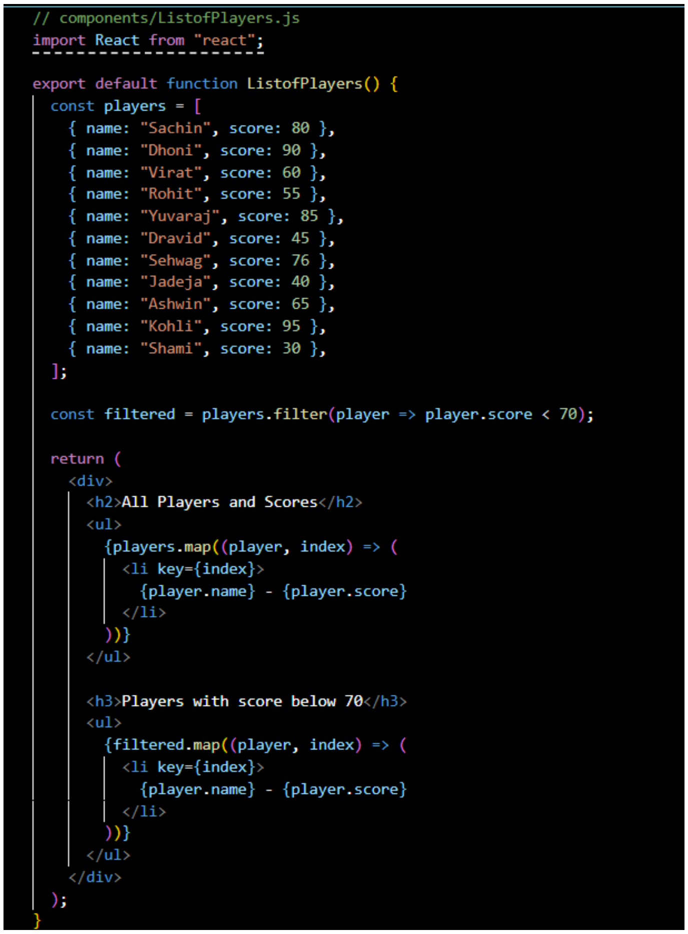
React HandsOn 9

Create a React Application named “cricketapp” with the following components:

1. ListofPlayers
   - Declare an array with 11 players and store details of their names and scores using the map feature of ES6

   - Filter the players with scores below 70 using arrow functions of ES6.

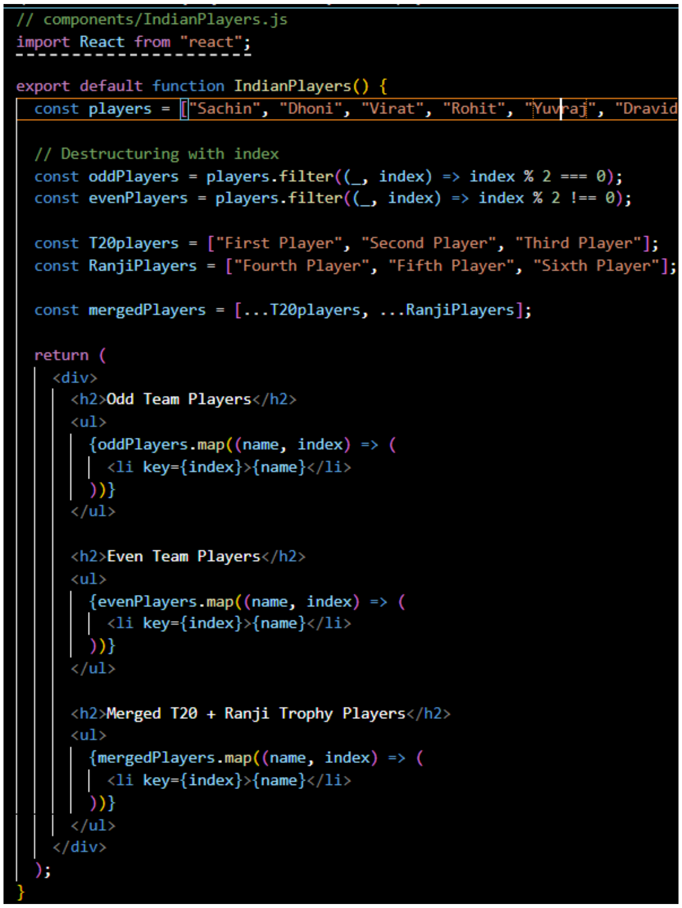


```
// components/ListofPlayers.js
import React from "react";

export default function ListofPlayers() {
  const players = [
    { name: "Sachin", score: 80 },
    { name: "Dhoni", score: 90 },
    { name: "Virat", score: 60 },
    { name: "Rohit", score: 55 },
    { name: "Yuvaraj", score: 85 },
    { name: "Dravid", score: 45 },
    { name: "Sehwag", score: 76 },
    { name: "Jadeja", score: 40 },
    { name: "Ashwin", score: 65 },
    { name: "Kohli", score: 95 },
    { name: "Shami", score: 30 },
  ];

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

  return (
    <div>
      <h2>All Players and Scores</h2>
      <ul>
        {players.map((player, index) => (
          <li key={index}>
            {player.name} - {player.score}
          </li>
        ))}
      </ul>

      <h3>Players with score below 70</h3>
      <ul>
        {filtered.map((player, index) => (
          <li key={index}>
            {player.name} - {player.score}
          </li>
        ))}
      </ul>
    </div>
  );
}
```

2. IndianPlayers

   a. Display the Odd Team Player and Even Team players using the Destructuring features of ES6

