

SUPERSET ID - 6364957 (Sachin Ray)

Complete React from Lab-9- Lab-13(Mandatory Handson) Implementation Solutions

Lab 9: ES6 Features - Cricket App

Objective

Create a React Application named "**cricketapp**" demonstrating ES6 features including `map()`, arrow functions, and destructuring.

Step 1: Creatign the React App

```
npx create-react-app cricketapp
cd cricketapp
npm start // running the server
```

Step 2: Creating ListofPlayers Component

File: `src/components/ListofPlayers.js`

```
import React from 'react';

const ListofPlayers = () => {
  // Array with 11 players using ES6 map feature
  const players = [
    { name: "Virat Kohli", score: 85 },
    { name: "Rohit Sharma", score: 92 },
    { name: "KL Rahul", score: 65 },
    { name: "Hardik Pandya", score: 45 },
    { name: "MS Dhoni", score: 78 },
    { name: "Ravindra Jadeja", score: 55 },
    { name: "Jasprit Bumrah", score: 25 },
    { name: "Mohammed Shami", score: 35 },
    { name: "Yuzvendra Chahal", score: 40 },
    { name: "Rishabh Pant", score: 88 },
    { name: "Shikhar Dhawan", score: 75 }
  ];

  // Filter players with scores below 70 using arrow functions
  const lowScorePlayers = players.filter(player => player.score < 70);
```

```

return (
  <div style={{ padding: '20px' }}>
    <h2>List of Players</h2>
    <h3>All Players:</h3>
    <ul>
      {players.map((player, index) => (
        <li key={index}>
          {player.name} - Score: {player.score}
        </li>
      ))}
    </ul>

    <h3>Players with Score Below 70:</h3>
    <ul>
      {lowScorePlayers.map((player, index) => (
        <li key={index} style={{ color: 'red' }}>
          {player.name} - Score: {player.score}
        </li>
      ))}
    </ul>
  </div>
);
};

export default ListofPlayers;

```

Step 3: Creating IndianPlayers Component

File: src/components/IndianPlayers.js

```

import React from 'react';

const IndianPlayers = () => {
  const teamPlayers = [
    "Virat Kohli", "Rohit Sharma", "KL Rahul", "Hardik Pandya",
    "MS Dhoni", "Ravindra Jadeja", "Jasprit Bumrah", "Mohammed Shami"
  ];

  // Destructuring to separate odd and even team players
  const [first, second, third, fourth, fifth, sixth, seventh, eighth] = teamPlayers;
  const oddTeamPlayers = [first, third, fifth, seventh];
  const evenTeamPlayers = [second, fourth, sixth, eighth];

```

```

// T20 and Ranji Trophy players arrays
const T20players = ["Virat Kohli", "Rohit Sharma", "KL Rahul", "Hardik Pandya"];
const RanjiTrophyPlayers = ["Prithvi Shaw", "Mayank Agarwal", "Hanuma Vihari", "Wriddhiman Saha"];

// Merge arrays using ES6 spread operator
const mergedPlayers = [...T20players, ...RanjiTrophyPlayers];

return (
  <div style={{ padding: '20px' }}>
    <h2>Indian Players</h2>
    <h3>Odd Team Players:</h3>
    <ul>
      {oddTeamPlayers.map((player, index) => (
        <li key={index}>{player}</li>
      ))}
    </ul>

    <h3>Even Team Players:</h3>
    <ul>
      {evenTeamPlayers.map((player, index) => (
        <li key={index}>{player}</li>
      ))}
    </ul>

    <h3>Merged T20 and Ranji Trophy Players:</h3>
    <ul>
      {mergedPlayers.map((player, index) => (
        <li key={index}>{player}</li>
      ))}
    </ul>
  </div>
);
};

export default IndianPlayers;

```

Step 4: Updating App.js

File: src/App.js

```

import React, { Component } from 'react';
import ListofPlayers from './components/ListofPlayers';
import IndianPlayers from './components/IndianPlayers';
import './App.css';

```

```
class App extends Component {
  constructor(props) {
    super(props);
    this.state = {
      flag: true
    };
  }

  toggleFlag = () => {
    this.setState({ flag: !this.state.flag });
  };

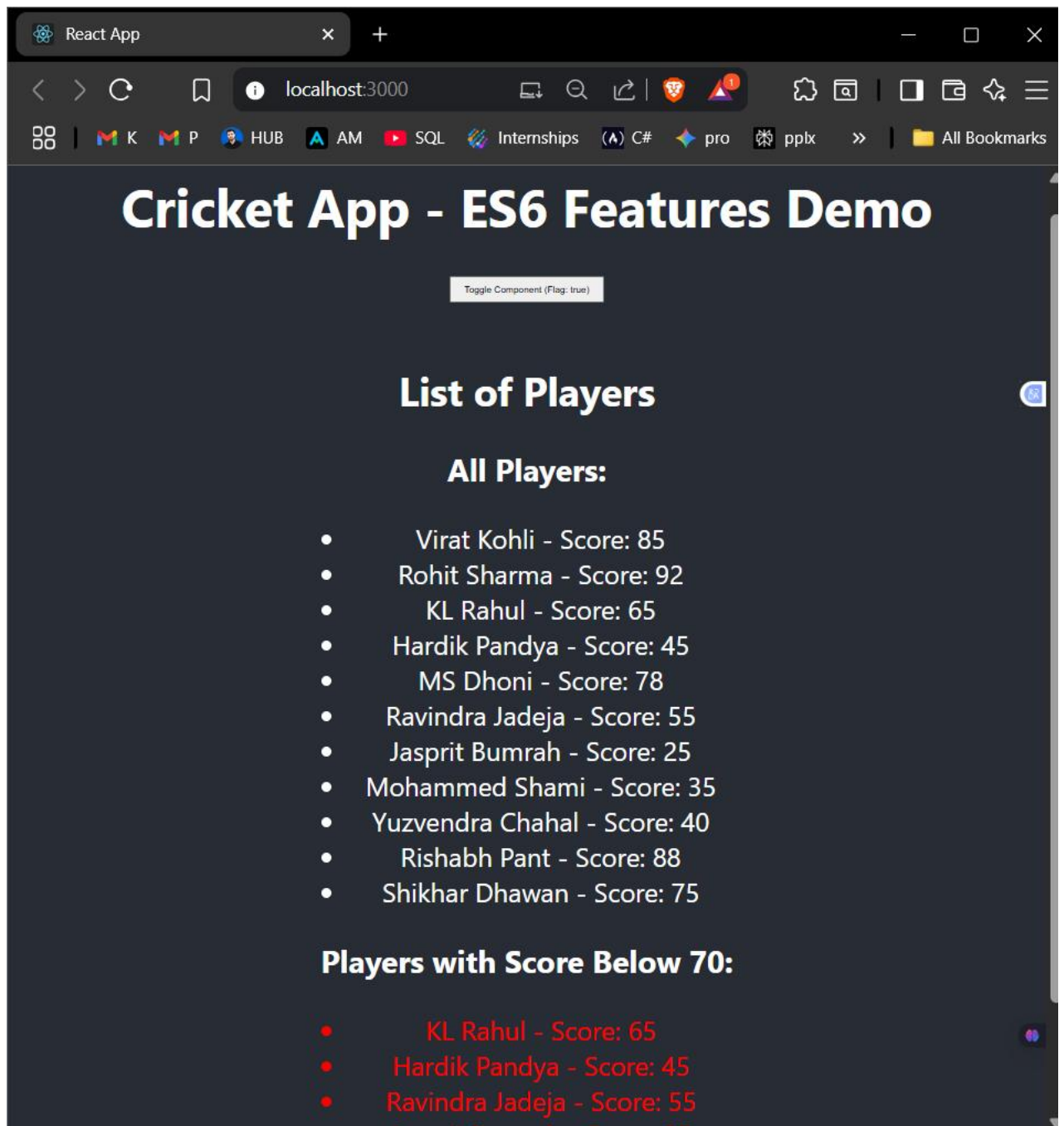
  render() {
    const { flag } = this.state;

    return (
      <div className="App">
        <header className="App-header">
          <h1>Cricket App - ES6 Features Demo</h1>
          <button onClick={this.toggleFlag} style={{ marginBottom: '20px', padding: '10px 20px' }}>
            Toggle Component (Flag: {flag.toString()})
          </button>
          {flag ? <ListofPlayers /> : <IndianPlayers />}
        </header>
      </div>
    );
  }
}

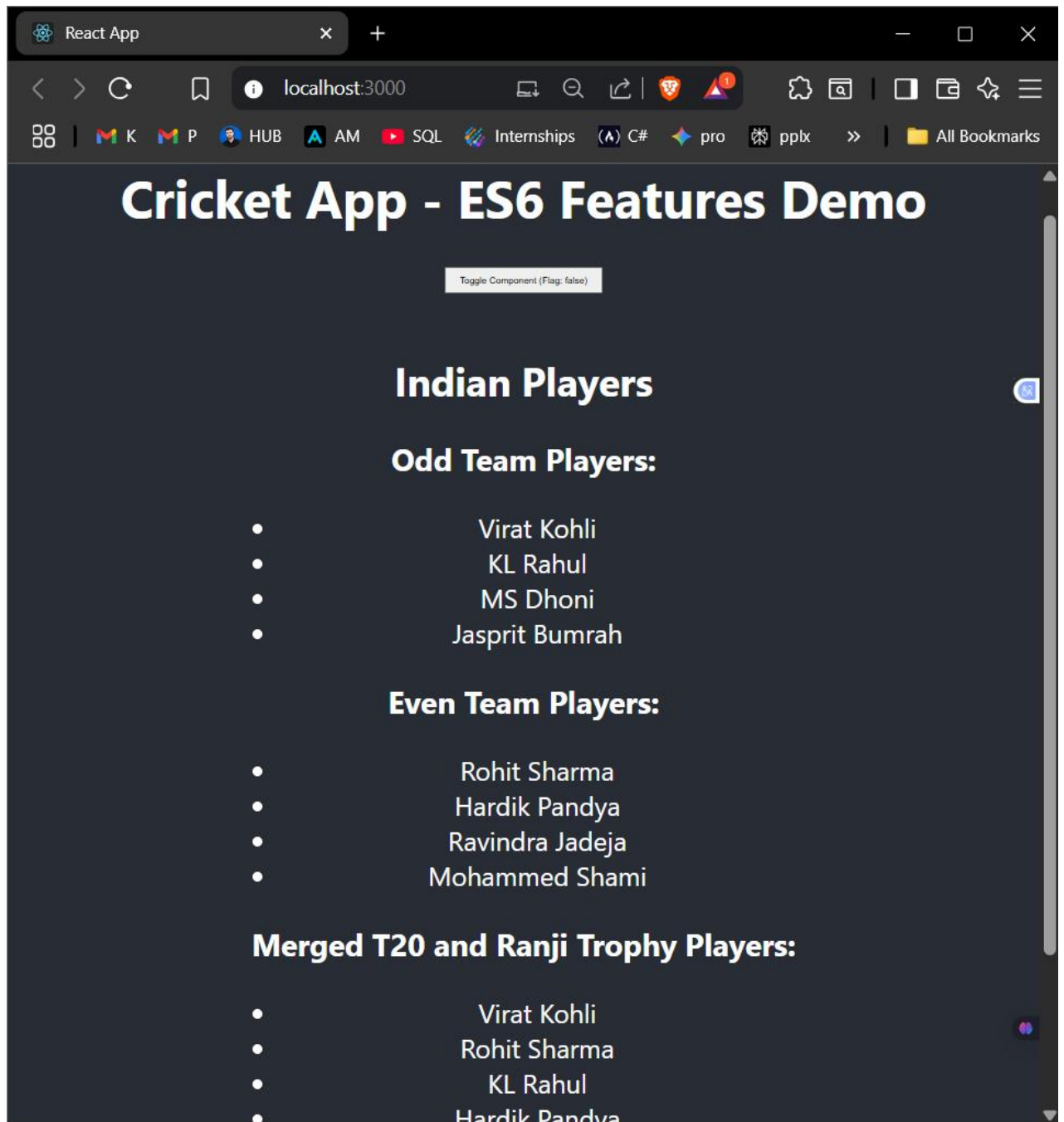
export default App;
```

