**React**

**9. ReactJS-HOL hands-on:**

import React from 'react';

const ListofPlayers = () => {

  const players = [

    { name: 'Virat', score: 95 },

    { name: 'Rohit', score: 88 },

    { name: 'Dhoni', score: 78 },

    { name: 'Pant', score: 65 },

    { name: 'Hardik', score: 55 },

    { name: 'Jadeja', score: 72 },

    { name: 'Shami', score: 40 },

    { name: 'Bumrah', score: 90 },

    { name: 'Gill', score: 75 },

    { name: 'Surya', score: 60 },

    { name: 'Ashwin', score: 82 },

  ];

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

  return (

    <div>

      <h2>All Players (Using map)</h2>

      <ul>

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

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

        ))}

      </ul>

      <h2>Players with score below 70 (Arrow + Filter)</h2>

      <ul>

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

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

        ))}

      </ul>

    </div>

  );

};

export default ListofPlayers;

import React from 'react';

const IndianPlayers = () => {

  const T20Players = ['Virat', 'Rohit', 'Hardik', 'Surya'];

  const RanjiTrophyPlayers = ['Rahane', 'Pujara', 'Jadeja'];

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

  const oddTeam = allPlayers.filter((\_, i) => i % 2 !== 0);

  const evenTeam = allPlayers.filter((\_, i) => i % 2 === 0);

  return (

    <div>

      <h2>Merged Players</h2>

      <ul>

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

          <li key={i}>{player}</li>

        ))}

      </ul>

      <h2>Even Team Players (Destructured)</h2>

      <ul>

        {evenTeam.map((player, i) => (

          <li key={i}>{player}</li>

        ))}

      </ul>

      <h2>Odd Team Players (Destructured)</h2>

      <ul>

        {oddTeam.map((player, i) => (

          <li key={i}>{player}</li>

        ))}

      </ul>

    </div>

  );

};

export default IndianPlayers;

import React from 'react';

import ListofPlayers from './ListofPlayers';

import IndianPlayers from './IndianPlayers';

function App() {

  const flag = true;

  return (

    <div className="App">

      <h1>🏏 Cricket App</h1>

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

    </div>

  );

}

export default App;



import React from 'react';

import ListofPlayers from './ListofPlayers';

import IndianPlayers from './IndianPlayers';

function App() {

  const flag = false;

  return (

    <div className="App">

      <h1>🏏 Cricket App</h1>

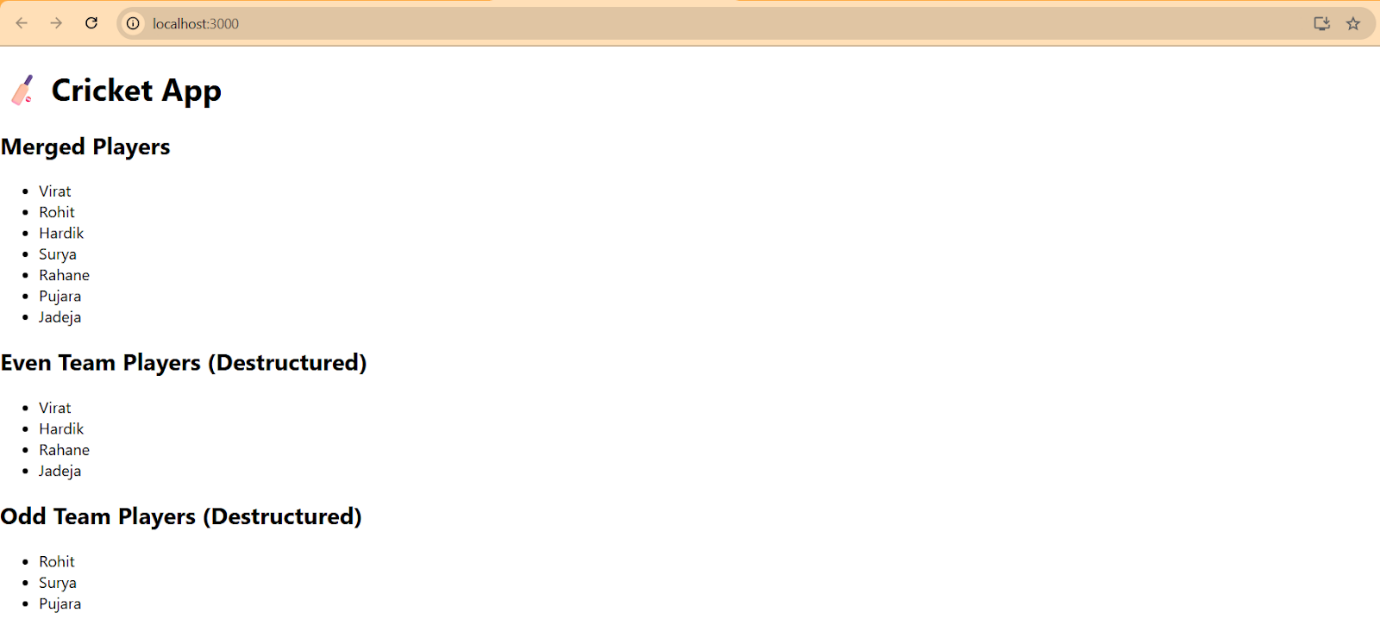
      {flag ? <ListofPlayers /> : <IndianPlayers />}