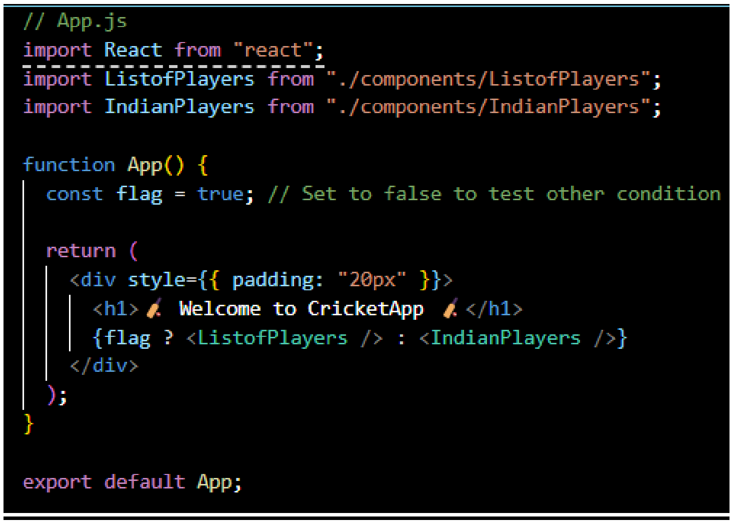
   b. Declare two arrays T20players and RanjiTrophy players and merge the two arrays and display them using the Merge feature of ES6



```
// components/IndianPlayers.js
import React from "react";

export default function IndianPlayers() {
  const players = ["Sachin", "Dhoni", "Virat", "Rohit", "Yuvraj", "Dravid

  // Destructuring with index
  const oddPlayers = players.filter((_, index) => index % 2 === 0);
  const evenPlayers = players.filter((_, index) => index % 2 !== 0);

  const T20players = ["First Player", "Second Player", "Third Player"];
  const RanjiPlayers = ["Fourth Player", "Fifth Player", "Sixth Player"];

  const mergedPlayers = [...T20players, ...RanjiPlayers];

  return (
    <div>
      <h2>Odd Team Players</h2>
      <ul>
        {oddPlayers.map((name, index) => (
          <li key={index}>{name}</li>
        ))}
      </ul>

      <h2>Even Team Players</h2>
      <ul>
        {evenPlayers.map((name, index) => (
          <li key={index}>{name}</li>
        ))}
      </ul>

      <h2>Merged T20 + Ranji Trophy Players</h2>
      <ul>
        {mergedPlayers.map((name, index) => (
          <li key={index}>{name}</li>
        ))}
      </ul>
    </div>
  );
}
```

Display these two components in the same home page using a simple if else in the flag variable.

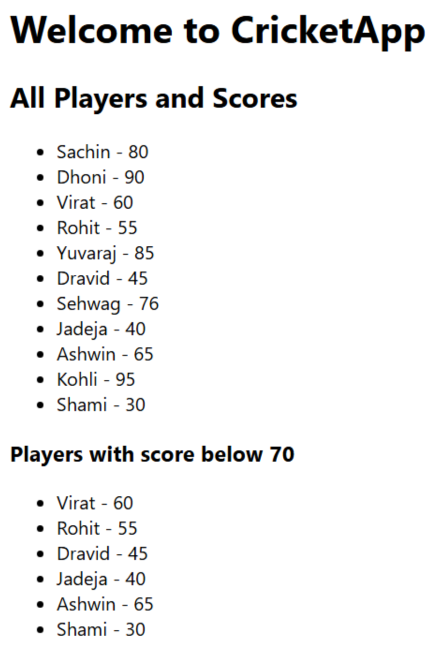
App.js



```
// App.js
import React from "react";
import ListofPlayers from "./components/ListofPlayers";
import IndianPlayers from "./components/IndianPlayers";

function App() {
  const flag = true; // Set to false to test other condition

  return (
    <div style={{ padding: "20px" }}>
      <h1>🏏 Welcome to CricketApp 🏏</h1>
      {flag ? <ListofPlayers /> : <IndianPlayers />}
    </div>
  );
}

export default App;
```

Output:

When Flag=true



Welcome to CricketApp

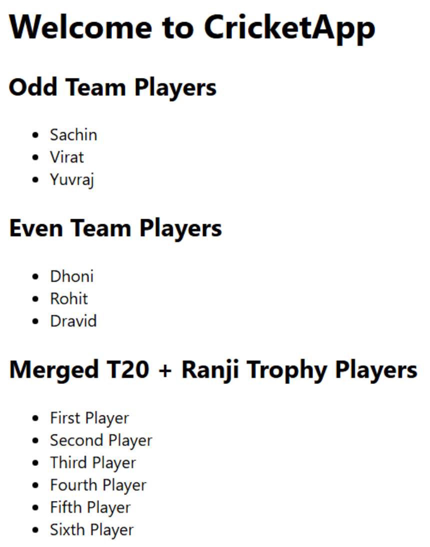
All Players and Scores

- Sachin - 80
- Dhoni - 90
- Virat - 60
- Rohit - 55
- Yuvaraj - 85
- Dravid - 45
- Sehwag - 76
- Jadeja - 40
- Ashwin - 65
- Kohli - 95
- Shami - 30

Players with score below 70

- Virat - 60
- Rohit - 55
- Dravid - 45
- Jadeja - 40
- Ashwin - 65
- Shami - 30

When Flag=false



Welcome to CricketApp

Odd Team Players

- Sachin
- Virat
- Yuvraj

Even Team Players

- Dhoni
- Rohit
- Dravid

Merged T20 + Ranji Trophy Players

- First Player
- Second Player
- Third Player
- Fourth Player
- Fifth Player
- Sixth Player

React HandsOn 10

Create an element to display the heading of the page.

Attribute to display the image of the office space

Create an object of office to display the details like Name, Rent and Address.

Create a list of Object and loop through the office space item to display more data.

To apply Css, Display the color of the Rent in Red if it’s below 60000 and in Green if it’s above 60000.

