**9.HandsOn**

// src/ListofPlayers.js

import React from 'react';

const ListofPlayers = () => {

const players = [

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

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

{ name: "Rahul", score: 75 },

{ name: "Dhoni", score: 50 },

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

{ name: "Hardik", score: 60 },

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

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

{ name: "Bumrah", score: 55 },

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

{ name: "Pant", score: 88 }

];

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

return (

<div>

<h2>All Players</h2>

<ul>

{players.map((p, i) => (

<li key={i}>{p.name} - {p.score}</li>

))}

</ul>

<h3>Players with score below 70</h3>

<ul>

{lowScorers.map((p, i) => (

<li key={i}>{p.name} - {p.score}</li>

))}

</ul>

</div>

);

};

export default ListofPlayers;

// src/IndianPlayers.js

import React from 'react';

const IndianPlayers = () => {

const team = ["Virat", "Rohit", "Dhoni", "Rahul", "Shikhar", "Pant"];

const oddPlayers = team.filter((\_, i) => i % 2 === 0); // index 0, 2, 4

const evenPlayers = team.filter((\_, i) => i % 2 !== 0); // index 1, 3, 5

const [p1, p2, p3, p4, p5, p6] = team;

const T20Players = ["Surya", "Iyer", "Kishan"];

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

const allPlayers = [...T20Players, ...RanjiTrophyPlayers];

return (

<div>

<h2>Odd Team Players</h2>

<ul>

{oddPlayers.map((name, i) => <li key={i}>{name}</li>)}

</ul>

<h2>Even Team Players</h2>

<ul>

{evenPlayers.map((name, i) => <li key={i}>{name}</li>)}

</ul>

<h2>Merged Players (T20 + Ranji)</h2>

<ul>

{allPlayers.map((name, i) => <li key={i}>{name}</li>)}

</ul>

</div>

);

};

export default IndianPlayers;

// src/App.js

import React from 'react';

import ListofPlayers from './ListofPlayers';

import IndianPlayers from './IndianPlayers';

function App() {

const flag = true; // Toggle this to false to show the other component

return (

<div className="App">

<h1>🏏 Cricket App</h1>

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

</div>

);

}

export default App;

**10.HandsOn**

// src/OfficeSpace.js

import React from "react";

import "./OfficeSpace.css"; // CSS styling file

const OfficeSpace = () => {

// List of office space objects

const offices = [

{

name: "CoWork Space A",

rent: 55000,

address: "Bangalore, Karnataka",

image: "https://via.placeholder.com/200?text=Office+A",

},

{

name: "Startup Hub B",

rent: 70000,

address: "Hyderabad, Telangana",

image: "https://via.placeholder.com/200?text=Office+B",

},

{

name: "TechNest C",

rent: 60000,

address: "Chennai, Tamil Nadu",

image: "https://via.placeholder.com/200?text=Office+C",

},

{

name: "GreenDesk D",

rent: 45000,

address: "Pune, Maharashtra",

image: "https://via.placeholder.com/200?text=Office+D",

},

];

return (

<div>

<h1>🏢 Office Space Rental Portal</h1>

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

<div className="office-card" key={index}>

<img src={office.image} alt={office.name} className="office-image" />

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

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

<p

className="office-rent"

style={{ color: office.rent > 60000 ? "green" : "red" }}

>

<strong>Rent:</strong> ₹{office.rent}

</p>

</div>

))}

</div>

);

};

export default OfficeSpace;

/\* src/OfficeSpace.css \*/

.office-card {

border: 1px solid #ccc;

padding: 15px;

margin: 15px auto;

width: 300px;

box-shadow: 0 0 5px #888;

text-align: center;

border-radius: 8px;

}

.office-image {

width: 200px;

height: 150px;

object-fit: cover;

margin-bottom: 10px;

}

.office-rent {

font-size: 18px;

font-weight: bold;

}

// src/App.js

import React from "react";

import OfficeSpace from "./OfficeSpace";

function App() {

return (

<div className="App">

<OfficeSpace />

</div>

);

}

export default App;

**HandsOn-11**

// src/EventDemo.js

import React, { Component } from "react";

class EventDemo extends Component {

constructor(props) {

super(props);

this.state = {

count: 0,

message: "",

};

}

increment = () => {

this.setState({ count: this.state.count + 1 }, () => {

this.sayHello(); // invoke after increment

});