    </div>

  );

}

export default App;



**10. ReactJS-HOL hands-on:**

import React from 'react';

function App() {

  const office = {

    name: 'WeWork Residency Tower',

    rent: 55000,

    address: 'Koramangala, Bengaluru',

    image: 'https://via.placeholder.com/400x200?text=Office+Space'

  };

  const offices = [

    {

      name: 'IndiQube Alpha',

      rent: 45000,

      address: 'HSR Layout, Bengaluru',

      image: 'https://via.placeholder.com/300x150?text=Alpha'

    },

    {

      name: 'CoWrks RMZ',

      rent: 70000,

      address: 'RMZ EcoWorld, Bengaluru',

      image: 'https://via.placeholder.com/300x150?text=CoWrks'

    },

    {

      name: 'Awfis TechPark',

      rent: 60000,

      address: 'Whitefield, Bengaluru',

      image: 'https://via.placeholder.com/300x150?text=Awfis'

    }

  ];

  const heading = <h1 style={{ textAlign: 'center' }}>🏢 Office Space Rental App</h1>;

  const getRentStyle = (rent) => ({

    color: rent < 60000 ? 'red' : 'green',

    fontWeight: 'bold'

  });

  return (

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

      {heading}

      <h2>Featured Office</h2>

      <img src={office.image} alt="Featured Office" style={{ width: '400px' }} />

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

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

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

      <hr />

      <h2>Available Office Spaces</h2>

      <div style={{ display: 'flex', gap: '20px' }}>

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

          <div key={index} style={{ border: '1px solid #ccc', padding: '10px', width: '300px' }}>

            <img src={item.image} alt={item.name} style={{ width: '100%' }} />

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

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

            <p><strong>Rent:</strong> <span style={getRentStyle(item.rent)}>₹{item.rent}</span></p>

          </div>

        ))}

      </div>

    </div>

  );

}

export default App;