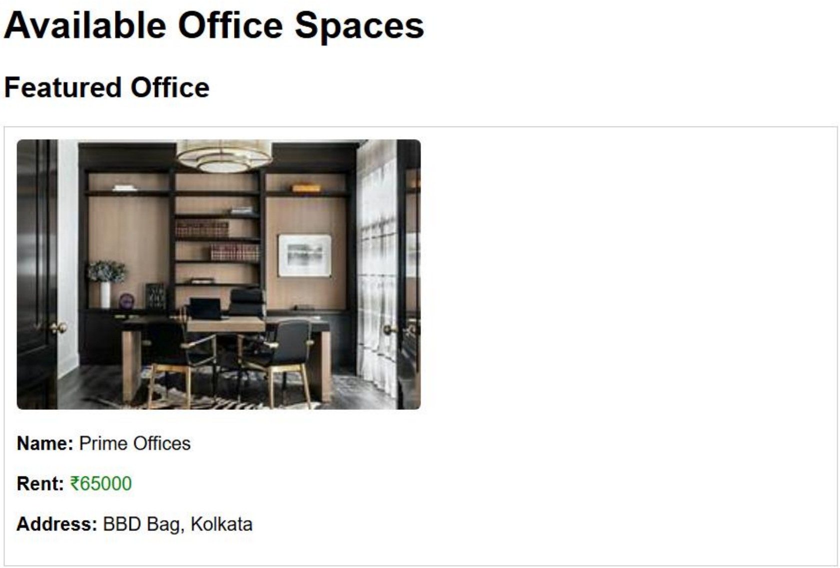
OfficeApp.js:

```
import React from "react";

const offices = [
  {
    name: "Office A",
    rent: 55000,
    address: "Sector 5, Salt Lake",
    image: "https://tse4.mm.bing.net/th/id/OIP.y-JCbcWu_PkOmnJzr4e1KQHaE7?pid=Api&P=0&h=180",
  },
  {
    name: "Office B",
    rent: 72000,
    address: "Kolkata, Rajarhat",
    image: "https://tse2.mm.bing.net/th/id/OIP.FpOe13DnZ678OQ2GX8MPIQHaE8?pid=Api&P=0&h=180",
  },
  {
    name: "Office C",
    rent: 48000,
    address: "New Town",
    image: "https://tse4.mm.bing.net/th/id/OIP.HfKRI-KYFgwmWdq-FxFYKgHaE7?pid=Api&P=0&h=180",
  },
];


export default function OfficeApp() {
  return (
    <div style={{ padding: "20px", fontFamily: "Arial" }}>
      <h1>Available Office Spaces</h1>
      <h2>Featured Office</h2>
      <div style={{ border: "1px solid #ccc", padding: "10px", marginBottom: "20px" }}>
        <img
          src="https://tse3.mm.bing.net/th/id/OIP.xiLvvQ02gdFhWvwqA98q2gHaE8?pid=Api&P=0&h=180"
          alt="Office"
          style={{ width: "50%", borderRadius: "5px" }}
        />
        <p><strong>Name:</strong> Prime Offices</p>
        <p>
          <strong>Rent:</strong>{" "}
          <span style={{ color: 65000 < 60000 ? "red" : "green" }}>₹65000</span>
        </p>
        <p><strong>Address:</strong> BBD Bag, Kolkata</p>
      </div>

      <h2>Other Available Offices</h2>
      {offices.map((office, index) => (
        <div key={index} style={{
            border: "1px solid #aaa",
            padding: "10px",
            marginBottom: "15px",
            borderRadius: "5px",
          }}>
          <img src={office.image}
            alt={office.name}
            style={{ width: "100%", maxWidth: "300px", borderRadius: "5px" }}/>
          <p><strong>Name:</strong> {office.name}</p>
          <p>
            <strong>Rent:</strong>{" "}
            <span style={{ color: office.rent < 60000 ? "red" : "green" }}>
              ₹{office.rent}
            </span>
          </p>
          <p><strong>Address:</strong> {office.address}</p>
        </div>
      ))}
    </div>
  );
}
```

App.js:

```
import React from "react";
import OfficeApp from "./components/OfficeApp";
function App() {
  return (
    <div className="App">
      <OfficeApp />
    </div>
  );
}
export default App;
```

Output:



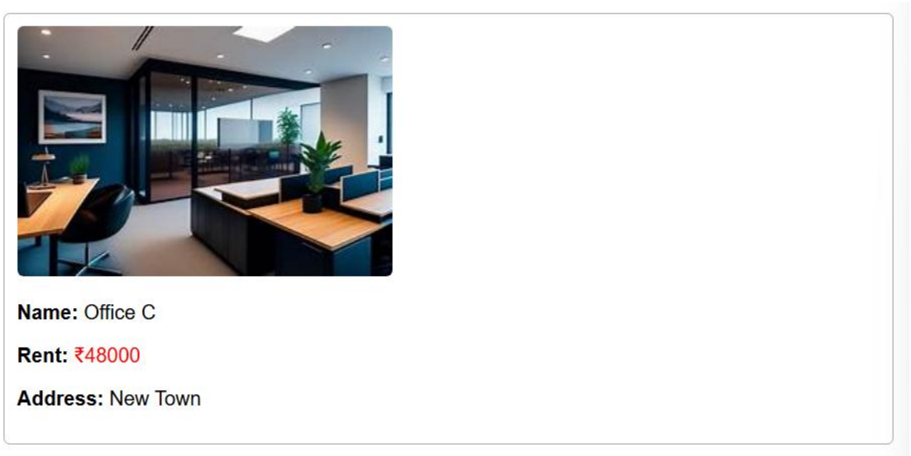
Available Office Spaces

Featured Office

Name: Prime Offices

Rent: ₹65000

Address: BBD Bag, Kolkata



Name: Office C

Rent: ₹48000

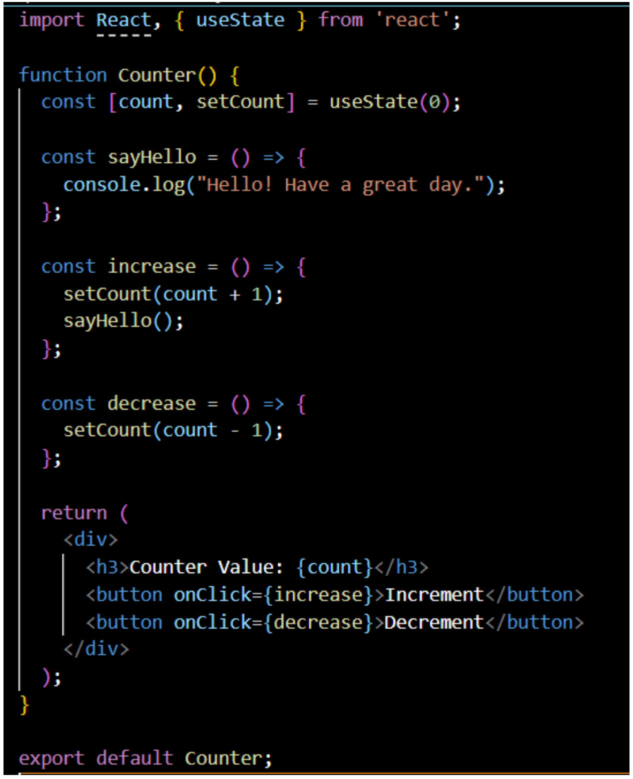
Address: New Town

React HandsOn 11

Create a React Application “eventexamplesapp” to handle various events of the form elements in HTML.

1. Create “Increment” button to increase the value of the counter and “Decrement” button to decrease the value of the counter. The “Increase” button should invoke multiple methods.
    a. To increment the value
    b. Say Hello followed by a static message.

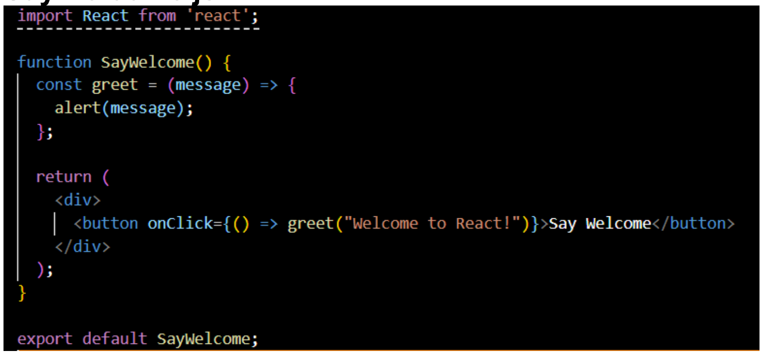
Counter.js



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

function Counter() {
  const [count, setCount] = useState(0);

  const sayHello = () => {
    console.log("Hello! Have a great day.");
  };

  const increase = () => {
    setCount(count + 1);
    sayHello();
  };

  const decrease = () => {
    setCount(count - 1);
  };

  return (
    <div>
      <h3>Counter Value: {count}</h3>
      <button onClick={increase}>Increment</button>
      <button onClick={decrease}>Decrement</button>
    </div>
  );
}

export default Counter;
```

2. Create a button “Say Welcome” which invokes the function which takes “welcome” as an argument.

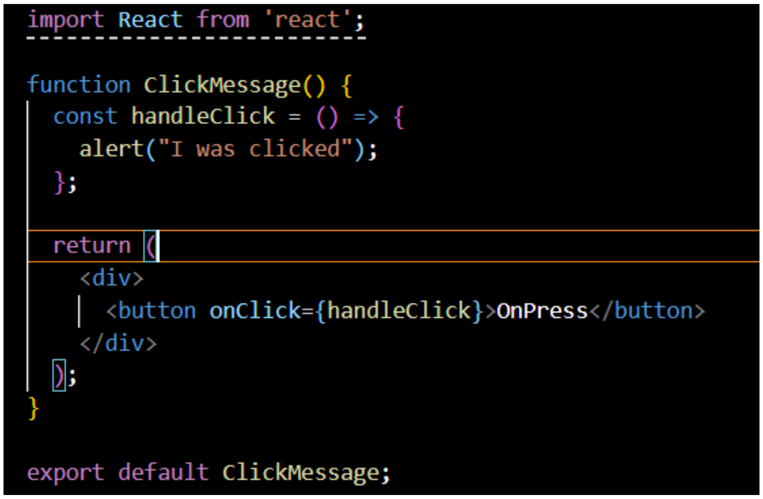
SayWelcome.js



```
import React from 'react';

function SayWelcome() {
  const greet = (message) => {
    alert(message);
  };

  return (
    <div>
      <button onClick={() => greet("Welcome to React!")}>Say Welcome</button>
    </div>
  );
}

export default SayWelcome;
```

3. Create a button which invokes synthetic event “OnPress” which display “I was clicked”

ClickMessage.js

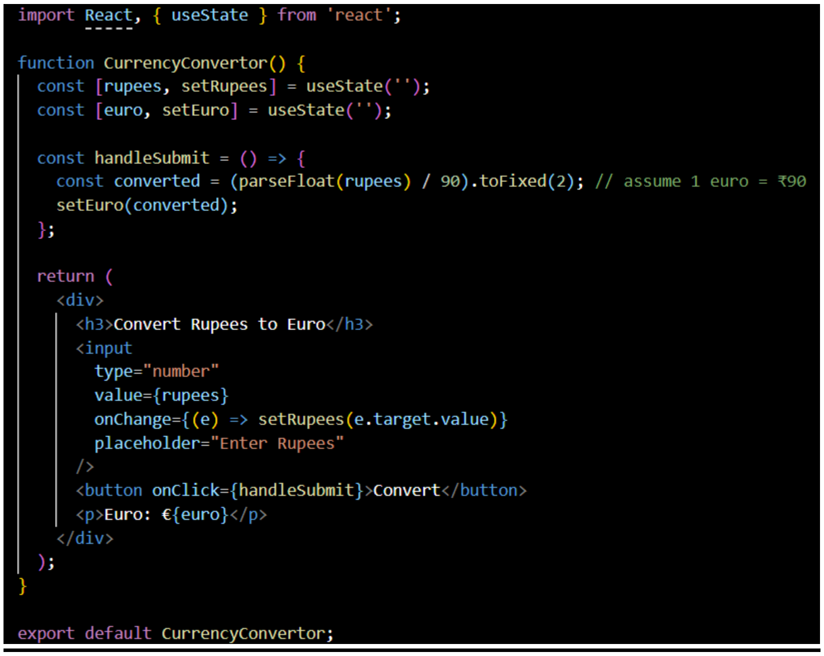