Output:

- When Flag=true:



- When Flag=false:



Lab 10: JSX and Inline CSS - Office Space Rental App

Objective

Create a React Application named "officespacerentalapp" using JSX syntax and inline CSS.

Step 1: Creating the React App

```
npx create-react-app officespacerentalapp
cd officespacerentalapp
npm start // running the server
```

Step 2: Creating Office Data and Components

File: src/App.js

```
import React from 'react';
import './App.css';

function App() {
  // Office object with details
  const office = {
    name: "Premium Business Center",
    rent: 75000,
    address: "123 Business District, Mumbai"
  };

  // List of office spaces
  const officeSpaces = [
    {
      id: 1,
      name: "Luxury Office Suite A",
      rent: 85000,
      address: "Floor 12, Tower A, BKC Mumbai",
      image: "https://encrypted-tbn0.gstatic.com/images?q=tbn:ANd9GcQQ9-EWJiAJ3TjRachAlGrKNqEosDacJmXhw&s"
    },
    {
      id: 2,
      name: "Compact Business Space",
      rent: 45000,
      address: "Floor 5, Commercial Complex, Pune",
      image: "https://content.jdmagicbox.com/comp/pune/t9/020pxx20.xx20.220125045716.j6t9/catalogue/icc-trade-tower-gokhale-nagar-pune-commercial-buildings-1jzurxtf6.jpg?clr="
    },
    {
      id: 3,
      name: "Executive Office Center",
      rent: 120000,
      address: "Floor 20, IT Park, Bangalore",
      image: "https://c.ndtvmg.com/2025-02/9dddpsq_google-bengaluru-office-ananta_625x300_20_February_25.jpeg"
```

```
},  
{  
  id: 4,  
  name: "Startup Hub Workspace",  
  rent: 35000,  
  address: "Floor 3, Tech Center, Hyderabad",  
  image: "https://media.telanganatoday.com/wp-content/uploads/2022/06/T-Hub-3.jpg"  
}  
];
```

// Inline CSS styles

```
const containerStyle = {  
  padding: '20px',  
  fontFamily: 'Arial, sans-serif'  
};
```

```
const headerStyle = {  
  textAlign: 'center',  
  color: '#333',  
  marginBottom: '30px',  
  fontSize: '2.5em'  
};
```

```
const officeCardStyle = {  
  border: '1px solid #ddd',  
  borderRadius: '8px',  
  margin: '20px 0',  
  padding: '20px',  
  boxShadow: '0 2px 4px rgba(0,0,0,0.1)'  
};
```

```
const imageStyle = {  
  width: '100%',  
  maxWidth: '300px',  
  height: '200px',  
  objectFit: 'cover',  
  borderRadius: '5px',  
  marginBottom: '15px'  
};
```

```
const nameStyle = {  
  fontSize: '1.5em',  
  fontWeight: 'bold',  
  marginBottom: '10px',  
  color: '#333'
```



```

});

const addressStyle = {
  color: '#666',
  marginBottom: '10px',
  fontSize: '1.1em'
};

// Function to get rent color based on value
const getRentStyle = (rent) => ({
  fontSize: '1.3em',
  fontWeight: 'bold',
  color: rent < 60000 ? 'red' : 'green'
});

return (
  <div style={containerStyle}>
    <h1 style={headerStyle}>Office Space Rental Portal</h1>

    <div style={officeCardStyle}>
      <h2>Featured Office</h2>
      <div style={nameStyle}>{office.name}</div>
      <div style={addressStyle}>{office.address}</div>
      <div style={getRentStyle(office.rent)}>
        Monthly Rent: ₹ {office.rent.toLocaleString()}
      </div>
    </div>

    <h2 style={{ textAlign: 'center', margin: '40px 0 20px 0' }}>
      Available Office Spaces
    </h2>

    {officeSpaces.map(space => (
      <div key={space.id} style={officeCardStyle}>
        <img
          src={space.image}
          alt={space.name}
          style={imageStyle}
        />
        <div style={nameStyle}>{space.name}</div>
        <div style={addressStyle}>{space.address}</div>
        <div style={getRentStyle(space.rent)}>
          Monthly Rent: ₹ {space.rent.toLocaleString()}
        </div>
      </div>
    ))}
  </div>
);

```

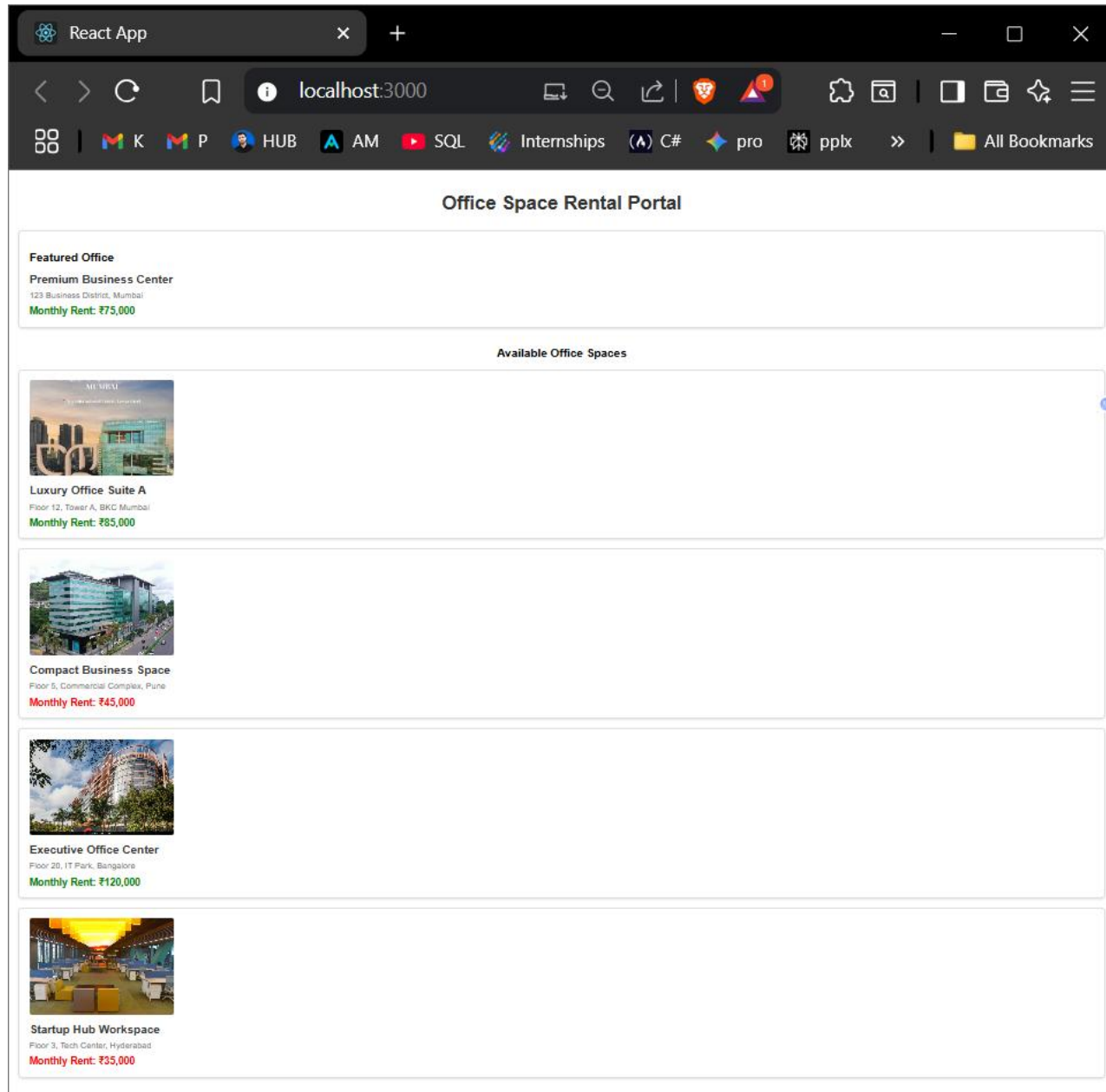
```

    )})
  </div>
);
}

export default App;

