WEEK : 7

Skill : React  
Exercise 9 :

ListOfPlayers.js :

// src/components/ListOfPlayers.js

import React from 'react';

const ListOfPlayers = () => {

const players = [

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

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

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

{ name: "Pant", score: 70 },

{ name: "Ashwin", score: 30 },

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

{ name: "Shami", score: 66 },

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

{ name: "Gill", score: 78 },

{ name: "Surya", score: 100 },

{ name: "Kuldeep", score: 85 }

];

// Arrow function + filter

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

return (

<div>

<h2>All Players</h2>

<ul>

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

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

))}

</ul>

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

<ul>

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

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

))}

</ul>

</div>

);

};

export default ListOfPlayers;

IndianPlayers.js :  
// src/components/IndianPlayers.js

import React from 'react';

const IndianPlayers = () => {

// Destructuring & Odd-Even Split

const players = ["Virat", "Rohit", "Rahul", "Pant", "Ashwin", "Bumrah"];

const oddTeam = players.filter((\_, index) => index % 2 === 0);

const evenTeam = players.filter((\_, index) => index % 2 !== 0);

// Merging arrays with spread (...)

const T20Players = ["Surya", "Hardik"];

const RanjiTrophyPlayers = ["Jaiswal", "Sarfaraz"];

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

return (

<div>

<h2>Odd Team</h2>

<ul>{oddTeam.map((p, i) => <li key={i}>{p}</li>)}</ul>

<h2>Even Team</h2>

<ul>{evenTeam.map((p, i) => <li key={i}>{p}</li>)}</ul>

<h2>Merged Team</h2>

<ul>{mergedPlayers.map((p, i) => <li key={i}>{p}</li>)}</ul>

</div>

);

};

export default IndianPlayers;

App.js :  
// src/App.js

import React from 'react';

import ListOfPlayers from './components/ListOfPlayers';

import IndianPlayers from './components/IndianPlayers';

const App = () => {

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

return (

<div className="App">

<h1>🏏 Welcome to CricketApp</h1>

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

</div>

);

};

export default App;

Exercise 10 :

src/App.js :  
// src/App.js

import React from 'react';

import './App.css';

function App() {

const heading = <h1>Office Space Rental</h1>;

const officeImage = "https://images.unsplash.com/photo-1573164574572-cb89e39749b4"; // sample image

const officeDetails = {

name: "Tech Park View",

rent: 55000,

address: "1234, Silicon Avenue, Bengaluru"

};

const officeList = [

{ name: "Tech Hub", rent: 55000, address: "Whitefield, Bangalore" },

{ name: "Innovation Tower", rent: 62000, address: "Hitech City, Hyderabad" },

{ name: "Startup Studio", rent: 45000, address: "Sector 5, Noida" },

{ name: "Corporate Heights", rent: 70000, address: "Gachibowli, Hyderabad" }

];

return (

<div className="App">

{heading}

<img

src={officeImage}

alt="Office"

style={{ width: "60%", height: "300px", objectFit: "cover", marginBottom: "20px" }}

/>

<h2>Primary Office Details</h2>

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

<p>

<strong>Rent:</strong>{" "}

<span style={{ color: officeDetails.rent > 60000 ? "green" : "red" }}>

₹{officeDetails.rent}

</span>

</p>

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

<hr />

<h2>Available Office Spaces</h2>

<ul style={{ listStyleType: "none", paddingLeft: 0 }}>

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

<li key={index} style={{ marginBottom: "15px", border: "1px solid #ccc", padding: "10px" }}>

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

<p>

<strong>Rent:</strong>{" "}

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

₹{office.rent}

</span>

</p>

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

</li>

))}

</ul>

</div>

);

}

export default App;

**Optional Styling (App.css) :**/\* src/App.css \*/

.App {

text-align: center;

font-family: Arial, sans-serif;

padding: 30px;

background-color: #f3f3f3;

}

Exercise 11 :

App.js :  
// src/App.js

import React, { Component } from 'react';

import CurrencyConverter from './CurrencyConverter';

class App extends Component {

constructor() {

super();

this.state = {

count: 0,

};

}

increment = () => {

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

};

sayHello = () => {

alert('Hello! Static message triggered.');

};

handleIncrement = () => {

this.increment();

this.sayHello();

};

decrement = () => {

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

};

sayWelcome = (message) => {

alert(message);

};

handleSyntheticEvent = (e) => {

e.preventDefault(); // Synthetic event usage

alert('I was clicked!');