```
import React from 'react';

function ClickMessage() {
  const handleClick = () => {
    alert("I was clicked");
  };

  return (
    <div>
      <button onClick={handleClick}>OnPress</button>
    </div>
  );
}

export default ClickMessage;
```

Create a “CurrencyConvertor” component which will convert the Indian Rupees to Euro when the Convert button is clicked.

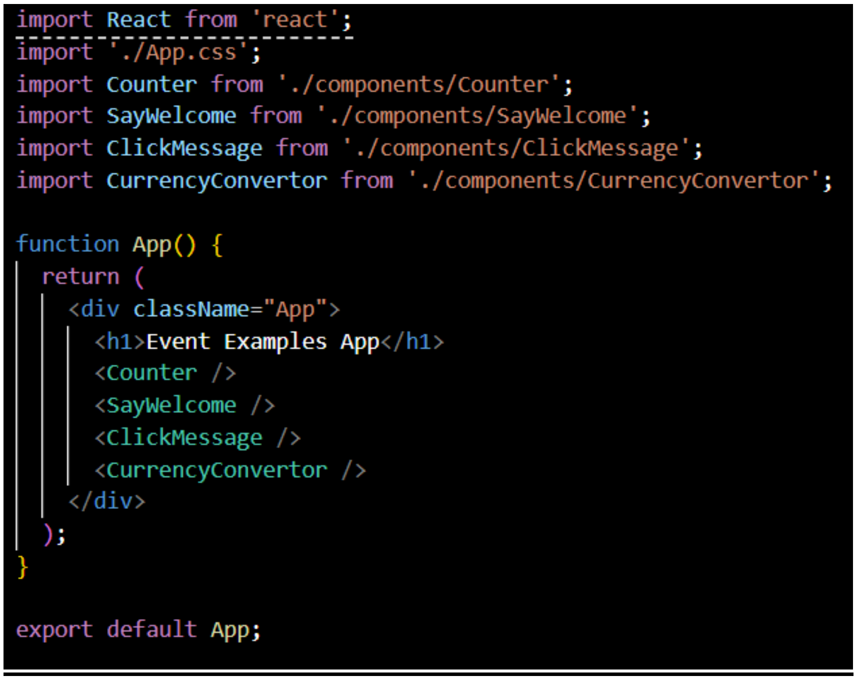
Handle the Click event of the button to invoke the handleSubmit event and handle the conversion of the euro to rupees.

CurrencyConverter.js



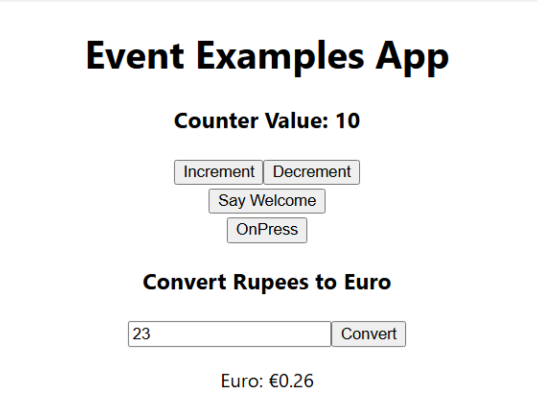
```
import React, { useState } from 'react';

function CurrencyConvertor() {
  const [rupees, setRupees] = useState('');
  const [euro, setEuro] = useState('');

  const handleSubmit = () => {
    const converted = (parseFloat(rupees) / 90).toFixed(2); // assume 1 euro = ₹90
    setEuro(converted);
  };

  return (
    <div>
      <h3>Convert Rupees to Euro</h3>
      <input
        type="number"
        value={rupees}
        onChange={(e) => setRupees(e.target.value)}
        placeholder="Enter Rupees"
      />
      <button onClick={handleSubmit}>Convert</button>
      <p>Euro: €{euro}</p>
    </div>
  );
}

export default CurrencyConvertor;
```

App.js



```
import React from 'react';
import './App.css';
import Counter from './components/Counter';
import SayWelcome from './components/SayWelcome';
import ClickMessage from './components/ClickMessage';
import CurrencyConvertor from './components/CurrencyConvertor';

function App() {
  return (
    <div className="App">
      <h1>Event Examples App</h1>
      <Counter />
      <SayWelcome />
      <ClickMessage />
      <CurrencyConvertor />
    </div>
  );
}

