**Week 7-Mandatory Hands-on**

**9. ReactJS-HOL**

**1. ListofPlayers.js**

import React from 'react';

const ListofPlayers = () => {

const players = [

{ name: "Virat", score: 90 },

{ name: "Rohit", score: 45 },

{ name: "Dhoni", score: 85 },

{ name: "KL Rahul", score: 50 },

{ name: "Jadeja", score: 72 },

{ name: "Shami", score: 40 },

{ name: "Bumrah", score: 95 },

{ name: "Pant", score: 65 },

{ name: "Gill", score: 88 },

{ name: "Hardik", score: 69 },

{ name: "Surya", score: 75 }

];

const filteredPlayers = players.filter(player => player.score >= 70);

return (

<div>

<h2>List of Players (Score ≥ 70)</h2>

<ul>

{filteredPlayers.map((player, index) => (

<li key={index}>{player.name} - {player.score}</li>

))}

</ul>

</div>

);

};

export default ListofPlayers;

**2.IndianPlayers.js**

import React from 'react';

const IndianPlayers = () => {

const oddTeam = ["Virat", "Dhoni", "Jadeja", "Pant", "Hardik"];

const evenTeam = ["Rohit", "KL Rahul", "Shami", "Bumrah", "Gill", "Surya"];

// Destructuring

const [player1, player2, ...restOdd] = oddTeam;

const [playerA, playerB, ...restEven] = evenTeam;

const T20players = ["Virat", "Rohit", "Hardik"];

const RanjiTrophyPlayers = ["Pujara", "Rahane", "Saha"];

const allPlayers = [...T20players, ...RanjiTrophyPlayers]; // Merge

return (

<div>

<h2>Indian Players - Destructuring & Merging</h2>

<p><strong>Odd Team:</strong> {player1}, {player2}, {restOdd.join(', ')}</p>

<p><strong>Even Team:</strong> {playerA}, {playerB}, {restEven.join(', ')}</p>

<h3>All Players (Merged T20 & Ranji):</h3>

<ul>

{allPlayers.map((player, index) => (

<li key={index}>{player}</li>

))}

</ul>

</div>

);

};

export default IndianPlayers;

**3. App.js**

import React, { useState } from 'react';

import ListofPlayers from './components/ListofPlayers';

import IndianPlayers from './components/IndianPlayers';

function App() {

const [flag, setFlag] = useState(true);

return (

<div className="App">

<h1>Cricket App</h1>

<button onClick={() => setFlag(!flag)}>

Toggle View

</button>

{flag ? <ListofPlayers /> : <IndianPlayers />}

</div>

);

}

export default App;

**4. 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(

<React.StrictMode>

<App />

</React.StrictMode>

);

**Example Output**

**When Flag = true:**

List of Players (Score ≥ 70)

- Virat - 90

- Dhoni - 85

- Jadeja - 72

- Bumrah - 95

- Gill - 88

- Surya - 75

**When Flag = false:**

Odd Team: Virat, Dhoni, Jadeja, Pant, Hardik

Even Team: Rohit, KL Rahul, Shami, Bumrah, Gill, Surya

All Players (Merged T20 & Ranji):

- Virat

- Rohit

- Hardik

- Pujara

- Rahane

- Saha

**10. ReactJS-HOL**

**1. App.js**

import React from 'react';

function App() {

const officeList = [

{

name: "Indiranagar Workspace",

rent: 50000,

address: "Indiranagar, Bangalore",

image: "https://via.placeholder.com/200?text=Indiranagar"

},

{

name: "Koramangala Office",

rent: 65000,

address: "Koramangala, Bangalore",

image: "https://via.placeholder.com/200?text=Koramangala"

},

{

name: "MG Road Tower",

rent: 55000,

address: "MG Road, Bangalore",

image: "https://via.placeholder.com/200?text=MG+Road"

}

];

return (

<div style={{ fontFamily: "Arial, sans-serif", padding: "20px" }}>

{/\* JSX heading \*/}

<h1 style={{ color: "#2c3e50" }}>Office Space Rental App</h1>

{/\* Render office list \*/}

{officeList.map((office, index) => {

const rentStyle = {

color: office.rent < 60000 ? "red" : "green",

fontWeight: "bold"