};

decrement = () => {

this.setState({ count: this.state.count - 1 });

};

sayHello = () => {

this.setState({ message: "Hello! Counter was incremented!" });

};

sayWelcome = (msg) => {

this.setState({ message: msg });

};

onPress = () => {

this.setState({ message: "I was clicked" });

};

render() {

return (

<div style={{ marginBottom: "30px" }}>

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

<button onClick={this.increment}>Increment</button>{" "}

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

<br /><br />

<button onClick={() => this.sayWelcome("Welcome!")}>Say Welcome</button>

<br /><br />

<button onClick={this.onPress}>OnPress</button>

<h3>{this.state.message}</h3>

</div>

);

}

}

export default EventDemo;

// src/CurrencyConvertor.js

import React, { Component } from "react";

class CurrencyConvertor extends Component {

constructor(props) {

super(props);

this.state = {

rupees: '',

euros: '',

};

}

handleChange = (e) => {

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

};

handleSubmit = (e) => {

e.preventDefault();

const euros = (parseFloat(this.state.rupees) / 90).toFixed(2);

this.setState({ euros });

};

render() {

return (

<div>

<h2>Currency Converter</h2>

<form onSubmit={this.handleSubmit}>

<input

type="number"

placeholder="Enter INR"

value={this.state.rupees}

onChange={this.handleChange}

/>

<button type="submit">Convert</button>

</form>

{this.state.euros && (

<h3>€ {this.state.euros} Euros</h3>

)}

</div>

);

}

}

export default CurrencyConvertor;

// src/App.js

import React from "react";

import EventDemo from "./EventDemo";

import CurrencyConvertor from "./CurrencyConvertor";

function App() {

return (

<div className="App" style={{ padding: "20px" }}>

<h1>🎯 Event Examples App</h1>

<EventDemo />

<hr />

<CurrencyConvertor />

</div>

);

}

export default App;

**HandsOn-12**

// src/GuestPage.js

import React from 'react';

function GuestPage() {

return (

<div>

<h2>Welcome Guest 👋</h2>

<h3>Available Flights:</h3>

<ul>

<li>✈ Flight A123 - New Delhi to Mumbai</li>

<li>✈ Flight B456 - Bengaluru to Chennai</li>

<li>✈ Flight C789 - Hyderabad to Kolkata</li>

</ul>

<p>Login to book your tickets.</p>

</div>

);

}

export default GuestPage;

// src/UserPage.js

import React from 'react';

function UserPage() {

return (

<div>

<h2>Welcome Back! 🎫</h2>

<h3>Book Your Tickets:</h3>

<ul>

<li>🟢 Flight A123 - Book Now</li>

<li>🟢 Flight B456 - Book Now</li>

<li>🟢 Flight C789 - Book Now</li>

</ul>

</div>

);

}

export default UserPage;

// src/App.js

import React, { useState } from 'react';

import GuestPage from './GuestPage';

import UserPage from './UserPage';

function App() {

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

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

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

return (

<div className="App" style={{ padding: '20px' }}>

<h1>✈️ Ticket Booking App</h1>

<div style={{ marginBottom: '20px' }}>

{isLoggedIn ? (

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

) : (

<button onClick={handleLogin}>Login</button>

)}

</div>

{/\* Show content based on login status \*/}

{isLoggedIn ? <UserPage /> : <GuestPage />}

</div>

);

}

export default App;

**HandsOn-13**

// src/components/BookDetails.js

import React from 'react';

const BookDetails = () => (

<div>

<h2>📚 Book Details</h2>

<p>Title: React for Beginners</p>

<p>Author: John Doe</p>

</div>

);

export default BookDetails;

// src/components/BlogDetails.js

import React from 'react';

const BlogDetails = () => (

<div>

<h2>📝 Blog Details</h2>

<p>Title: Exploring React 18</p>

<p>Author: Jane Smith</p>

</div>

);

export default BlogDetails;

// src/components/CourseDetails.js

import React from 'react';

const CourseDetails = () => (

<div>

<h2>📖 Course Details</h2>

<p>Course: Advanced React Hooks</p>

<p>Instructor: Alex Johnson</p>

</div>

);

export default CourseDetails;