export default App;
```

OUTPUT:



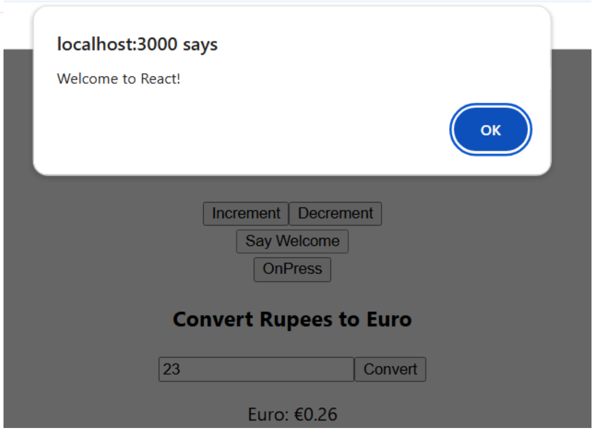
Event Examples App

Counter Value: 10

Convert Rupees to Euro

23

Euro: €0.26



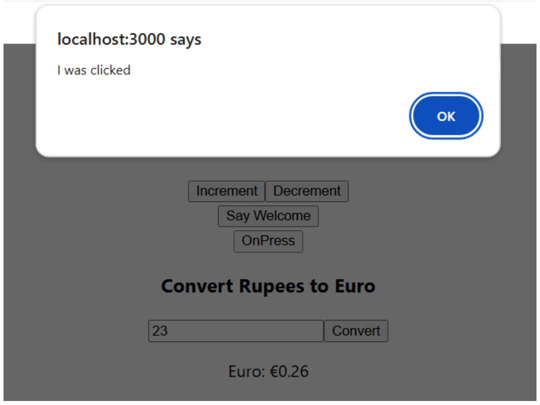
localhost:3000 says

Welcome to React!

Convert Rupees to Euro

23

Euro: €0.26



localhost:3000 says

I was clicked

Convert Rupees to Euro

23

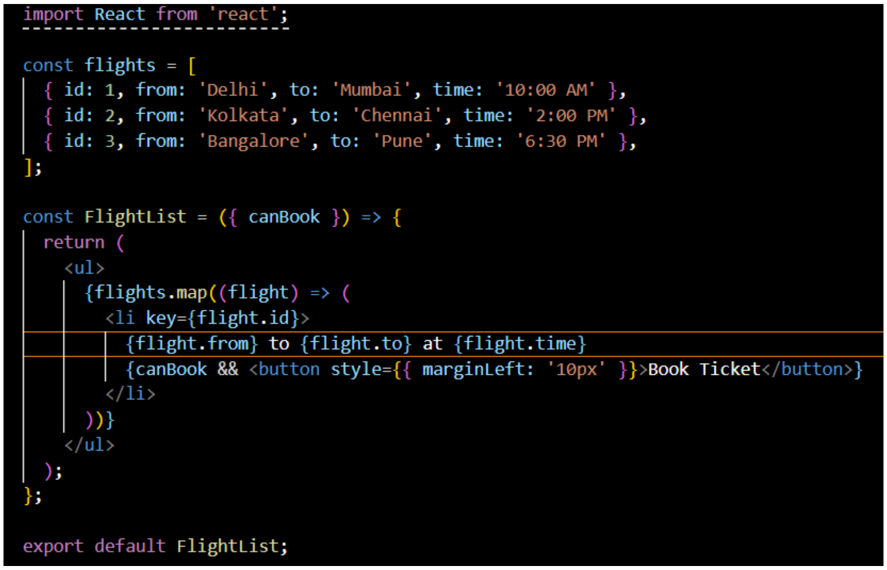
Euro: €0.26

React HandsOn 12

Create a React Application named “ticketbookingapp” where the guest user can browse the page where the flight details are displayed whereas the logged in user only can book tickets.

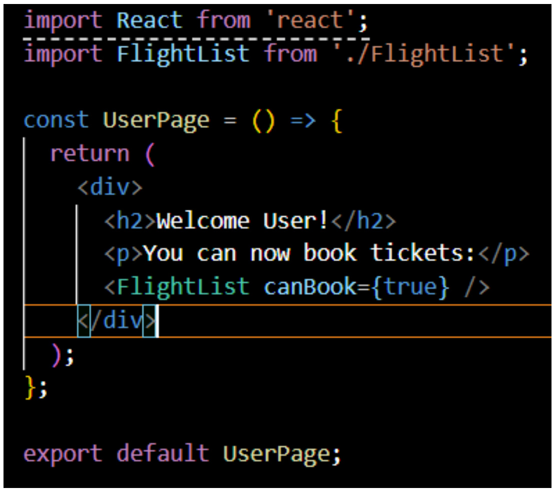
The Login and Logout buttons should accordingly display different pages. Once the user is logged in the User page should be displayed. When the user clicks on Logout, the Guest page should be displayed.

GuestPage.js



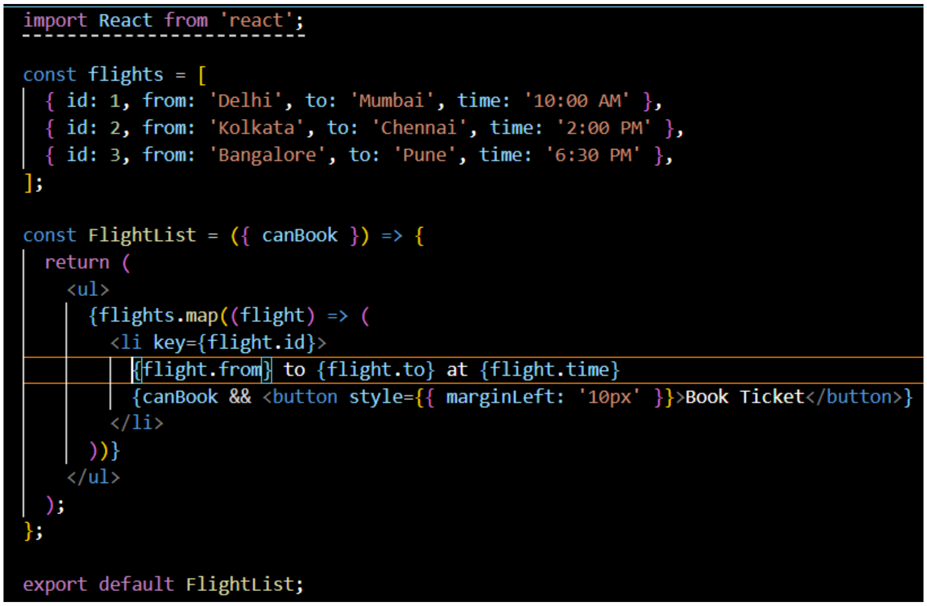
```
import React from 'react';

const flights = [
  { id: 1, from: 'Delhi', to: 'Mumbai', time: '10:00 AM' },
  { id: 2, from: 'Kolkata', to: 'Chennai', time: '2:00 PM' },
  { id: 3, from: 'Bangalore', to: 'Pune', time: '6:30 PM' },
];

const FlightList = ({ canBook }) => {
  return (
    <ul>
      {flights.map((flight) => (
        <li key={flight.id}>
          {flight.from} to {flight.to} at {flight.time}
          {canBook && <button style={{ marginLeft: '10px' }}>Book Ticket</button>}
        </li>
      ))}
    </ul>
  );
};