```

Output:



Note: Rent color: **Red** if below ₹60,000, **Green** if above ₹60,000.

Lab 11: Event Handling - Event Examples App

Objective

Create a React Application "**eventexamplesapp**" to handle various events and demonstrate synthetic events.

Step 1: Creating the React App

```
npx create-react-app eventexamplesapp
cd eventexamplesapp
npm start //Running the server
```

Step 2: Creating Components

File: src/components/Counter.js

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

class Counter extends Component {
  constructor(props) {
    super(props);
    this.state = {
      count: 0,
      message: ""
    };
  }

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

  sayHello = () => {
    this.setState({ message: 'Hello! Counter was incremented!' });
  };

  handleIncrease = () => {
    this.incrementCounter();
    this.sayHello();
  };
}
```

```

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

sayWelcome = (welcomeMsg) => {
  alert(`Welcome! ${welcomeMsg}`);
};

handleOnPress = (e) => {
  console.log('Synthetic Event:', e);
  alert('I was clicked');
};

render() {
  return (
    <div style={{ padding: '20px', border: '1px solid #ccc', margin: '20px' }}>
      <h2>Counter Component</h2>
      <h3>Count: {this.state.count}</h3>
      <button onClick={this.handleIncrease}
        style={{ margin: '5px', padding: '10px 15px' }}>
        Increment (Multiple Methods)
      </button>
      <button onClick={this.decrementCounter}
        style={{ margin: '5px', padding: '10px 15px' }}>
        Decrement
      </button>
      <button onClick={() => this.sayWelcome('to our application!')}
        style={{ margin: '5px', padding: '10px 15px' }}>
        Say Welcome
      </button>
      <button onClick={this.handleOnPress}
        style={{ margin: '5px', padding: '10px 15px' }}>
        OnPress (Synthetic Event)
      </button>
      {this.state.message && (
        <p style={{ color: 'green', marginTop: '10px' }}>
          {this.state.message}
        </p>
      )}
    </div>
  );
}

```

```
export default Counter;
```

File: src/components/CurrencyConverter.js

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

class CurrencyConverter extends Component {
  constructor(props) {
    super(props);
    this.state = {
      rupees: "",
      euros: 0,
      conversionRate: 0.011 // 1 INR = 0.011 EUR
    };
  }

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

  handleSubmit = (e) => {
    e.preventDefault();
    const { rupees, conversionRate } = this.state;
    const convertedEuros = parseFloat(rupees) * conversionRate;
    this.setState({ euros: convertedEuros.toFixed(2) });
  };

  render() {
    return (
      <div style={{ padding: '20px', border: '1px solid #ccc', margin: '20px' }}>
        <h2>Currency Converter (INR to EUR)</h2>
        <form onSubmit={this.handleSubmit}>
          <div style={{ marginBottom: '10px' }}>
            <label>Enter amount in Indian Rupees: </label>
            <input
              type="number"
              value={this.state.rupees}
              onChange={this.handleInputChange}
              placeholder="Enter rupees"
              style={{ padding: '5px', marginLeft: '10px' }}
            />
          </div>
        </form>
      </div>
    );
  }
}
```

```

    </div>
    <button
      type="submit"
      style={{
        padding: '10px 20px',
        backgroundColor: '#007bff',
        color: 'white',
        border: 'none'
      }}>
      Convert to EUR
    </button>
  </form>
  {this.state.euros > 0 && (
    <div style={{ marginTop: '20px', padding: '10px', backgroundColor: '#f8f9fa' }}>
      <h3>Conversion Result:</h3>
      <p>₹{this.state.rupees} = €{this.state.euros}</p>
    </div>
  )}
</div>
);
}
}

export default CurrencyConverter;

```

Step 3: Updatign App.js

File: src/App.js

```

import React from 'react';
import Counter from './components/Counter';
import CurrencyConverter from './components/CurrencyConverter';
import './App.css';

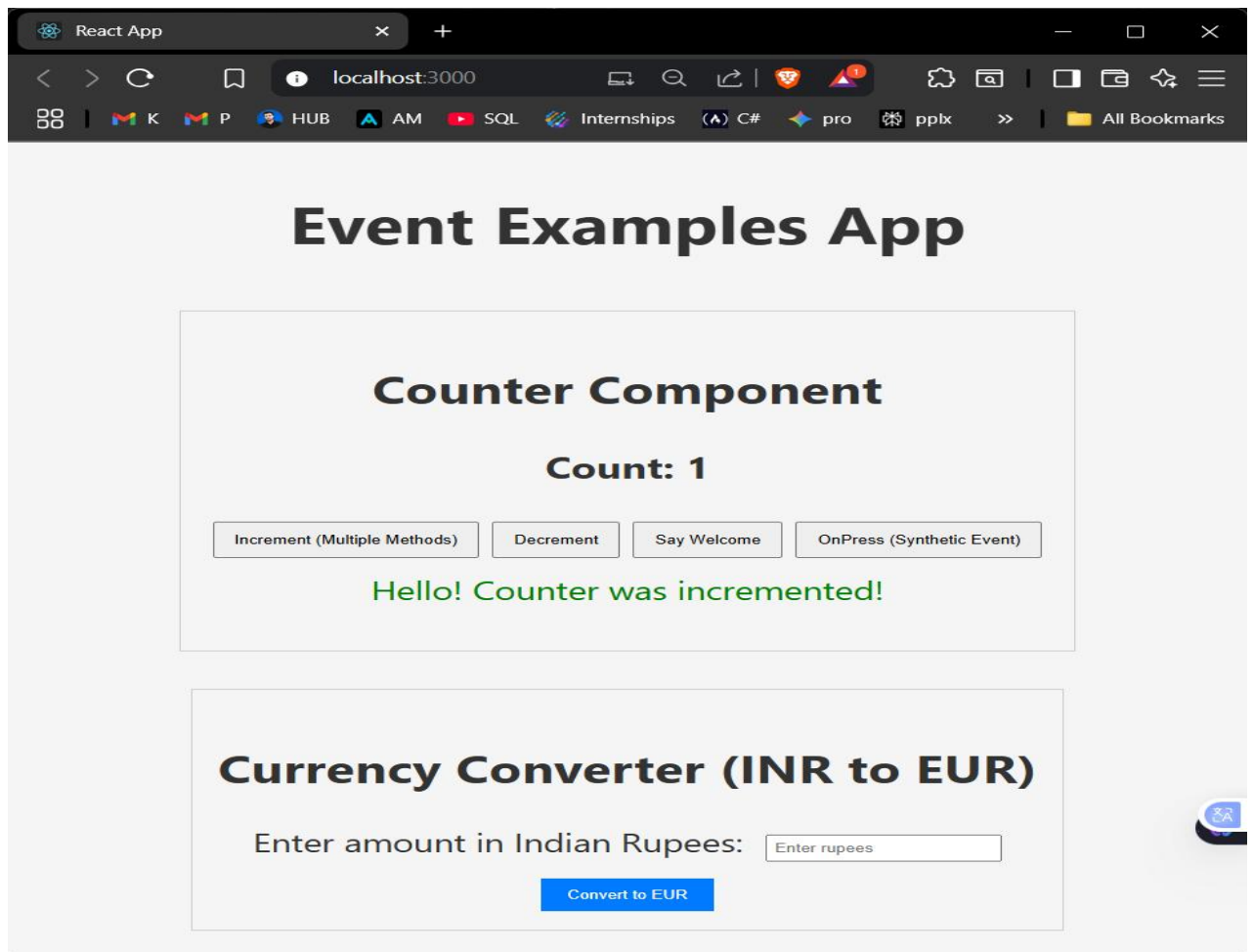
function App() {
  return (
    <div className="App">
      <header className="App-header" style={{ backgroundColor: '#f5f5f5', color: '#333' }}>
        <h1>Event Examples App</h1>
        <Counter />
        <CurrencyConverter />
      </header>
    </div>
  );
}

