react';

import Post from './Post';

class Posts extends React.Component {

constructor(props) {

super(props);

this.state = {

posts: [],

hasError: false

};

}

componentDidMount() {

this.loadPosts();

}

loadPosts() {

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

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

.then(data => this.setState({ posts: data.slice(0, 5) })) // limit to 5 posts

.catch(error => {

console.error("Error loading posts:", error);

this.setState({ hasError: true });

});

}

componentDidCatch(error, info) {

alert("Something went wrong while rendering the posts.");

this.setState({ hasError: true });

}

render() {

const { posts, hasError } = this.state;

if (hasError) {

return <p>Oops! Could not load posts.</p>;

}

return (

<div>

<h2>Latest Blog Posts</h2>

{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">

<Posts />

</div>

);

}

export default App;

**5. ReactJS-HOL.docx**

**Exercise: Cohort Styling**

**src/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;

}

**src/CohortDetails.js**

import React from 'react';

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

function CohortDetails(props) {

const { name, trainer, status } = props;

const headingStyle = {

color: status.toLowerCase() === 'ongoing' ? 'green' : 'blue'

};

return (

<div className={styles.box}>

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

<dl>

<dt>Trainer:</dt>

<dd>{trainer}</dd>

<dt>Status:</dt>

<dd>{status}</dd>

</dl>

</div>

);

}

export default CohortDetails;

**src/App.js**

import React from 'react';

import CohortDetails from './CohortDetails';

function App() {

return (

<div className="App">

<CohortDetails name="React Cohort" trainer="Aru" status="Ongoing" />

<CohortDetails name="Java Cohort" trainer="Neil" status="Completed" />

</div>

);

}

export default App;

**6. ReactJS-HOL.docx**

**Exercise: Trainers App**

**src/Trainer.js**

class Trainer {

constructor(id, name, email, phone, technology, skills) {

this.id = id;

this.name = name;

this.email = email;

this.phone = phone;

this.technology = technology;

this.skills = skills;

}

}

export default Trainer;

**src/TrainersMock.js**

import Trainer from './Trainer';

const trainers = [

new Trainer(1, 'Aru', 'aru@example.com', '1234567890', 'React', ['Hooks', 'JSX']),

new Trainer(2, 'Neil', 'neil@example.com', '2345678901', 'Java', ['Spring', 'Hibernate']),

new Trainer(3, 'Karl', 'karl@example.com', '3456789012', 'Python', ['Flask', 'Pandas']),

];

export default trainers;

**src/Home.js**

import React from 'react';

function Home() {

return (

<div>

<h2>Welcome to Trainers Management Portal</h2>

</div>

);

}

export default Home;

**src/TrainerList.js**

import React from 'react';

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

import trainers from './TrainersMock';

function TrainerList() {

return (

<div>

<h2>Trainer List</h2>

<ul>

{trainers.map((trainer) => (

<li key={trainer.id}>

<Link to={`/trainers/${trainer.id}`}>{trainer.name}</Link>

</li>

))}

</ul>

</div>

);

}

export default TrainerList;

**src/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.id === 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 TrainerDetails;

**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 TrainerDetails from './TrainerDetails';

function App() {

return (

<BrowserRouter>

<div>

<nav>

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

</nav>

<hr />

<Routes>

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

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

<Route path="/trainers/:id" element={<TrainerDetails />} />

</Routes>

</div>

</BrowserRouter>

);

}

export default App;

**7. ReactJS-HOL.docx**

**Exercise: Shopping App**

**src/Cart.js**

import React from 'react';

class Cart extends React.Component {

render() {

return (

<div style={{ border: '1px solid #aaa', margin: '10px', padding: '10px' }}>

<p><strong>Item:</strong> {this.props.itemname}</p>

<p><strong>Price:</strong> ₹{this.props.price}</p>

</div>

);

}

}

export default Cart;

**src/OnlineShopping.js**

import React from 'react';

import Cart from './Cart';

class OnlineShopping extends React.Component {

render() {

const items = [

{ itemname: 'Chocolates', price: 120 },

{ itemname: 'Books', price: 300 },

{ itemname: 'T-Shirts', price: 450 },

{ itemname: 'Laptop Bag', price: 800 },

{ itemname: 'Pens', price: 50 }

];

return (

<div>

<h2>My Shopping Cart</h2>

{items.map((item, index) => (

<Cart key={index} itemname={item.itemname} price={item.price} />

))}

</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;

**src/index.js**

import React from 'react';

import ReactDOM from 'react-dom';

import App from './App';

ReactDOM.render(

<React.StrictMode>

<App />

</React.StrictMode>,

document.getElementById('root')

);

**8. ReactJS-HOL.docx**

**Exercise: Counter App**

**src/CountPeople.js**

import React, { Component } from 'react';

class CountPeople extends Component {

constructor(props) {

super(props);

this.state = {

entryCount: 0,

exitCount: 0

};

}

updateEntry = () => {

this.setState(prevState => ({

entryCount: prevState.entryCount + 1

}));

}

updateExit = () => {

this.setState(prevState => ({

exitCount: prevState.exitCount + 1

}));

}

render() {

return (

<div style={{ margin: '20px', fontFamily: 'Arial' }}>

<h2>Mall People Counter</h2>

<p><strong>People Entered:</strong> {this.state.entryCount}</p>

<p><strong>People Exited:</strong> {this.state.exitCount}</p>

<button onClick={this.updateEntry} style={{ marginRight: '10px' }}>Login</button>

<button onClick={this.updateExit}>Exit</button>

</div>

);

}

}

export default CountPeople;

**src/App.js**

import React from 'react';

import CountPeople from './CountPeople';

function App() {

return (

<div className="App">

<CountPeople />

</div>

);

}

export default App;