export default FlightList;
```

UserPage.js



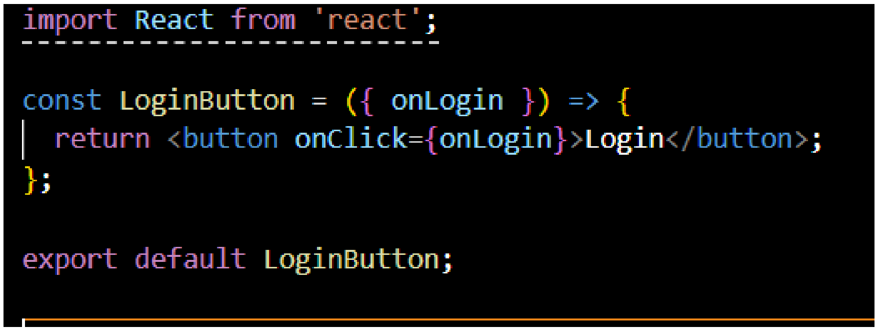
```
import React from 'react';
import FlightList from './FlightList';

const UserPage = () => {
  return (
    <div>
      <h2>Welcome User!</h2>
      <p>You can now book tickets:</p>
      <FlightList canBook={true} />
    </div>
  );
};

export default UserPage;
```

FlightList.js



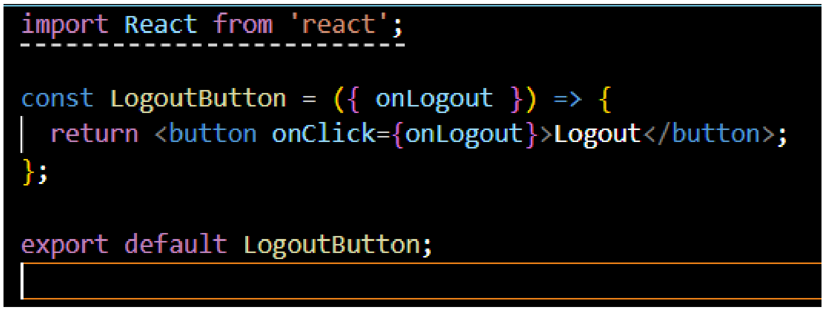
```
import React from 'react';

const flights = [
  { id: 1, from: 'Delhi', to: 'Mumbai', time: '10:00 AM' },
  { id: 2, from: 'Kolkata', to: 'Chennai', time: '2:00 PM' },
  { id: 3, from: 'Bangalore', to: 'Pune', time: '6:30 PM' },
];

const FlightList = ({ canBook }) => {
  return (
    <ul>
      {flights.map((flight) => (
        <li key={flight.id}>
          {flight.from} to {flight.to} at {flight.time}
          {canBook && <button style={{ marginLeft: '10px' }}>Book Ticket</button>}
        </li>
      ))}
    </ul>
  );
};

export default FlightList;
```

LoginButton.js



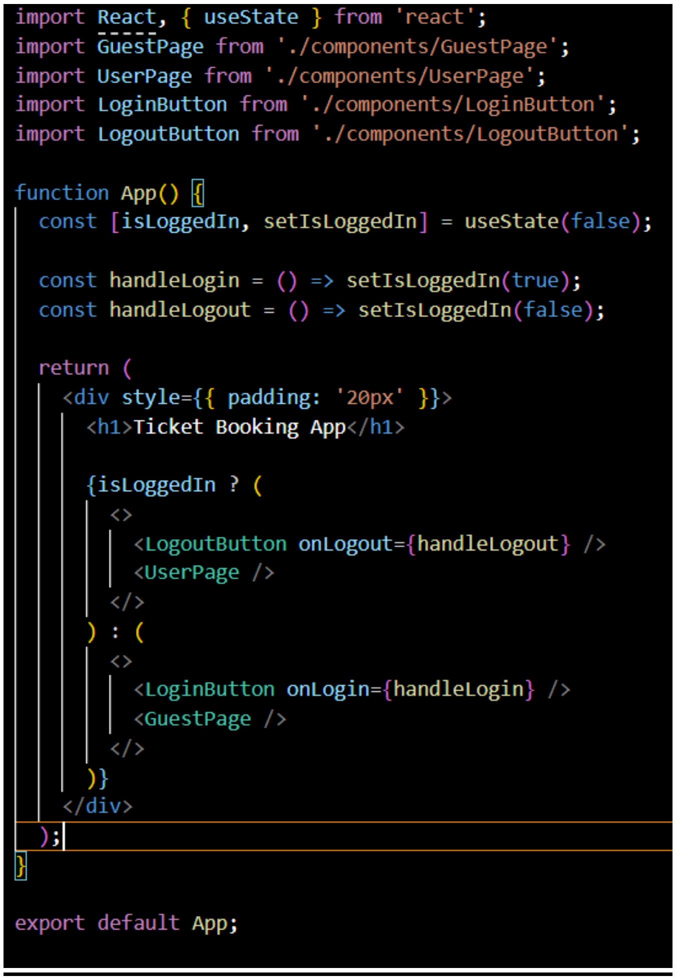
```
import React from 'react';

const LoginButton = ({ onLogin }) => {
  return <button onClick={onLogin}>Login</button>;
};

export default LoginButton;
```

LogoutButton.js



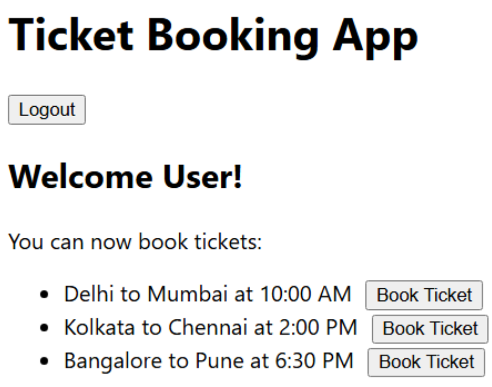
```
import React from 'react';

const LogoutButton = ({ onLogout }) => {
  return <button onClick={onLogout}>Logout</button>;
};

export default LogoutButton;
```

App.js



```
import React, { useState } from 'react';
import GuestPage from './components/GuestPage';
import UserPage from './components/UserPage';
import LoginButton from './components/LoginButton';
import LogoutButton from './components/LogoutButton';