```

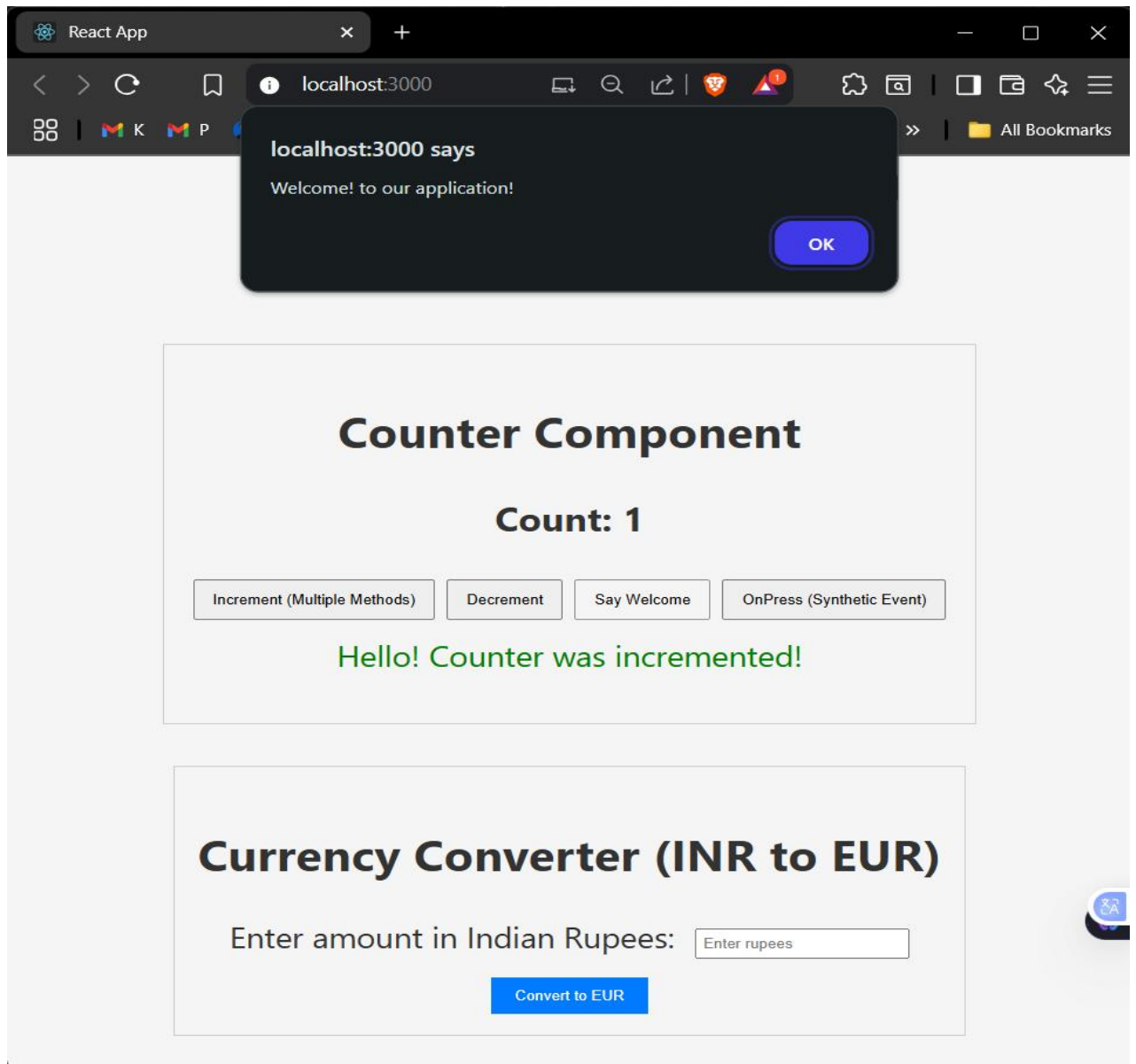
```
}  
  
export default App;
```

Output:

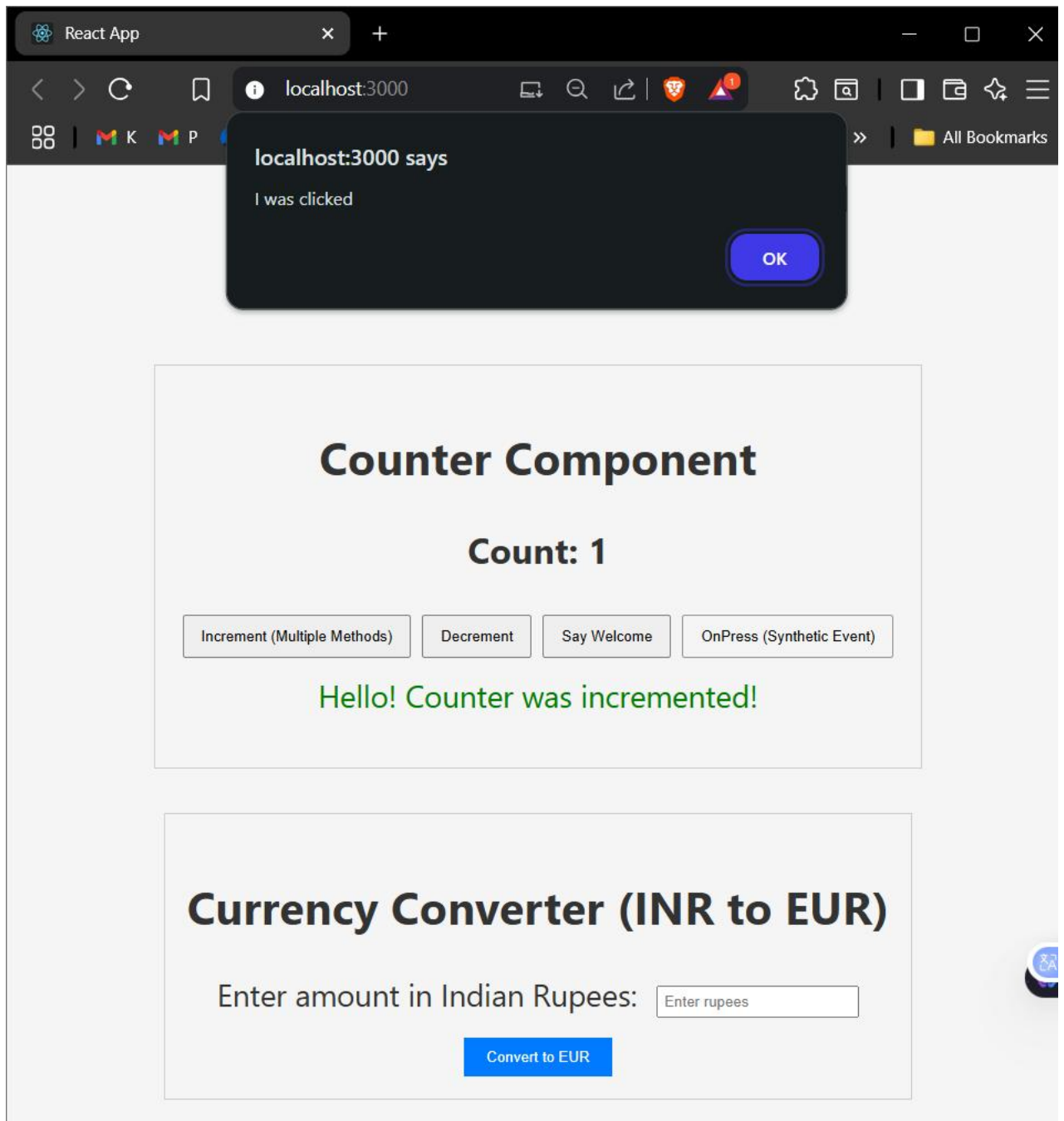
- Counter with increment/decrement functionality