**11. ReactJS-HOL hands-on:**

**import React, { Component } from 'react';**

**class Counter extends Component {**

**constructor(props) {**

**super(props);**

**this.state = { count: 0 };**

**// Bind methods if not using arrow functions**

**this.increment = this.increment.bind(this);**

**this.sayHello = this.sayHello.bind(this);**

**this.incrementAndGreet = this.incrementAndGreet.bind(this);**

**this.decrement = this.decrement.bind(this);**

**}**

**increment() {**

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

**}**

**sayHello() {**

**console.log('Hello! This is a static message.');**

**}**

**incrementAndGreet() {**

**this.increment();**

**this.sayHello();**

**}**

**decrement() {**

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

**}**

**render() {**

**return (**

**<div>**

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

**<button onClick={this.incrementAndGreet}>Increment</button>**

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

**</div>**

**);**

**}**

**}**

**export default Counter;**

**import React from 'react';**

**const WelcomeButton = () => {**

**const sayWelcome = (message) => {**

**alert(message);**

**};**

**return (**

**<div>**

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

**Say Welcome**

**</button>**

**</div>**

**);**

**};**

**export default WelcomeButton;**

**import React from 'react';**

**const SyntheticEventButton = () => {**

**const handleClick = (event) => {**

**event.preventDefault(); // synthetic event usage**

**alert('I was clicked');**

**};**

**return (**

**<div>**

**<button onClick={handleClick}>Click Me (Synthetic Event)</button>**

**</div>**

**);**

**};**

**export default SyntheticEventButton;**

**import React, { useState } from 'react';**

**const CurrencyConvertor = () => {**

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

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

**const handleSubmit = (e) => {**

**e.preventDefault();**

**const converted = (parseFloat(rupees) / 90).toFixed(2); // Assuming 1 Euro = 90 INR**

**setEuros(converted);**

**};**

**return (**

**<div>**

**<h3>Currency Convertor</h3>**

**<form onSubmit={handleSubmit}>**

**<input**

**type="number"**

**value={rupees}**

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

**placeholder="Enter amount in ₹"**

**required**

**/>**

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