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

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

  return (
    <div style={{ padding: '20px' }}>
      <h1>Ticket Booking App</h1>

      {isLoggedIn ? (
        <>
          <LogoutButton onLogout={handleLogout} />
          <UserPage />
        </>
      ) : (
        <>
          <LoginButton onLogin={handleLogin} />
          <GuestPage />
        </>
      )}
    </div>
  );
}

export default App;
```

OUTPUT:

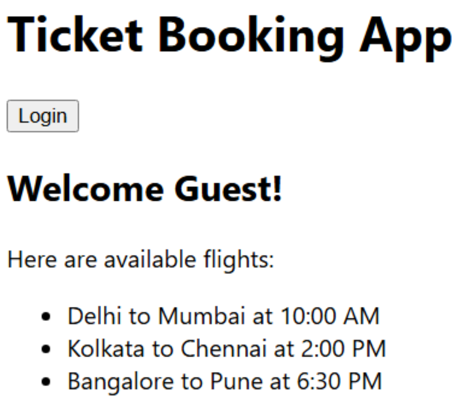


Ticket Booking App

Welcome User!

You can now book tickets:

- Delhi to Mumbai at 10:00 AM
- Kolkata to Chennai at 2:00 PM
- Bangalore to Pune at 6:30 PM



Ticket Booking App

Welcome Guest!

Here are available flights:

- Delhi to Mumbai at 10:00 AM
- Kolkata to Chennai at 2:00 PM
- Bangalore to Pune at 6:30 PM

React HandsOn 13

Create a React App named “bloggerapp” in with 3 components.

1. Book Details
2. Blog Details
3. Course Details

Implement this with as many ways possible of Conditional Rendering.

BookDetails.js

```
import React from 'react';
const BookDetails = () => {
  return (
    <div>
      <h2>Book Details</h2>
      <p>Title: React for Beginners</p>
      <p>Author: Sparshak Ghosh</p>
      <p>Title: java expert</p>
      <p>Author: Sparshak Ghosh</p>
      <p>Title: Let us C</p>
      <p>Author: Sparshak Ghosh</p>
    </div>
  );
};
export default BookDetails;
```

BlogDetails.js

```
import React from 'react';
const BlogDetails = () => {
  return (
    <div>
      <h2>Blog Details</h2>
      <p>Topic: React Conditional Rendering</p>
      <p>Author: Sparshak Ghosh</p>
      <p>Topic: Mastering Java</p>
      <p>Author: Sparshak Ghosh</p>
      <p>Topic: The Future of Web Development</p>
      <p>Author: Sparshak Ghosh</p>
    </div>
  );
};
export default BlogDetails;
```

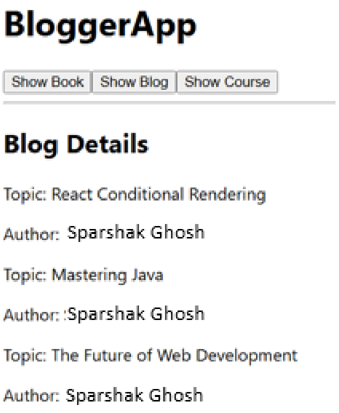
CourseDetails.js

```
import React from 'react';
const CourseDetails = () => {
  return (
    <div>
      <h2>Course Details</h2>
      <p>Course: React Mastery</p>
      <p>Duration: 4 weeks</p>
      <p>Course: Python Programming Masterclass</p>
      <p>Duration: 4 weeks</p>
      <p>Course: Ultimate AWS Certified Cloud Practitioner CLF-C02 2025</p>
      <p>Duration: 4 weeks</p>
    </div>
  );
};
export default CourseDetails;
```

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');

  return (

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

      <h1>BloggerApp</h1>

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

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

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

      {view === 'book' ? <BookDetails /> : null}

      {/* === 2. Logical AND rendering === */}

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

      {/* === 3. IIFE (Immediately Invoked Function Expression) === */}

      {(() => { if (view === 'course') return <CourseDetails />;})()}
    </div>

  );

}

export default App;
```

Output:



BloggerApp

Blog Details

Topic: React Conditional Rendering

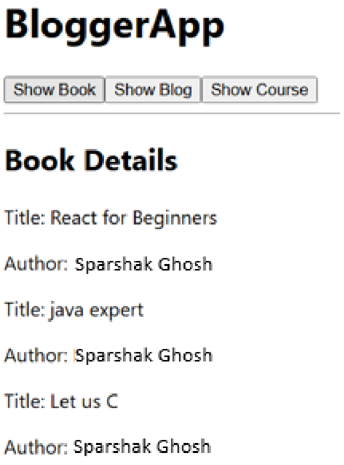
Author: Sparshak Ghosh

Topic: Mastering Java

Author: :Sparshak Ghosh

Topic: The Future of Web Development

Author: Sparshak Ghosh



BloggerApp

Book Details

Title: React for Beginners

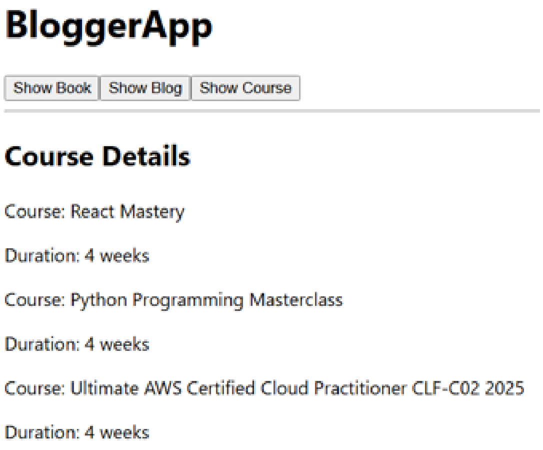
Author: Sparshak Ghosh

Title: java expert

Author: Sparshak Ghosh

Title: Let us C

Author: Sparshak Ghosh



BloggerApp

Course Details

Course: React Mastery

Duration: 4 weeks

Course: Python Programming Masterclass

Duration: 4 weeks

Course: Ultimate AWS Certified Cloud Practitioner CLF-C02 2025

Duration: 4 weeks