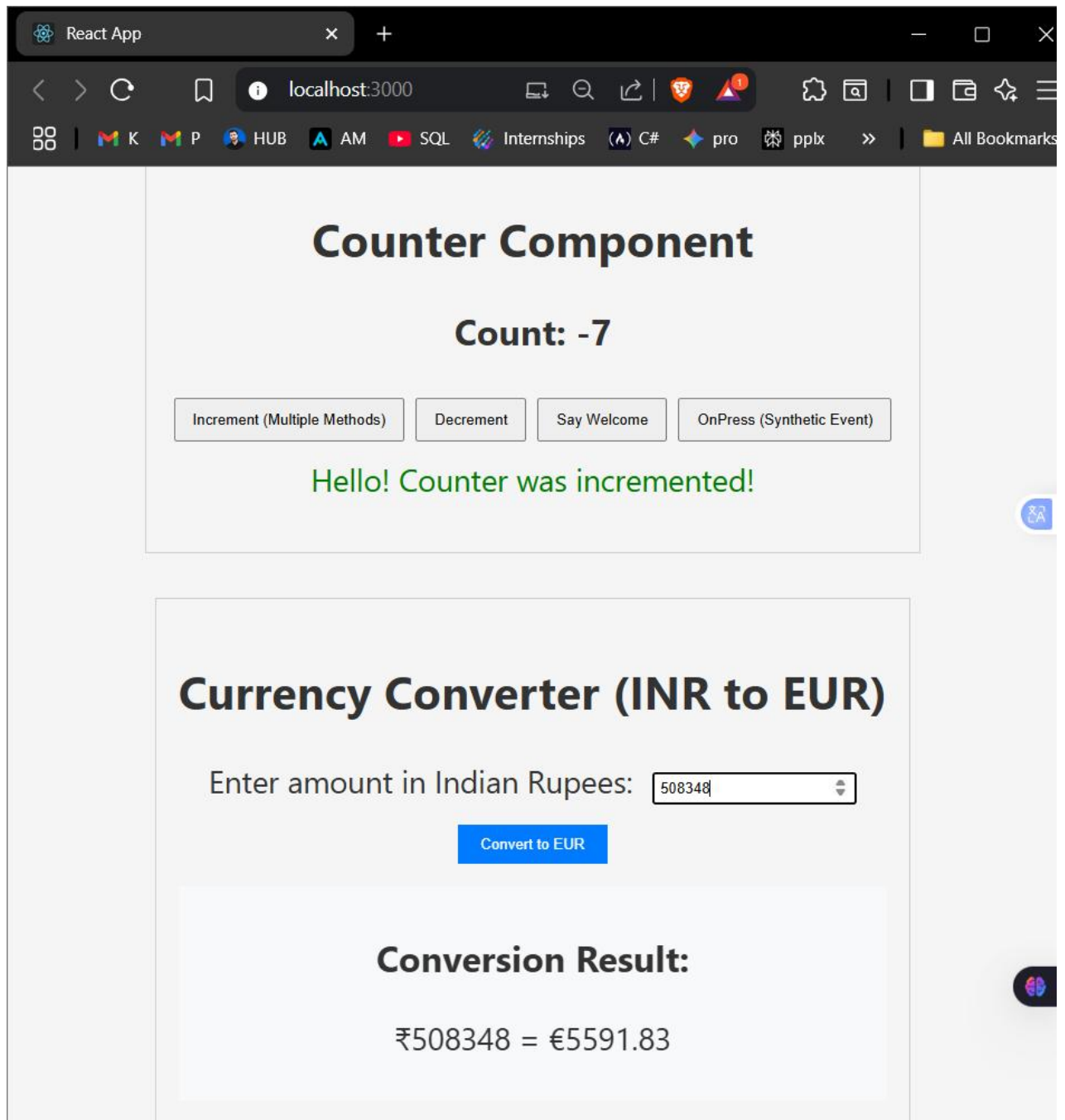
- Welcome button with alert



- Synthetic event demonstration



- Currency converter with form handling



Lab 12: Conditional Rendering - Ticket Booking App

Objective

Create a React Application **"ticketbookingapp"** demonstrating conditional rendering for guest and logged-in users.

Step 1: Creating the React App

```
npx create-react-app ticketbookingapp
cd ticketbookingapp
npm start //starting the server
```

Step 2: Creating Components

File: src/components/GuestPage.js

```
import React from 'react';

const GuestPage = ({ onLogin }) => {
  const flights = [
    { id: 1, from: 'Mumbai', to: 'Delhi', price: '₹5,500', time: '2h 15m' },
    { id: 2, from: 'Bangalore', to: 'Chennai', price: '₹3,200', time: '1h 30m' },
    { id: 3, from: 'Pune', to: 'Hyderabad', price: '₹4,100', time: '1h 45m' },
    { id: 4, from: 'Kolkata', to: 'Mumbai', price: '₹6,200', time: '2h 30m' }
  ];

  const cardStyle = {
    border: '1px solid #ddd',
    borderRadius: '8px',
    padding: '15px',
    margin: '10px 0',
    backgroundColor: '#f9f9f9'
  };

  return (
    <div style={{ padding: '20px' }}>
      <h2>Welcome Guest! Browse Available Flights</h2>
      <p style={{ color: '#666', marginBottom: '20px' }}>
        Please login to book tickets
      </p>
      <button
        onClick={onLogin}

```

```

    style={{
      padding: '10px 20px',
      backgroundColor: '#007bff',
      color: 'white',
      border: 'none',
      borderRadius: '5px',
      marginBottom: '20px'
    }}>
    Login
  </button>
</div>
<div>
  <h3>Available Flights:</h3>
  {flights.map(flight => (
    <div key={flight.id} style={cardStyle}>
      <h4>{flight.from} → {flight.to}</h4>
      <p>Price: {flight.price}</p>
      <p>Duration: {flight.time}</p>
      <button disabled style={{ padding: '5px 10px', backgroundColor: '#ccc' }}>
        Login to Book
      </button>
    </div>
  ))}
</div>
</div>
);
};

export default GuestPage;

```

File: src/components/UserPage.js

```

import React, { Component } from 'react';

class UserPage extends Component {
  constructor(props) {
    super(props);
    this.state = {
      bookedTickets: []
    };
  }

  bookTicket = (flight) => {

```

```
const booking = {
  ...flight,
  bookingId: Date.now(),
  bookingTime: new Date().toLocaleString()
};

this.setState({
  bookedTickets: [...this.state.bookedTickets, booking]
});

alert(`Ticket booked successfully! Booking ID: ${booking.bookingId}`);
};
```

```
render() {
  const { onLogout } = this.props;
  const flights = [
    { id: 1, from: 'Mumbai', to: 'Delhi', price: '₹5,500', time: '2h 15m' },
    { id: 2, from: 'Bangalore', to: 'Chennai', price: '₹3,200', time: '1h 30m' },
    { id: 3, from: 'Pune', to: 'Hyderabad', price: '₹4,100', time: '1h 45m' },
    { id: 4, from: 'Kolkata', to: 'Mumbai', price: '₹6,200', time: '2h 30m' }
  ];
```

```
const cardStyle = {
  border: '1px solid #ddd',
  borderRadius: '8px',
  padding: '15px',
  margin: '10px 0',
  backgroundColor: '#f0f8ff'
};
```

```
return (
  <div style={{ padding: '20px' }}>
    <h2>Welcome User! Book Your Flights</h2>
    <button
      onClick={onLogout}
      style={{
        padding: '10px 20px',
        backgroundColor: '#dc3545',
        color: 'white',
        border: 'none',
        borderRadius: '5px',
        marginBottom: '20px'
      }}>
      Logout
    </button>
    <div>
      <h3>Available Flights:</h3>
```

```

    {flights.map(flight => (
      <div key={flight.id} style={cardStyle}>
        <h4>{flight.from} → {flight.to}</h4>
        <p>Price: {flight.price}</p>
        <p>Duration: {flight.time}</p>
        <button
          onClick={() => this.bookTicket(flight)}
          style={{
            padding: '5px 10px',
            backgroundColor: '#28a745',
            color: 'white',
            border: 'none',
            borderRadius: '3px'
          }}>
          Book Now
        </button>
      </div>
    ))}
  </div>
  {this.state.bookedTickets.length > 0 && (
    <div style={{ marginTop: '30px' }}>
      <h3>Your Bookings:</h3>
      {this.state.bookedTickets.map(ticket => (
        <div key={ticket.bookingId} style={{ ...cardStyle, backgroundColor: '#d4edda' }}>
          <h4>Booking ID: {ticket.bookingId}</h4>
          <p>{ticket.from} → {ticket.to}</p>
          <p>Price: {ticket.price}</p>
          <p>Booked on: {ticket.bookingTime}</p>
        </div>
      ))}
    </div>
  )}
</div>
);
}
}

export default UserPage;