};

render() {

return (

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

<h1>React Event Examples</h1>

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

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

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

<br /><br />

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

<br /><br />

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

<hr />

<CurrencyConverter />

</div>

);

}

}

export default App;

CurrencyConverter.js :  
// src/CurrencyConverter.js

import React, { useState } from 'react';

const CurrencyConverter = () => {

const [rupees, setRupees] = useState('');

const [euros, setEuros] = useState('');

const handleSubmit = (e) => {

e.preventDefault();

const rate = 0.011; // Example conversion rate

const result = parseFloat(rupees) \* rate;

setEuros(result.toFixed(2));

};

return (

<div>

<h2>Currency Converter: INR to EUR</h2>

<form onSubmit={handleSubmit}>

<input

type="number"

placeholder="Enter amount in ₹"

value={rupees}

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

required

/>

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

</form>

{euros && <p>Converted Amount: €{euros}</p>}

</div>

);

};

export default CurrencyConverter;

Exercise 12 :  
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);

let content;

if (isLoggedIn) {

content = <UserPage />;

} else {

content = <GuestPage />;

}

return (

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

<h1>Ticket Booking App</h1>

<div style={{ marginBottom: '10px' }}>

{isLoggedIn ? (

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

) : (

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

)}

</div>

{content}

</div>

);

}

export default App;

GuestPage.js :  
import React from 'react';

const GuestPage = () => {

return (

<div>

<h2>Welcome, Guest!</h2>

<p>You can view available flight details.</p>

<ul>

<li>Flight 1: Chennai ✈️ Mumbai - 10:00 AM</li>

<li>Flight 2: Delhi ✈️ Bangalore - 2:00 PM</li>

<li>Flight 3: Hyderabad ✈️ Kolkata - 6:00 PM</li>

</ul>

</div>

);

};

export default GuestPage;

UserPage.js :  
import React from 'react';

const UserPage = () => {

return (

<div>

<h2>Welcome, User!</h2>

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

<button>Book Ticket for Flight 1</button><br /><br />

<button>Book Ticket for Flight 2</button><br /><br />

<button>Book Ticket for Flight 3</button>

</div>

);

};

export default UserPage;

Exercise 13 :

src/App.js :

import React, { useState } from 'react';

import BookDetails from './BookDetails';

import BlogDetails from './BlogDetails';

import CourseDetails from './CourseDetails';

function App() {

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

const renderComponent = () => {

switch (view) {

case 'books':

return <BookDetails />;

case 'blogs':

return <BlogDetails />;

case 'courses':

return <CourseDetails />;

default:

return <h2>Please select a view</h2>;

}

};

return (

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

<h1>Blogger App</h1>

<div>

<button onClick={() => setView('books')}>Show Books</button>

<button onClick={() => setView('blogs')}>Show Blogs</button>

<button onClick={() => setView('courses')}>Show Courses</button>

</div>

<hr />

{renderComponent()}

</div>

);

}

export default App;

BookDetails.js :  
import React from 'react';

const books = [

{ id: 1, title: 'Clean Code', author: 'Robert C. Martin' },

{ id: 2, title: 'You Don’t Know JS', author: 'Kyle Simpson' },

{ id: 3, title: 'The Pragmatic Programmer', author: 'Andy Hunt' }

];

const BookDetails = () => {

return (

<div>

<h2>Book List</h2>

<ul>

{books.map(book => (

<li key={book.id}>

<strong>{book.title}</strong> - {book.author}

</li>

))}

</ul>

</div>

);

};

export default BookDetails;

BlogDetails.js :  
import React from 'react';

const blogs = [

{ id: 1, title: 'Understanding React Hooks' },

{ id: 2, title: 'A Guide to Node.js Performance' },

{ id: 3, title: '10 Tips for Clean JavaScript Code' }

];

const BlogDetails = () => {

return (

<div>

<h2>Blog Posts</h2>

{blogs.length > 0 ? (

<ul>

{blogs.map(blog => (

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

))}

</ul>

) : (

<p>No blogs to show</p>

)}

</div>

);

};

export default BlogDetails;

**CourseDetails.js :**

import React from 'react';

const courses = [];

const CourseDetails = () => {

return (

<div>

<h2>Course Details</h2>

{/\* Conditional rendering using && operator \*/}

{courses.length === 0 && <p>No courses available right now.</p>}

{courses.length > 0 && (

<ul>

{courses.map(course => (

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

))}

</ul>

)}

</div>

);

};

export default CourseDetails;