// src/App.js

import React, { useState } from 'react';

import BookDetails from './components/BookDetails';

import BlogDetails from './components/BlogDetails';

import CourseDetails from './components/CourseDetails';

function App() {

const [view, setView] = useState('book');

const renderComponent = () => {

if (view === 'book') {

return <BookDetails />;

} else if (view === 'blog') {

return <BlogDetails />;

} else if (view === 'course') {

return <CourseDetails />;

} else {

return <p>No component selected</p>;

}

};

return (

<div className="App" style={{ padding: '20px' }}>

<h1>📚 Blogger App</h1>

<div style={{ marginBottom: '15px' }}>

<button onClick={() => setView('book')}>Book</button>{' '}

<button onClick={() => setView('blog')}>Blog</button>{' '}

<button onClick={() => setView('course')}>Course</button>

</div>

{/\* ✅ Using If-Else Method \*/}

{renderComponent()}

<hr />

{/\* ✅ Using Ternary Operator \*/}

<h3>Using Ternary:</h3>

{view === 'book' ? <BookDetails /> : view === 'blog' ? <BlogDetails /> : <CourseDetails />}

<hr />

{/\* ✅ Using && Operator \*/}

<h3>Using Short-Circuit:</h3>

{view === 'book' && <BookDetails />}

{view === 'blog' && <BlogDetails />}

{view === 'course' && <CourseDetails />}

<hr />

{/\* ✅ Using IIFE \*/}

<h3>Using IIFE:</h3>

{(() => {

switch (view) {

case 'book':

return <BookDetails />;

case 'blog':

return <BlogDetails />;

case 'course':

return <CourseDetails />;

default:

return <p>Please select a view</p>;

}

})()}

</div>

);

}

export default App;

**HandsOn-14**

// src/ThemeContext.js

import React from 'react';

const ThemeContext = React.createContext('light'); // default theme

export default ThemeContext;

// src/App.js

import React, { Component } from 'react';

import EmployeeList from './EmployeesList';

import ThemeContext from './ThemeContext';

class App extends Component {

constructor(props) {

super(props);

this.state = {

theme: 'light' // or 'dark'

};

}

render() {

return (

<ThemeContext.Provider value={this.state.theme}>

<div className="App">

<h1>Employee Management System</h1>

<EmployeeList />

</div>

</ThemeContext.Provider>

);

}

}

export default App;

// src/EmployeesList.js

import React from 'react';

import EmployeeCard from './EmployeeCard';

const EmployeesList = () => {

const employees = [

{ id: 1, name: 'John Doe', dept: 'Engineering' },

{ id: 2, name: 'Jane Smith', dept: 'Marketing' }

];

return (

<div>

<h2>Employee List</h2>

{employees.map(emp => (

<EmployeeCard key={emp.id} employee={emp} />

))}

</div>

);

};export default EmployeesList;

// src/EmployeeCard.js

import React, { useContext } from 'react';

import ThemeContext from './ThemeContext';

const EmployeeCard = ({ employee }) => {

const theme = useContext(ThemeContext);

return (

<div className="employee-card">

<h3>{employee.name}</h3>

<p>Department: {employee.dept}</p>

<button className={`btn ${theme === 'dark' ? 'btn-dark' : 'btn-light'}`}>

View Profile

</button>

</div>

);

};

export default EmployeeCard;

/\* App.css or index.css \*/

.btn {

padding: 10px;

margin-top: 10px;

border: none;

cursor: pointer;

}

.btn-light {

background-color: #f0f0f0;

color: #000;

}

.btn-dark {

background-color: #333;

color: #fff;

}

**HandsOn-15**

// src/App.js

import React from 'react';

import ComplaintRegister from './ComplaintRegister';

function App() {

return (

<div className="App">

<h1>Ticket Raising Application</h1>

<ComplaintRegister />

</div>

);

}

export default App;

// src/ComplaintRegister.js

import React, { useState } from 'react';

function ComplaintRegister() {

const [employeeName, setEmployeeName] = useState('');

const [complaint, setComplaint] = useState('');

const handleSubmit = (e) => {

e.preventDefault();

const referenceNumber = 'REF' + Math.floor(100000 + Math.random() \* 900000);

alert(`Complaint Registered!\nName: ${employeeName}\nComplaint: ${complaint}\nReference No: ${referenceNumber}`);

setEmployeeName('');

setComplaint('');