```

Step 3: Updating App.js

File: src/App.js

```
import React, { Component } from 'react';
import GuestPage from './components/GuestPage';
import UserPage from './components/UserPage';
import './App.css';

class App extends Component {
  constructor(props) {
    super(props);
    this.state = {
      isLoggedIn: false
    };
  }

  handleLogin = () => {
    this.setState({ isLoggedIn: true });
  };

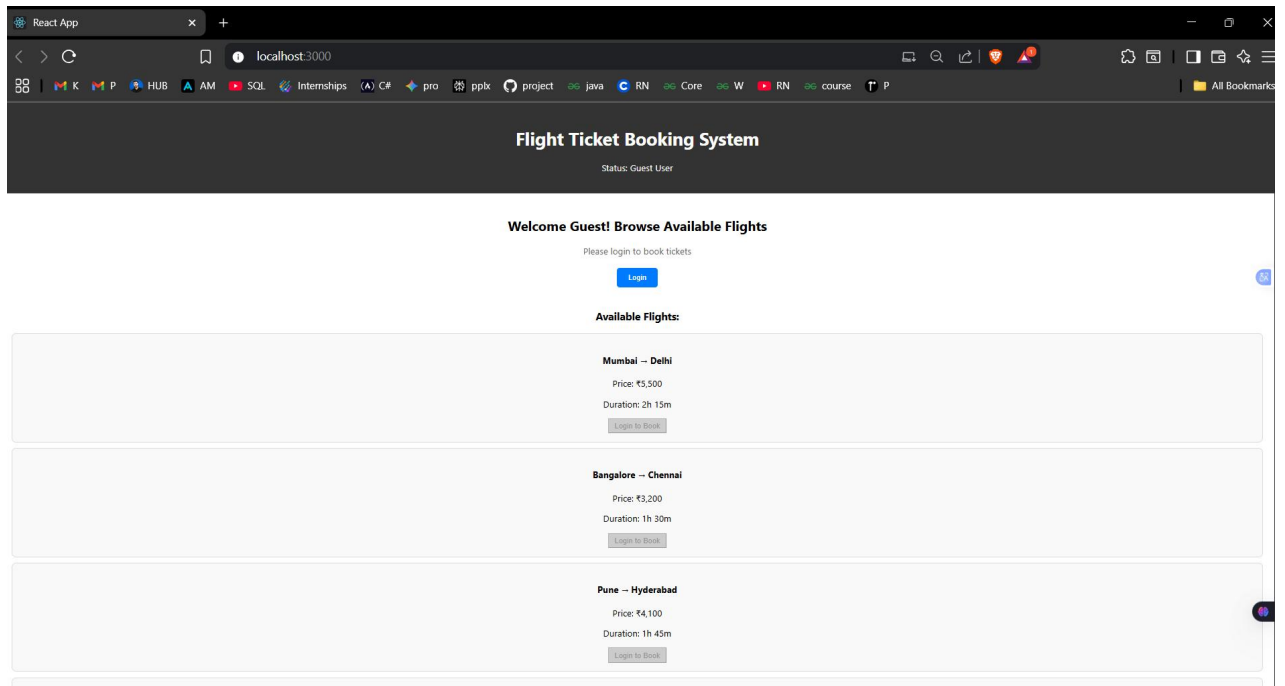
  handleLogout = () => {
    this.setState({ isLoggedIn: false });
  };

  render() {
    const { isLoggedIn } = this.state;
    return (
      <div className="App">
        <header style={{ backgroundColor: '#333', color: 'white', padding: '20px', textAlign: 'center' }}>
          <h1>Flight Ticket Booking System</h1>
          <p>Status: {isLoggedIn ? 'Logged In' : 'Guest User'}</p>
        </header>
        <main>
          {isLoggedIn ? (
            <UserPage onLogout={this.handleLogout} />
          ) : (
            <GuestPage onLogin={this.handleLogin} />
          )}
        </main>
      </div>
    );
  }
}

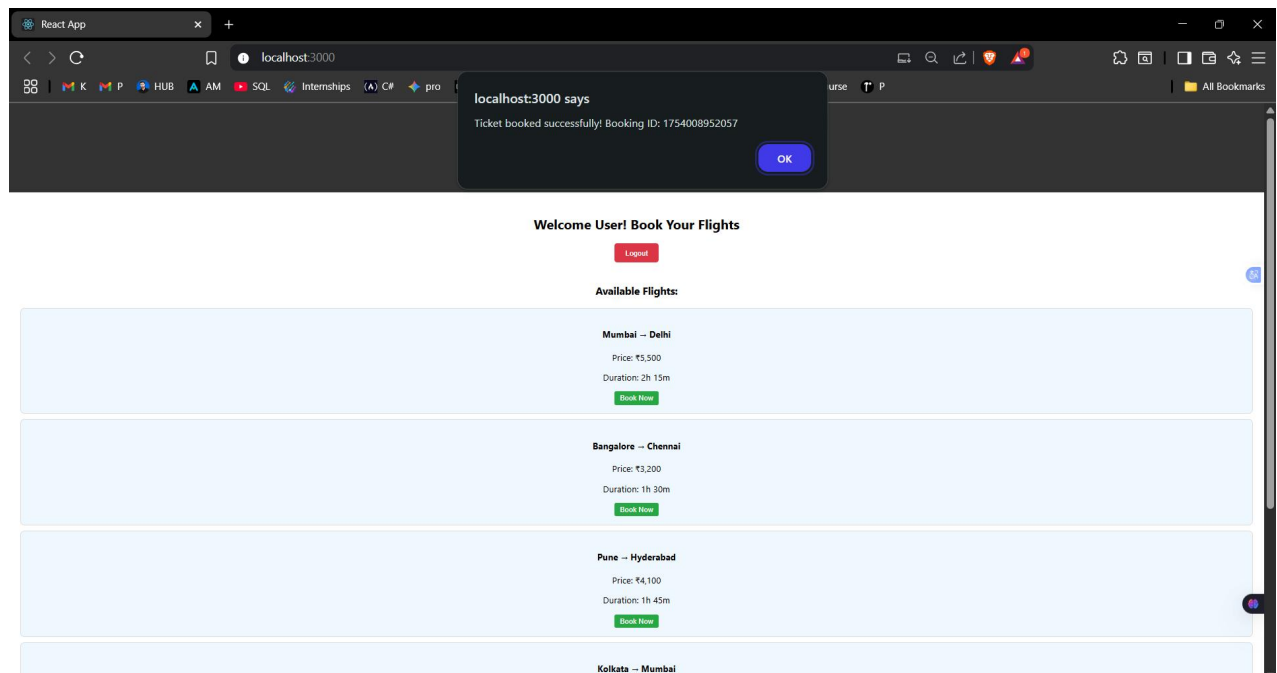
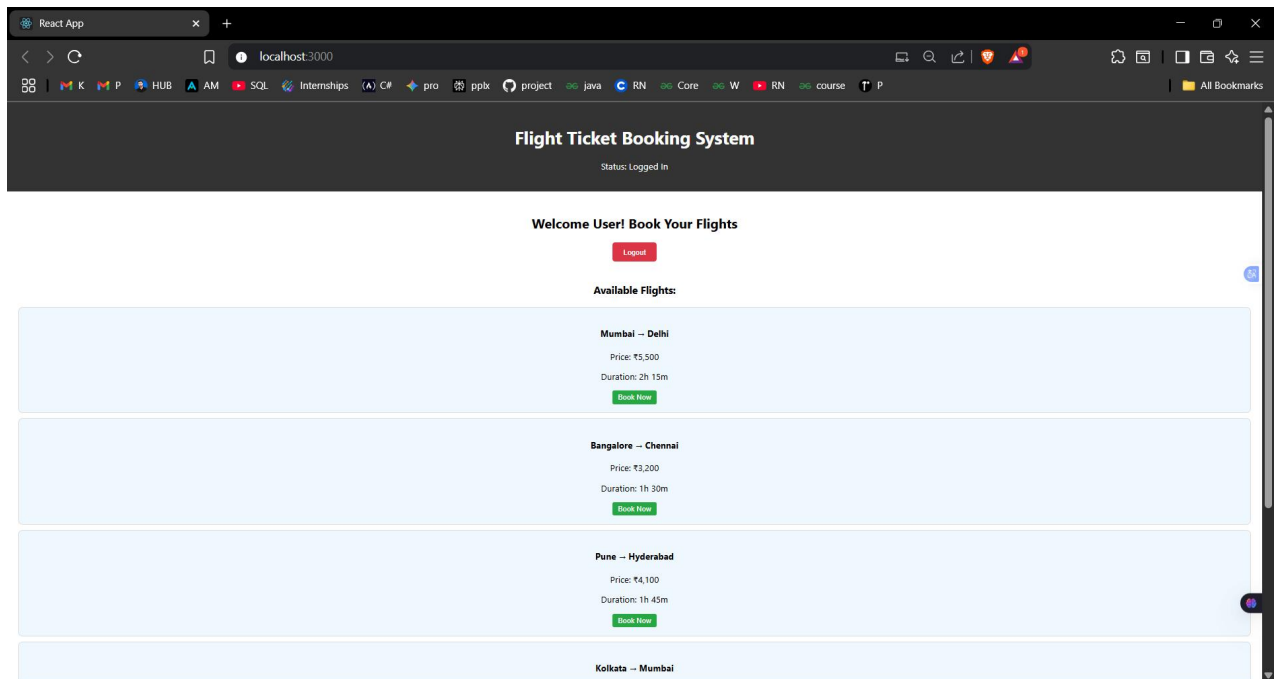
export default App;
```

Outputs:

- **Guest view:** Can browse flights but cannot book.



- **User view:** Can book tickets and see booking history.



Lab 13: Multiple Conditional Rendering - Blogger App

Objective

Create a React App "**bloggerapp**" with 3 components demonstrating various conditional rendering techniques.

Step 1: Creating the React App

```
npx create-react-app bloggerapp
cd bloggerapp
npm start //starting the server
```

Step 2: Creating Components

File: src/components/BookDetails.js

```
import React from 'react';

const BookDetails = () => {
  const books = [
    { id: 1, title: 'React in Action', author: 'Mark Thomas', rating: 4.5 },
    { id: 2, title: 'Learning React', author: 'Alex Banks', rating: 4.8 },
    { id: 3, title: 'React Cookbook', author: 'David Griffiths', rating: 4.2 }
  ];

  return (
    <div style={{ padding: '20px', border: '2px solid #007bff', margin: '10px' }}>
      <h2 style={{ color: '#007bff' }}> Book Details</h2>
      {books.map(book => (
        <div key={book.id} style={{
          backgroundColor: '#f8f9fa',
          padding: '15px',
          margin: '10px 0',
          borderRadius: '5px'
        }}>
          <h3>{book.title}</h3>
          <p><strong>Author:</strong> {book.author}</p>
          <p><strong>Rating:</strong> {book.rating}/5 ★ </p>
        </div>
      ))}
    </div>
  );
};

export default BookDetails;
```

File: src/components/BlogDetails.js

```
import React from 'react';

const BlogDetails = () => {
  const blogs = [
    {
      id: 1,
      title: '10 React Best Practices',
      author: 'John Doe',
      date: '2024-01-15',
      excerpt: 'Learn the best practices for writing clean React code...'
    },
    {
      id: 2,
      title: 'Understanding React Hooks',
      author: 'Jane Smith',
      date: '2024-01-20',
      excerpt: 'A comprehensive guide to React Hooks and their usage...'
    },
    {
      id: 3,
      title: 'State Management in React',
      author: 'Mike Johnson',
      date: '2024-01-25',
      excerpt: 'Exploring different state management solutions...'
    }
  ];

  return (
    <div style={{ padding: '20px', border: '2px solid #28a745', margin: '10px' }}>
      <h2 style={{ color: '#28a745' }}> Blog Details</h2>
      {blogs.map(blog => (
        <div key={blog.id} style={{
          backgroundColor: '#f8fff8',
          padding: '15px',
          margin: '10px 0',
          borderRadius: '5px'
        }}>
          <h3>{blog.title}</h3>
          <p><strong>Author:</strong> {blog.author}</p>
          <p><strong>Date:</strong> {blog.date}</p>
          <p><em>{blog.excerpt}</em></p>
        </div>
      ))}
    </div>
  );
};
```

```
};

export default BlogDetails;
```