**</form>**

**{euros && <p>€ {euros}</p>}**

**</div>**

**);**

**};**

**export default CurrencyConvertor;**

**import React from 'react';**

**import Counter from './Counter';**

**import WelcomeButton from './WelcomeButton';**

**import SyntheticEventButton from './SyntheticEventButton';**

**import CurrencyConvertor from './CurrencyConvertor';**

**function App() {**

**return (**

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

**<h1>🎯 Event Examples App</h1>**

**<Counter />**

**<hr />**

**<WelcomeButton />**

**<hr />**

**<SyntheticEventButton />**

**<hr />**

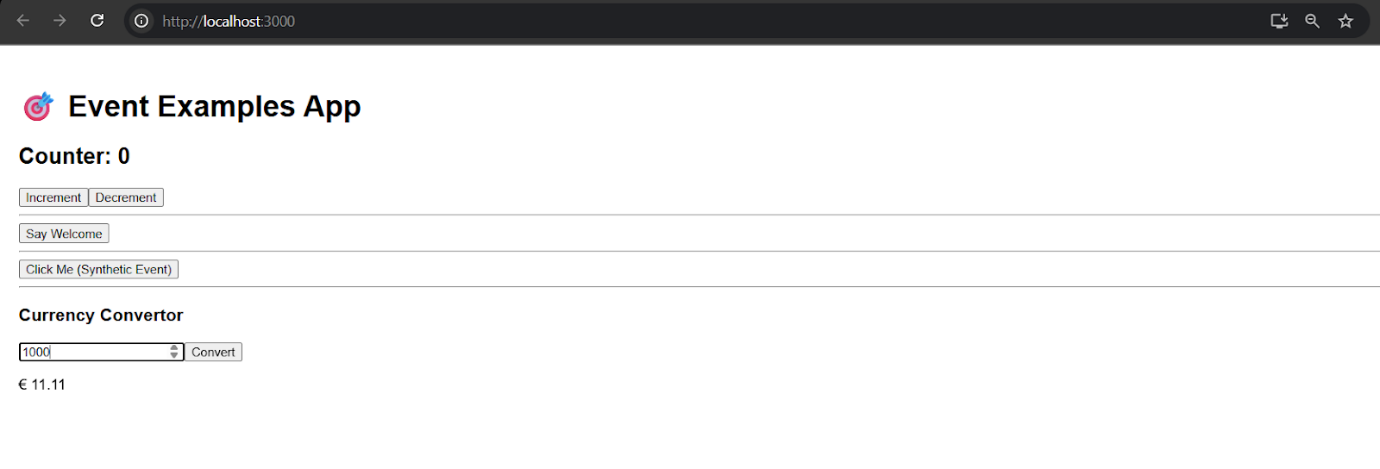
**<CurrencyConvertor />**

**</div>**

**);**

**}**

**export default App;**

****

**12. ReactJS-HOL hands-on:**

**import React from 'react';**

**const GuestPage = () => {**

**return (**

**<div>**

**<h2>Welcome Guest ✈️</h2>**

**<p>You can browse available flight details below.</p>**

**<ul>**

**<li>Flight: Indigo 6E-203 | From: Delhi | To: Mumbai | Time: 08:00 AM</li>**

**<li>Flight: Air India AI-123 | From: Chennai | To: Bangalore | Time: 10:30 AM</li>**

**</ul>**

**</div>**

**);**

**};**

**export default GuestPage;**

**import React from 'react';**

**const UserPage = () => {**

**return (**

**<div>**

**<h2>Welcome Back! 👤</h2>**

**<p>You are now logged in. You can book your flights below.</p>**

**<button>Book Indigo 6E-203</button>**

**<button>Book Air India AI-123</button>**

**</div>**

**);**

**};**

**export default UserPage;**

**import React, { useState } from 'react';**

**import GuestPage from './GuestPage';**

**import UserPage from './UserPage';**

**function App() {**

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

**// Element variable for the page**

**let displayPage;**

**if (isLoggedIn) {**

**displayPage = <UserPage />;**

**} else {**

**displayPage = <GuestPage />;**

**}**

**// Prevent rendering if user is blocked (example)**

**const isBlocked = false;**

**if (isBlocked) return <h3>User access is restricted.</h3>;**

**return (**

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

**<h1>🎟️ Ticket Booking App</h1>**

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

**{isLoggedIn ? (**

**<button onClick={() => setIsLoggedIn(false)}>Logout</button>**

**) : (**

**<button onClick={() => setIsLoggedIn(true)}>Login</button>**

**)}**

**</div>**

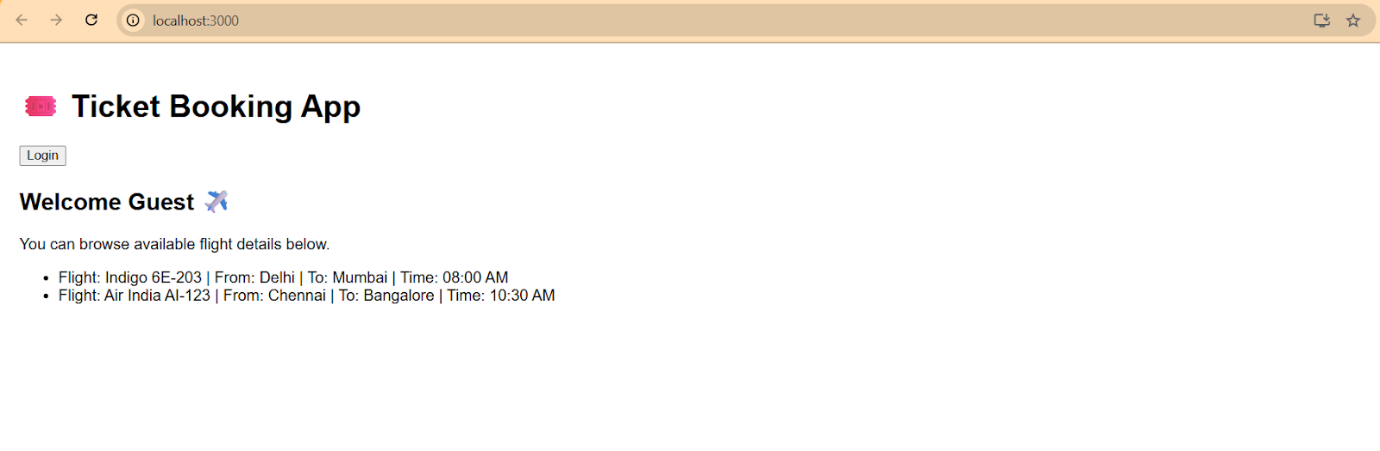
**{displayPage}**

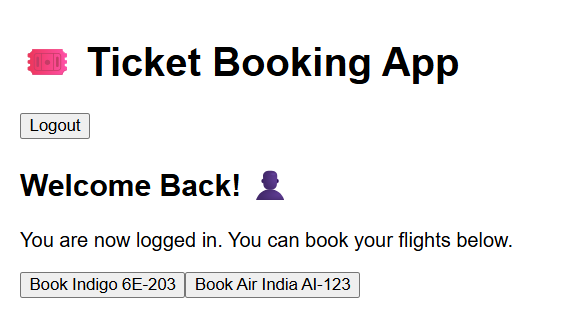