};

return (

<form onSubmit={handleSubmit} style={{ maxWidth: '400px', margin: 'auto' }}>

<label>

Employee Name:

<input

type="text"

value={employeeName}

onChange={(e) => setEmployeeName(e.target.value)}

required

/>

</label>

<br /><br />

<label>

Complaint:

<textarea

value={complaint}

onChange={(e) => setComplaint(e.target.value)}

required

/>

</label>

<br /><br />

<button type="submit">Submit Complaint</button>

</form>

);

}

export default ComplaintRegister;

input, textarea {

width: 100%;

padding: 8px;

margin-top: 4px;

box-sizing: border-box;

}

button {

padding: 10px 20px;

background-color: #0077cc;

color: white;

border: none;

cursor: pointer;

}

button:hover {

background-color: #005fa3;

}

**HandsOn-16**

// src/App.js

import React from 'react';

import Register from './Register';

function App() {

return (

<div className="App">

<h1>Mail Registration Form</h1>

<Register />

</div>

);

}

export default App;

// src/Register.js

import React, { useState } from 'react';

function Register() {

const [formData, setFormData] = useState({ name: '', email: '', password: '' });

const [errors, setErrors] = useState({});

const validate = () => {

const newErrors = {};

if (formData.name.length < 5) {

newErrors.name = 'Name must be at least 5 characters long.';

}

if (!formData.email.includes('@') || !formData.email.includes('.')) {

newErrors.email = 'Email must contain "@" and "."';

}

if (formData.password.length < 8) {

newErrors.password = 'Password must be at least 8 characters long.';

}

setErrors(newErrors);

return Object.keys(newErrors).length === 0; // returns true if no errors

};

const handleSubmit = (e) => {

e.preventDefault();

if (validate()) {

alert(`Registration Successful!\nName: ${formData.name}\nEmail: ${formData.email}`);

setFormData({ name: '', email: '', password: '' });

setErrors({});

}

};

const handleChange = (e) => {

setFormData({ ...formData, [e.target.name]: e.target.value });

};

return (

<form onSubmit={handleSubmit} style={{ maxWidth: '400px', margin: 'auto' }}>

<div>

<label>Name:</label><br />

<input

type="text"

name="name"

value={formData.name}

onChange={handleChange}

/>

<div style={{ color: 'red' }}>{errors.name}</div>

</div>

<br />

<div>

<label>Email:</label><br />

<input

type="text"

name="email"

value={formData.email}

onChange={handleChange}

/>

<div style={{ color: 'red' }}>{errors.email}</div>

</div>

<br />

<div>

<label>Password:</label><br />

<input

type="password"

name="password"

value={formData.password}

onChange={handleChange}

/>

<div style={{ color: 'red' }}>{errors.password}</div>

</div>

<br />

<button type="submit">Register</button>

</form>

);

}

export default Register;

input {

width: 100%;

padding: 8px;

margin-top: 4px;

box-sizing: border-box;

}

button {

padding: 10px 20px;

background-color: green;

color: white;

border: none;

cursor: pointer;

}

button:hover {

background-color: darkgreen;

}

**HandsOn-17**

// src/App.js

import React from 'react';

import Getuser from './Getuser';

function App() {

return (

<div className="App">

<h1>Random User Info</h1>

<Getuser />

</div>

);

}

export default App;

// src/Getuser.js

import React, { Component } from 'react';

class Getuser extends Component {

constructor(props) {

super(props);

this.state = {

user: null,

loading: true,

error: null

};

}

async componentDidMount() {

try {

const response = await fetch('https://api.randomuser.me/');

const data = await response.json();

const user = data.results[0];

this.setState({

user: {

title: user.name.title,

firstName: user.name.first,

image: user.picture.large

},

loading: false

});

} catch (error) {

this.setState({ error: 'Failed to fetch user.', loading: false });

}

}

render() {

const { user, loading, error } = this.state;

if (loading) {

return <p>Loading user...</p>;

}

if (error) {

return <p>{error}</p>;

}

return (

<div style={{ border: '1px solid gray', padding: '20px', maxWidth: '300px' }}>

<h3>{user.title} {user.firstName}</h3>

<img src={user.image} alt="User" style={{ width: '100%', borderRadius: '10px' }} />

</div>

);

}

}

export default Getuser;