File: src/components/CourseDetails.js

```
import React from 'react';

const CourseDetails = () => {
  const courses = [
    { id: 1, name: 'React Fundamentals', duration: '4 weeks', level: 'Beginner', price: '$99' },
    { id: 2, name: 'Advanced React Patterns', duration: '6 weeks', level: 'Advanced', price: '$199' },
    { id: 3, name: 'React with TypeScript', duration: '5 weeks', level: 'Intermediate', price: '$149' }
  ];

  return (
    <div style={{ padding: '20px', border: '2px solid #dc3545', margin: '10px' }}>
      <h2 style={{ color: '#dc3545' }}> Course Details</h2>
      {courses.map(course => (
        <div key={course.id} style={{
          backgroundColor: '#fff8f8',
          padding: '15px',
          margin: '10px 0',
          borderRadius: '5px'
        }}>
          <h3>{course.name}</h3>
          <p><strong>Duration:</strong> {course.duration}</p>
          <p><strong>Level:</strong> {course.level}</p>
          <p><strong>Price:</strong> {course.price}</p>
        </div>
      ))}
    </div>
  );
};

export default CourseDetails;
```

Step 3: Updating App.js with Multiple Conditional Rendering Techniques

File: src/App.js

```
import React, { Component } from 'react';
import BookDetails from './components/BookDetails';
```

```

import BlogDetails from './components/BlogDetails';
import CourseDetails from './components/CourseDetails';
import './App.css';

class App extends Component {
  constructor(props) {
    super(props);
    this.state = {
      selectedComponent: 'book', // 'book', 'blog', 'course'
      showComponents: true,
      userRole: 'admin' // 'admin', 'user', 'guest'
    };
  }

  // Method 1: If-Else Conditional Rendering
  renderWithIfElse = () => {
    if (this.state.selectedComponent === 'book') {
      return <BookDetails />;
    } else if (this.state.selectedComponent === 'blog') {
      return <BlogDetails />;
    } else {
      return <CourseDetails />;
    }
  };

  // Method 2: Ternary Operator
  renderWithTernary = () => {
    return this.state.selectedComponent === 'book' ?
      <BookDetails /> :
      this.state.selectedComponent === 'blog' ?
        <BlogDetails /> :
        <CourseDetails />;
  };

  // Method 3: Logical AND Operator
  renderWithLogicalAnd = () => {
    return (
      <
        {this.state.selectedComponent === 'book' && <BookDetails />}
        {this.state.selectedComponent === 'blog' && <BlogDetails />}
        {this.state.selectedComponent === 'course' && <CourseDetails />}
      </>
    );
  };
};

```

```

// Method 4: Switch Case
renderWithSwitch = () => {
  switch (this.state.selectedComponent) {
    case 'book':
      return <BookDetails />;
    case 'blog':
      return <BlogDetails />;
    case 'course':
      return <CourseDetails />;
    default:
      return <BookDetails />;
  }
};

// Method 5: Object Map
renderWithObjectMap = () => {
  const componentMap = {
    book: <BookDetails />,
    blog: <BlogDetails />,
    course: <CourseDetails />
  };
  return componentMap[this.state.selectedComponent] || <BookDetails />;
};

// Method 6: Element Variables
renderWithElementVariable = () => {
  let component;
  if (this.state.selectedComponent === 'book') {
    component = <BookDetails />;
  } else if (this.state.selectedComponent === 'blog') {
    component = <BlogDetails />;
  } else {
    component = <CourseDetails />;
  }
  return component;
};

handleComponentChange = (componentType) => {
  this.setState({ selectedComponent: componentType });
};

toggleComponents = () => {
  this.setState({ showComponents: !this.state.showComponents });
};

```

```

render() {
  const buttonStyle = {
    margin: '5px',
    padding: '10px 15px',
    border: 'none',
    borderRadius: '5px',
    cursor: 'pointer',
    fontWeight: 'bold'
  };

  const activeButtonStyle = {
    ...buttonStyle,
    backgroundColor: '#007bff',
    color: 'white'
  };

  const inactiveButtonStyle = {
    ...buttonStyle,
    backgroundColor: '#f8f9fa',
    color: '#333'
  };

  return (
    <div className="App">
      <header style={{ backgroundColor: '#333', color: 'white', padding: '20px', textAlign: 'center' }}>
        <h1>Blogger App - Conditional Rendering Demo</h1>
        <p>Demonstrating Multiple Ways of Conditional Rendering</p>
      </header>
      <div style={{ padding: '20px' }}>
        <div style={{ marginBottom: '20px', textAlign: 'center' }}>
          <h3>Select Component to Display:</h3>
          <button
            style={this.state.selectedComponent === 'book' ? activeButtonStyle : inactiveButtonStyle}
            onClick={() => this.handleComponentChange('book')}
          >
            Books
          </button>
          <button
            style={this.state.selectedComponent === 'blog' ? activeButtonStyle : inactiveButtonStyle}
            onClick={() => this.handleComponentChange('blog')}
          >
            Blogs
          </button>
          <button
            style={this.state.selectedComponent === 'course' ? activeButtonStyle : inactiveButtonStyle}

```



```

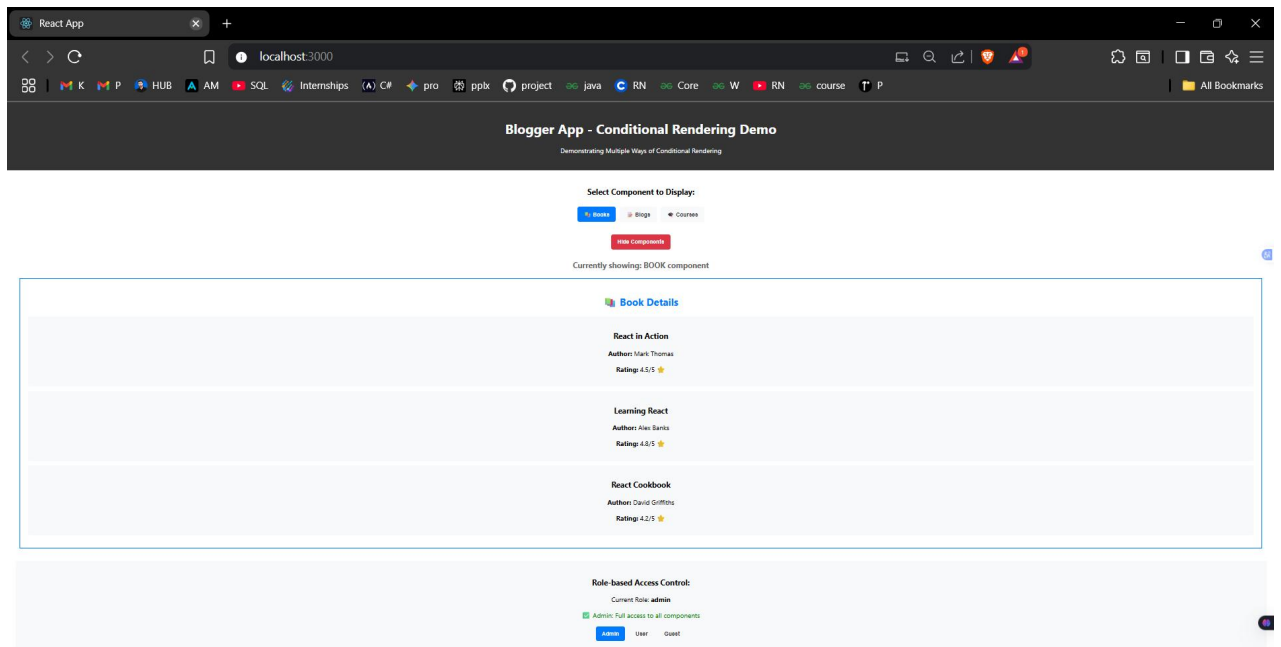
    })
    {this.state.userRole === 'guest' && (
      <div style={{ color: 'red' }}>
        ✖ Guest: Please login to access content
      </div>
    )}
    <div style={{ marginTop: '10px' }}>
      <button
        onClick={() => this.setState({ userRole: 'admin' })}
        style={this.state.userRole === 'admin' ? activeButtonStyle : inactiveButtonStyle}
      >
        Admin
      </button>
      <button
        onClick={() => this.setState({ userRole: 'user' })}
        style={this.state.userRole === 'user' ? activeButtonStyle : inactiveButtonStyle}
      >
        User
      </button>
      <button
        onClick={() => this.setState({ userRole: 'guest' })}
        style={this.state.userRole === 'guest' ? activeButtonStyle : inactiveButtonStyle}
      >
        Guest
      </button>
    </div>
  </div>
</div>
</div>
);
}
}

