**12. REACTJS – HOL**

**React Hands-on Lab – Conditional Rendering (ticketbookingapp)**

**OBJECTIVES**

Explain about Conditional Rendering in React

Conditional rendering in React means displaying different UI elements or components based on certain conditions (like user login status, permissions, or data availability).  
React uses JavaScript logic inside JSX to decide what to render and when.

Example:

{isLoggedIn ? <WelcomeUser /> : <LoginForm />}

Define Element Variables

Element variables are regular JavaScript variables that store JSX elements.  
You can create them inside the component function and conditionally assign different elements to them.

Example:

let message;

if (isLoggedIn) {

message = <h1>Welcome back!</h1>;

} else {

message = <h1>Please sign in.</h1>;

}

Then render using:

return <div>{message}</div>;

Explain How to Prevent Components from Rendering

You can prevent a component from rendering by returning null or an empty fragment (<> </>) based on a condition.

Example:

function WarningBanner(props) {

if (!props.showWarning) {

return null; // Component will not render

}

return <div className="warning">Warning!</div>;

}

Implement Conditional Rendering in React Applications

Conditional rendering can be done using:

1. if-else statements
2. ternary operator
3. logical && operator

Ternary Example:

{isLoggedIn ? <LogoutButton /> : <LoginButton />}

Logical AND (&&) Example:

{unreadMessages.length > 0 && <span>You have messages</span>}

Full Example:

function App() {

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

return (

<div>

{isLoggedIn ? <h1>Welcome</h1> : <h1>Please Login</h1>}

<button onClick={() => setIsLoggedIn(!isLoggedIn)}>

{isLoggedIn ? 'Logout' : 'Login'}

</button>

</div>

);

}

**Step 1 : Create app by typing command in terminal**

npx create-react-app ticketbookingapp

cd ticketbookingapp

npm start  
  
**Step 2: Paste the Code**

Add a heading: **Code (App.js)** and type this under it:

import React, { useState } from 'react';

import './App.css';

function App() {

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

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

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

const flightDetails = (

<div>

<h2>Available Flights</h2>

<ul>

<li>Flight A123 - Delhi to Mumbai - ₹3500</li>

<li>Flight B456 - Chennai to Bangalore - ₹2200</li>

<li>Flight C789 - Hyderabad to Pune - ₹2800</li>

</ul>

</div>

);

const guestView = (

<div>

<h1>Welcome, Guest!</h1>

{flightDetails}

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

</div>

);

const userView = (

<div>

<h1>Welcome, User!</h1>

{flightDetails}

<button>Book Tickets</button>

<br /><br />

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

</div>

);

return (

<div className="App">

{isLoggedIn ? userView : guestView}

</div>

);

}

export default App;

**Step 3: Run command to get output**

`npm start`

**Step 4 : Output**