**</div>**

**);**

**}**

**export default App;**

****

****

**13. ReactJS-HOL hands-on:**

**import React from 'react';**

**const BookDetails = ({ books }) => {**

**return (**

**<div>**

**<h3>📚 Book Details</h3>**

**<ul>**

**{books.map((book, index) => (**

**<li key={index}>**

**<strong>{book.title}</strong> by {book.author}**

**</li>**

**))}**

**</ul>**

**</div>**

**);**

**};**

**export default BookDetails;**

**import React from 'react';**

**const BlogDetails = ({ blogs }) => {**

**return (**

**<div>**

**<h3>📝 Blog Details</h3>**

**<ul>**

**{blogs.map((blog) => (**

**<li key={blog.id}>**

**<strong>{blog.title}</strong> - {blog.category}**

**</li>**

**))}**

**</ul>**

**</div>**

**);**

**};**

**export default BlogDetails;**

**import React from 'react';**

**const CourseDetails = ({ courses }) => {**

**return (**

**<div>**

**<h3>🎓 Course Details</h3>**

**<ul>**

**{courses.map((course) => (**

**<li key={course.id}>**

**{course.name} ({course.duration})**

**</li>**

**))}**

**</ul>**

**</div>**

**);**

**};**

**export default CourseDetails;**

**mport React, { useState } from 'react';**

**import BookDetails from './BookDetails';**

**import BlogDetails from './BlogDetails';**

**import CourseDetails from './CourseDetails';**

**function App() {**

**const [selected, setSelected] = useState('books');**

**const books = [**

**{ title: 'The Alchemist', author: 'Paulo Coelho' },**

**{ title: 'Ikigai', author: 'Francesc Miralles' },**

**];**

**const blogs = [**

**{ id: 1, title: 'React 18 Features', category: 'React' },**

**{ id: 2, title: 'Understanding JS Closures', category: 'JavaScript' },**

**];**

**const courses = [**

**{ id: 'c1', name: 'Full Stack Development', duration: '6 Months' },**

**{ id: 'c2', name: 'Data Science', duration: '3 Months' },**

**];**

**// Element variable conditional rendering**

**let displayComponent;**

**if (selected === 'books') {**

**displayComponent = <BookDetails books={books} />;**

**} else if (selected === 'blogs') {**

**displayComponent = <BlogDetails blogs={blogs} />;**

**} else if (selected === 'courses') {**

**displayComponent = <CourseDetails courses={courses} />;**

**} else {**

**displayComponent = <p>Select an option to view details.</p>;**

**}**

**return (**

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

**<h1>🧠 Blogger App</h1>**

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

**<button onClick={() => setSelected('books')}>Book Details</button>**

**<button onClick={() => setSelected('blogs')}>Blog Details</button>**

**<button onClick={() => setSelected('courses')}>Course Details</button>**

**</div>**

**{/\* Using if-else variable \*/}**

**{displayComponent}**

**{/\* Inline ternary rendering \*/}**

**{/\* Optional extra way: \*/}**

**{/\* {selected === 'books' ? <BookDetails books={books} /> : null} \*/}**

**</div>**

**);**

**}**

**export default App;**