WEEK 7

9. ReactJS-HOL

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

const ListofPlayers = () => {
  const players = [
    { name: "Rohit", score: 85 },
    { name: "Virat", score: 65 },
    { name: "Rahul", score: 50 },
    { name: "Hardik", score: 90 },
    { name: "Jadeja", score: 40 },
    { name: "Surya", score: 75 },
    { name: "Gill", score: 95 },
    { name: "Shami", score: 35 },
    { name: "Bumrah", score: 80 },
    { name: "Ishan", score: 55 },
    { name: "Kuldeep", score: 70 }
  ];

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

```jsx
      <h3>Players with score below 70</h3>
      <ul>
        {players.filter(p => p.score < 70).map((p, index) => (
          <li key={index}>{p.name}</li>
        ))}
      </ul>
    </div>
  );
};


const IndianPlayers = () => {
  const oddPlayers = ["Rohit", "Rahul", "Hardik", "Surya", "Gill"];
  const evenPlayers = ["Virat", "Jadeja", "Shami", "Bumrah", "Ishan", "Kuldeep"];


  const [first, ...restOdd] = oddPlayers;
  const [second, ...restEven] = evenPlayers;


  const T20players = ["Rohit", "Virat", "Hardik"];
  const RanjiTrophyPlayers = ["Rahul", "Gill", "Jadeja"];


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


  return (
    <div>
      <h2>Odd Team Players</h2>
      <p>Captain: {first}</p>
      <p>Others: {restOdd.join(", ")}</p>


      <h2>Even Team Players</h2>
```

```jsx
      <p>Captain: {second}</p>
      <p>Others: {restEven.join(", ")}</p>


      <h2>Merged Players (T20 + Ranji)</h2>
      <p>{mergedPlayers.join(", ")}</p>
    </div>
  );
};


const App = () => {
  const [flag, setFlag] = useState(true);


  return (
    <div>
      <h1>Cricket App</h1>
      {flag ? <ListofPlayers /> : <IndianPlayers />}
      <button onClick={() => setFlag(!flag)}>Toggle View</button>
    </div>
  );
};


export default App;
```

OUTPUT:

When flag = true

All Players & Scores:

Rohit - 85

Virat - 65

Rahul - 50

...

Players with score below 70:

Virat

Rahul

Jadeja

Shami

Ishan

When flag = false

Odd Team Players:

Captain: Rohit

Others: Rahul, Hardik, Surya, Gill

Even Team Players:

Captain: Virat

Others: Jadeja, Shami, Bumrah, Ishan, Kuldeep

Merged Players (T20 + Ranji):

Rohit, Virat, Hardik, Rahul, Gill, Jadeja

10. ReactJS-HOL

```jsx
import React from 'react';

const offices = [
  {
    name: "Downtown Hub",
    rent: 45000,
    address: "123 Market Street, City Center",
    image: "https://via.placeholder.com/400x200?text=Downtown+Hub"
  },
  {
    name: "Green Tower",
    rent: 75000,
    address: "456 Green Lane, Uptown",
    image: "https://via.placeholder.com/400x200?text=Green+Tower"
  },
  {
    name: "Ocean View Offices",
    rent: 60000,
    address: "789 Coastal Road, Beachside",
    image: "https://via.placeholder.com/400x200?text=Ocean+View"
  }
];

function App() {
  return (
    <div style={{ fontFamily: 'Arial, sans-serif', padding: '20px' }}>
      <h1>Office Space Rental App</h1>
      {offices.map((office, index) => (
```

```jsx
      <div key={index} style={{ marginBottom: '20px', border: '1px solid #ccc', padding:
'10px' }}>

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

        <img src={office.image} alt={office.name} width="400" height="200" />

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

        <p style={{ color: office.rent < 60000 ? 'red' : 'green' }}>

          <strong>Rent:</strong> ₹{office.rent}

        </p>

      </div>

    ))}

   </div>

  );

}


export default App;
```

OUTPUT:

Office Space Rental App

11. ReactJS-HOL

```
import React, { Component } from 'react';
import './App.css';
import CurrencyConvertor from './CurrencyConvertor';

class App extends Component {
  constructor(props) {
    super(props);
    this.state = {
      count: 0
    };
  }

  // Method to increment the counter and call another function
  handleIncrement = () => {
    this.setState(prevState => ({
      count: prevState.count + 1
    }));
    this.showGreeting();
  };

  // Method to show a greeting message
  showGreeting = () => {
    console.log("Hello! React event handling example.");
  };

  // Method to decrease the counter
  handleDecrement = () => {
    this.setState(prevState => ({
      count: prevState.count - 1
    }));
  };

  // Method with argument passed
  showMessage = (message) => {
    alert(message);
  };

  // Synthetic event example
  handleSyntheticEvent = (e) => {
    e.preventDefault(); // using SyntheticEvent
    alert("I was clicked");
  };

  render() {
    return (
      <div className="App">
        <h1>React Event Examples</h1>
        <p>Counter Value: {this.state.count}</p>
```

```jsx
        <button onClick={this.handleIncrement}>Increment</button>
        <button onClick={this.handleDecrement}>Decrement</button>

        <br /><br />

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

        <br /><br />

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

        <br /><br />

        <CurrencyConvertor />
      </div>
    );
  }
}

export default App;

import React, { Component } from 'react';


class CurrencyConvertor extends Component {
  constructor(props) {
    super(props);
    this.state = {
      rupees: ",
      euros: "
    };
  }


  // Input change handler
  handleInput = (event) => {
    this.setState({
      rupees: event.target.value
    });
  };
```

```jsx
// Submit handler for currency conversion
handleConvert = () => {
  const conversionRate = 90; // Example rate
  const euros = (parseFloat(this.state.rupees) / conversionRate).toFixed(2);
  this.setState({ euros });
};


render() {
  return (
    <div>
      <h2>Currency Convertor</h2>
      <input
        type="number"
        placeholder="Enter INR"
        value={this.state.rupees}
        onChange={this.handleInput}
      />
      <button onClick={this.handleConvert}>Convert</button>
      {this.state.euros && (
        <p>Converted: €{this.state.euros}</p>
      )}
    </div>
  );
}
}

export default CurrencyConvertor;
```

OUTPUT:

React Event Examples

Counter Value: 0

[Increment] [Decrement]

[Say Welcome]

[OnPress]

Currency Convertor

[100] [Convert]

Converted: €1.11

12. ReactJS-HOL

npx create-react-app ticketbookingapp

cd ticketbookingapp

npm start

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

import GuestPage from './GuestPage';

import UserPage from './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;

    let pageContent;
    if (isLoggedIn) {
```

```jsx
    pageContent = <UserPage />;
  } else {
    pageContent = <GuestPage />;
  }

  return (
    <div className="App">
      <h1>Flight Booking Portal</h1>

      {isLoggedIn ? (
        <button onClick={this.handleLogout}>Logout</button>
      ) : (
        <button onClick={this.handleLogin}>Login</button>
      )}

      <hr />
      {pageContent}
    </div>
  );
 }
}

export default App;
import React from 'react';

function GuestPage() {
 return (
   <div>
     <h2>Welcome, Guest!</h2>
     <p>Here are the available flights:</p>
```

```jsx
    <ul>
      <li>Flight 101 - Mumbai to Delhi - 10:00 AM</li>
      <li>Flight 202 - Bangalore to Kolkata - 1:30 PM</li>
      <li>Flight 303 - Chennai to Pune - 6:45 PM</li>
    </ul>
    <p>Login to book your ticket!</p>
  </div>
  );
}

export default GuestPage;
import React from 'react';

function UserPage() {
  return (
    <div>
      <h2>Welcome, User!</h2>
      <p>Book your flight below:</p>
      <button>Book Flight 101</button>
      <button>Book Flight 202</button>
      <button>Book Flight 303</button>
    </div>
  );
}

export default UserPage;
.App {
  text-align: center;
  margin-top: 40px;
  font-family: Arial, sans-serif;
```