```

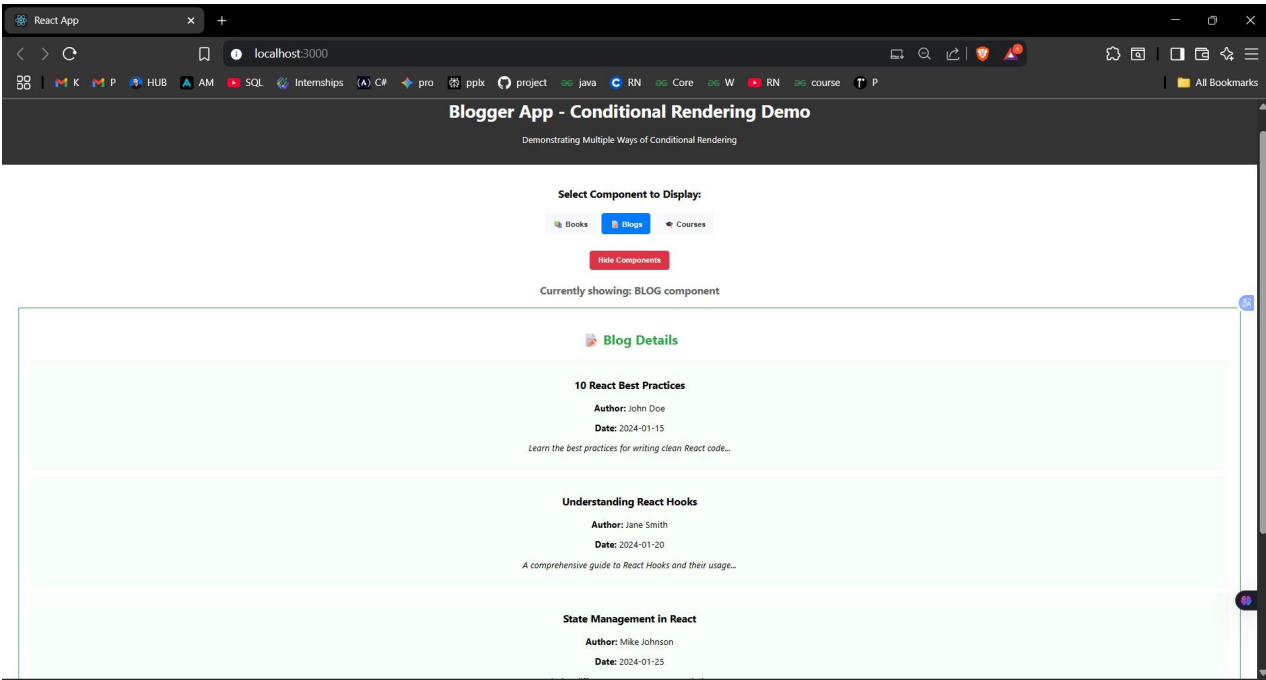
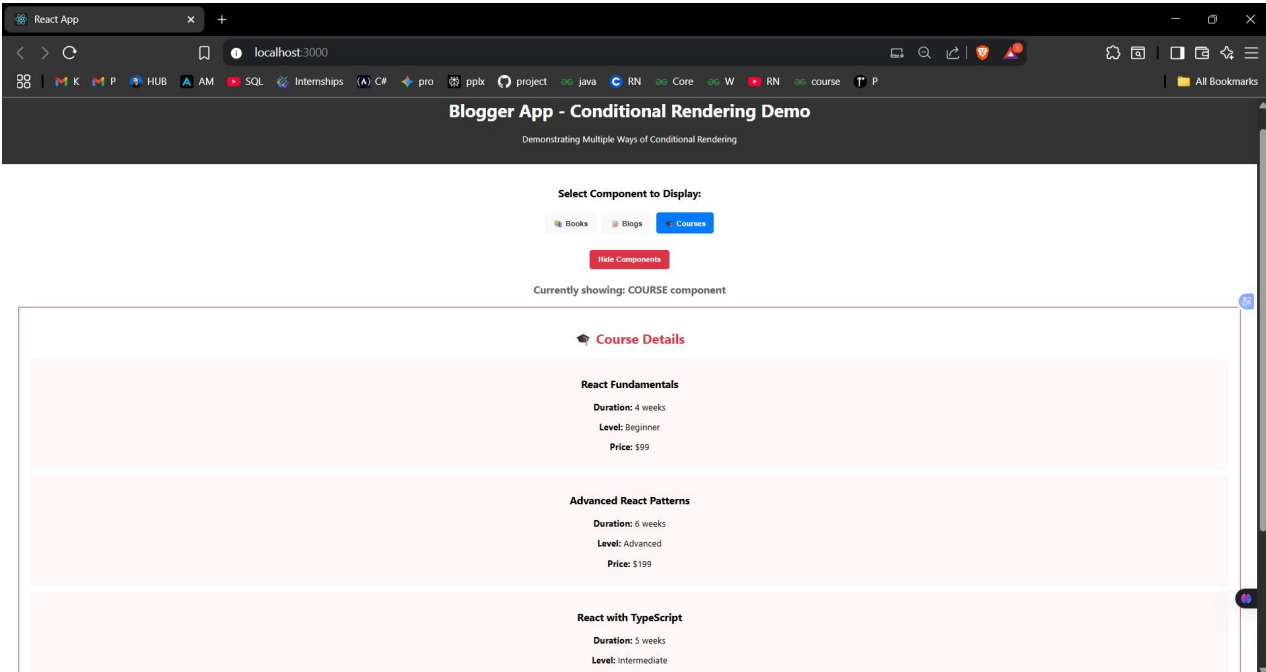
```
export default App;
```

Output

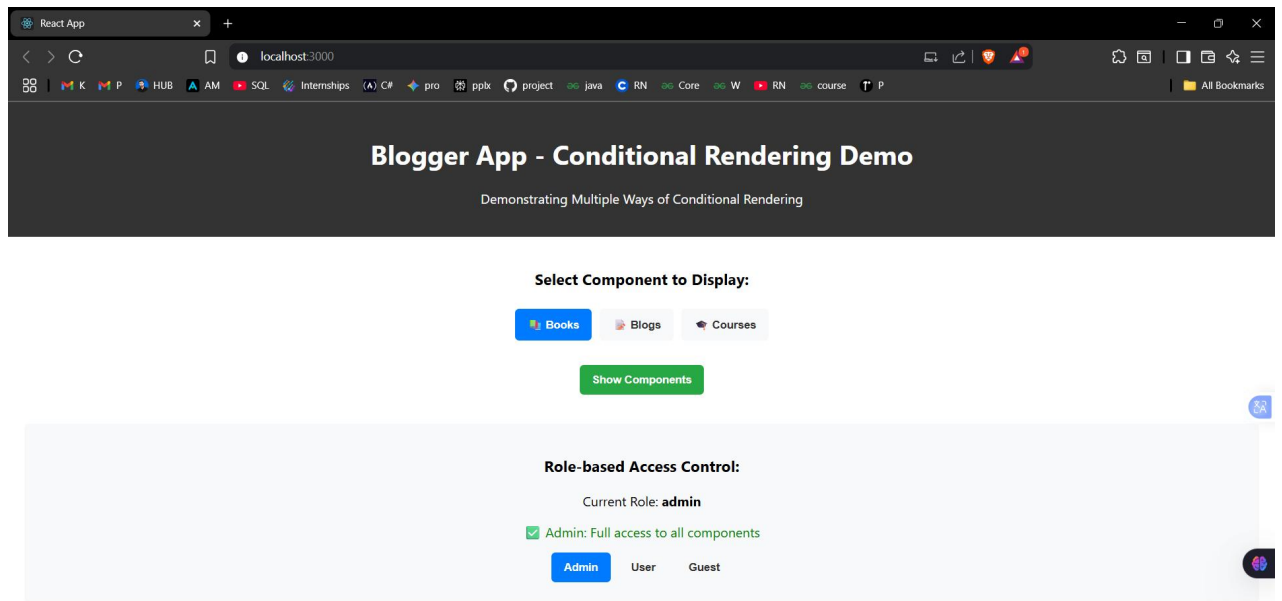
- Three different components (Books, Blogs, Courses).



- Multiple conditional rendering techniques demonstrated (if-else, ternary, logical AND, switch, object mapping, element variables).

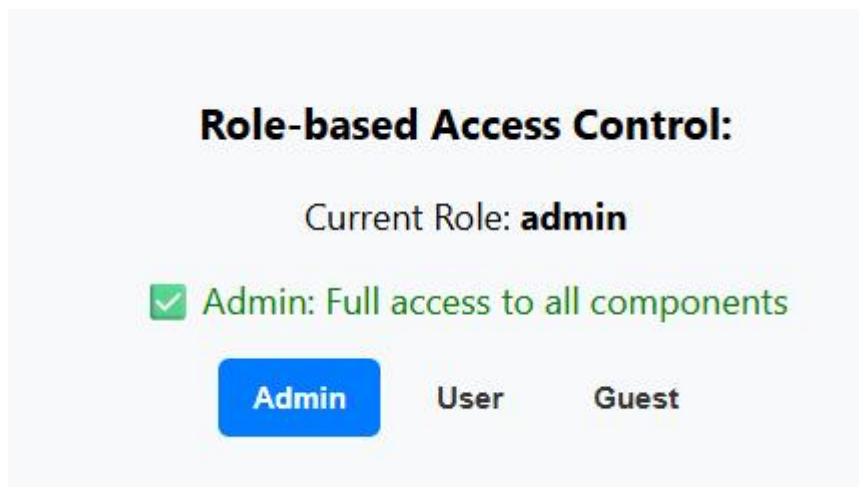


- Toggle functionality to show/hide components.



- Role-based access control (Admin, User, Guest).

Admin:



User:

Role-based Access Control:

Current Role: **user**

⚠ User: Limited access - can view content but cannot modify

AdminUserGuest

Guest:

Role-based Access Control:

Current Role: **guest**

✖ Guest: Please login to access content

AdminUserGuest