};

return (

<div

key={index}

style={{

border: "1px solid #ccc",

padding: "15px",

marginBottom: "15px",

borderRadius: "8px",

maxWidth: "400px"

}}

>

{/\* JSX with image attribute \*/}

<img

src={office.image}

alt={office.name}

style={{ width: "100%", borderRadius: "4px" }}

/>

<h2>{office.name}</h2>

<p><strong>Address:</strong> {office.address}</p>

<p><strong>Rent:</strong> <span style={rentStyle}>₹{office.rent}</span></p>

</div>

);

})}

</div>

);

}

export default App;

**2. 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(

<React.StrictMode>

<App />

</React.StrictMode>

);

**11. ReactJS-HOL**

**1. App.js**

import React, { Component } from 'react';

import CurrencyConverter from './components/CurrencyConverter';

class App extends Component {

constructor(props) {

super(props);

this.state = {

counter: 0

};

}

increment = () => {

this.setState(prevState => ({ counter: prevState.counter + 1 }));

};

sayHello = () => {

console.log("Hello! Button was clicked.");

};

handleIncrease = () => {

this.increment();

this.sayHello();

};

decrement = () => {

this.setState(prevState => ({ counter: prevState.counter - 1 }));

};

sayWelcome = (message) => {

alert(message);

};

handleSyntheticEvent = (e) => {

e.preventDefault(); // synthetic event handling

alert("I was clicked");

};

render() {

return (

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

<h1>React Event Handling Example</h1>

<h2>Counter: {this.state.counter}</h2>

<button onClick={this.handleIncrease}>Increment</button>{' '}

<button onClick={this.decrement}>Decrement</button>

<br /><br />

<button onClick={() => this.sayWelcome("Welcome to React Events!")}>

Say Welcome

</button>

<br /><br />

<button onClick={this.handleSyntheticEvent}>Synthetic Event</button>

<br /><br />

<CurrencyConverter />

</div>

);

}

}

export default App;

**2. CurrencyConverter.js**

import React, { Component } from 'react';

class CurrencyConverter extends Component {

constructor(props) {

super(props);

this.state = {

rupees: '',

euro: ''

};

}

handleChange = (e) => {

this.setState({ rupees: e.target.value });

};

handleSubmit = (e) => {

e.preventDefault();

const euroValue = (this.state.rupees / 90).toFixed(2); // assuming 1 Euro = 90 INR

this.setState({ euro: euroValue });

};

render() {

return (

<div style={{ marginTop: '30px' }}>

<h2>Currency Converter (INR to EUR)</h2>

<form onSubmit={this.handleSubmit}>

<label>

Enter amount in INR: &nbsp;

<input

type="number"

value={this.state.rupees}

onChange={this.handleChange}

required

/>

</label>

<button type="submit" style={{ marginLeft: '10px' }}>

Convert

</button>

</form>

{this.state.euro && (

<p style={{ marginTop: '10px' }}>

Equivalent in Euro: <strong>€{this.state.euro}</strong>

</p>

)}

</div>

);

}

}

export default CurrencyConverter;

**3. 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(

<React.StrictMode>

<App />

</React.StrictMode>

);

**12. ReactJS-HOL**

**1. App.js**

import React, { useState } from 'react';

import GuestPage from './components/GuestPage';

import UserPage from './components/UserPage';

function App() {

const [isLoggedIn, setIsLoggedIn] = useState(false);

const handleLogin = () => setIsLoggedIn(true);

const handleLogout = () => setIsLoggedIn(false);

let content;

if (isLoggedIn) {

content = <UserPage onLogout={handleLogout} />;

} else {

content = <GuestPage onLogin={handleLogin} />;

}

return (

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

<h1>Flight Ticket Booking App</h1>

{content}

</div>

);

}

export default App;