```
}

button {
  padding: 10px 20px;
  margin: 10px;
  font-size: 16px;
}
```

Output

Initial View (Guest):

Flight Booking Portal

[Login]

Welcome, Guest!

Here are the available flights:

- Flight 101...

- Flight 202...

Login to book your ticket!

After Login (User):

Flight Booking Portal

[Logout]

Welcome, User!

Book your flight below:

[Book Flight 101] [Book Flight 202]

13. ReactJS-HOL

```
npx create-react-app bloggerapp
cd bloggerapp
npm start
import React from 'react';

function BookDetails({ books }) {
  return (
    <div>
      <h2>Book Details</h2>
      {books.length === 0 ? (
        <p>No books available.</p>
      ) : (
        <ul>
          {books.map((book) => (
            <li key={book.id}>
              <strong>{book.title}</strong> by {book.author}
            </li>
          ))}
        </ul>
      )}
    </div>
  );
}

export default BookDetails;
import React from 'react';

function BlogDetails({ blogs }) {
  return (
    <div>
      <h2>Blog Posts</h2>
      {blogs.length > 0 ? (
        blogs.map((blog) => (
          <div key={blog.id}>
            <h4>{blog.title}</h4>
            <p>{blog.content}</p>
          </div>
        ))
      ) : (
        <p>No blog posts found.</p>
      )}
    </div>
  );
}

export default BlogDetails;
import React from 'react';
```

```jsx
function CourseDetails({ courses }) {
  return (
    <div>
      <h2>Course List</h2>
      {courses.length > 0 ? (
        <ul>
          {courses.map((course) => (
            <li key={course.id}>
              {course.name} - {course.duration}
            </li>
          ))}
        </ul>
      ) : (
        <p>No courses found.</p>
      )}
    </div>
  );
}

export default CourseDetails;
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 = {
      showBooks: true,
      showBlogs: false,
      showCourses: false,
      books: [
        { id: 1, title: "React Explained", author: "Dan Abramov" },
        { id: 2, title: "Learning JavaScript", author: "Kyle Simpson" }
      ],
      blogs: [
        { id: 1, title: "Understanding React", content: "React makes UI development easier..." },
        { id: 2, title: "JavaScript ES6", content: "Learn about let, const, arrow functions..." }
      ],
      courses: [
        { id: 1, name: "React Fundamentals", duration: "3 weeks" },
        { id: 2, name: "Advanced JavaScript", duration: "4 weeks" }
      ]
    };
  }

  render() {
    const { showBooks, showBlogs, showCourses, books, blogs, courses } = this.state;
```

```
  // Conditional rendering using element variable
  let section = null;

  if (showBooks) {
   section = <BookDetails books={books} />;
  } else if (showBlogs) {
   section = <BlogDetails blogs={blogs} />;
  } else if (showCourses) {
   section = <CourseDetails courses={courses} />;
  }

  return (
    <div className="App">
      <h1>Blogger App</h1>
      <div className="btn-group">
        <button onClick={() => this.setState({ showBooks: true, showBlogs: false,
showCourses: false })}>
          Show Books
        </button>
        <button onClick={() => this.setState({ showBooks: false, showBlogs: true,
showCourses: false })}>
          Show Blogs
        </button>
        <button onClick={() => this.setState({ showBooks: false, showBlogs: false,
showCourses: true })}>
          Show Courses
        </button>
      </div>
      <hr />
      {section}
    </div>
  );
 }
}

export default App;
```

OUTPUT:

Blogger App

[Show Books] [Show Blogs] [Show Courses]

--- Book Details ---
- React Explained by Dan Abramov
- Learning JavaScript by Kyle Simpson
When "Show Blogs" is clicked:
\
--- Blog Posts ---

Understanding React
React makes UI development easier...

JavaScript ES6
Learn about let, const, arrow functions...
When "Show Courses" is clicked:
\
--- Course List ---
React Fundamentals - 3 weeks
Advanced JavaScript - 4 weeks