**2. GuestPage.js**

import React from 'react';

const GuestPage = ({ onLogin }) => {

return (

<div>

<h2>Welcome Guest!</h2>

<p>Here are some flight details:</p>

<ul>

<li>Flight: AI202 | From: Delhi | To: Mumbai | Time: 10:00 AM</li>

<li>Flight: AI305 | From: Bangalore | To: Chennai | Time: 2:00 PM</li>

<li>Flight: AI410 | From: Hyderabad | To: Kolkata | Time: 6:30 PM</li>

</ul>

<button onClick={onLogin}>Login to Book Tickets</button>

</div>

);

};

export default GuestPage;

**3. UserPage.js**

import React from 'react';

const UserPage = ({ onLogout }) => {

return (

<div>

<h2>Welcome User!</h2>

<p>You can now book your tickets.</p>

<ul>

<li>

<strong>Flight:</strong> AI202 <br />

<button>Book Now</button>

</li>

<li>

<strong>Flight:</strong> AI305 <br />

<button>Book Now</button>

</li>

<li>

<strong>Flight:</strong> AI410 <br />

<button>Book Now</button>

</li>

</ul>

<button onClick={onLogout}>Logout</button>

</div>

);

};

export default UserPage;

**4. 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(

<React.StrictMode>

<App />

</React.StrictMode>

);

**13. ReactJS-HOL**

**1. BookDetails.js**

import React from 'react';

const BookDetails = () => {

const books = [

{ id: 1, title: "React in Action", author: "Mark T." },

{ id: 2, title: "Learning React", author: "Alex B." }

];

return (

<div>

<h3> Book Details</h3>

<ul>

{books.map(book => (

<li key={book.id}>{book.title} by {book.author}</li>

))}

</ul>

</div>

);

};

export default BookDetails;

**2. BlogDetails.js**

import React from 'react';

const BlogDetails = () => {

const blogs = [

{ id: 1, title: "React Hooks Deep Dive" },

{ id: 2, title: "State Management Tips" }

];

return (

<div>

<h3>Blog Details</h3>

<ul>

{blogs.map(blog => (

<li key={blog.id}>{blog.title}</li>

))}

</ul>

</div>

);

};

export default BlogDetails;

**3. CourseDetails.js**

import React from 'react';

const CourseDetails = () => {

const courses = [

{ id: 1, name: "React Basics", duration: "4 weeks" },

{ id: 2, name: "Advanced React", duration: "6 weeks" }

];

return (

<div>

<h3>Course Details</h3>

<ul>

{courses.map(course => (

<li key={course.id}>{course.name} - {course.duration}</li>

))}

</ul>

</div>

);

};

export default CourseDetails;

**4. App.js – With Conditional Rendering Variants**

import React, { useState } from 'react';

import BookDetails from './components/BookDetails';

import BlogDetails from './components/BlogDetails';

import CourseDetails from './components/CourseDetails';

function App() {

const [selected, setSelected] = useState("book"); // 'book', 'blog', or 'course'

const [showCourse, setShowCourse] = useState(true); // for && operator

let displayComponent; // for element variable method

if (selected === "book") {

displayComponent = <BookDetails />;

} else if (selected === "blog") {

displayComponent = <BlogDetails />;

} else {

displayComponent = <CourseDetails />;

}

return (

<div style={{ padding: "20px", fontFamily: "Arial" }}>

<h1>Blogger App</h1>

<div>

<button onClick={() => setSelected("book")}>Book</button>

<button onClick={() => setSelected("blog")}>Blog</button>

<button onClick={() => setSelected("course")}>Course</button>

<button onClick={() => setShowCourse(prev => !prev)}>

Toggle Course Details (&& method)

</button>

</div>

<hr />

{/\* Element Variable Method \*/}

{displayComponent}

{/\* Ternary Operator \*/}

<div style={{ marginTop: "20px" }}>

<h2>Ternary Rendering:</h2>

{selected === "book" ? <BookDetails /> : <p>Not showing Book details</p>}

</div>

{/\* && Logical AND Rendering \*/}

<div style={{ marginTop: "20px" }}>

<h2>Conditional Rendering using &&</h2>

{showCourse && <CourseDetails />}

</div>

</div>

);

}

export default App;

**5. 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 />);