**React**

**Handson 12**

**1.Explain about conditional rendering in React:**

Conditional rendering means showing different UI elements or components based on some condition (like user login status, input value, etc.). It works just like regular JavaScript if, else, or ternary (? :) conditions.

**Examples:**

Using if statement:

function Greeting(props) {

if (props.isLoggedIn) {

return <h1>Welcome back!</h1>;

} else {

return <h1>Please log in.</h1>;

}

}

**Using ternary operator:**

<h1>{isLoggedIn ? 'Welcome back!' : 'Please log in.'}</h1>

**Using**&&**operator:**

{isLoggedIn && <button>Logout</button>}

**2.Define element variables:**

Element variables are used to store JSX elements in a variable, allowing you to conditionally assign different elements to the same variable.

**Example:**

function LoginStatus(props) {

let message;

if (props.isLoggedIn) {

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

} else {

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

}

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

}

**3.Explain how to prevent components from rendering.**

There are several ways to prevent a component from rendering in React:

**1. Return**null**from the component:**

function WarningBanner(props) {

if (!props.showWarning) {

return null;

}

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

}

**2. Use short-circuit (**&&**) in JSX:**

{showWarning && <WarningBanner />}

**3. Conditional rendering with ternary:**

{show ? <ComponentA /> : null}

These techniques are useful for hiding UI parts based on state or props.

**GuestPage.js:**

function GuestPage() {

  return <h2>Welcome Guest! View Flight Details.</h2>;

}

export default GuestPage;

**LoginButton.js:**

function LoginButton({ onLogin }) {

  return <button onClick={onLogin}>Login</button>;

}

export default LoginButton;

**LogoutButton.js:**

function LogoutButton({ onLogout }) {

return <button onClick={onLogout}>Logout</button>;

}

export default LogoutButton;

**App.js:**

import React, { useState } from "react";

import GuestPage from "./GuestPage";

import UserPage from "./UserPage";

import LoginButton from "./LoginButton";

import LogoutButton from "./LogoutButton";

function App() {

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

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

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

  let content;

  if (isLoggedIn) {

    content = (

      <>

        <UserPage />

        <LogoutButton onLogout={handleLogout} />

      </>

    );

  } else {

    content = (

      <>

        <GuestPage />

        <LoginButton onLogin={handleLogin} />

      </>

    );

  }

  return (

    <div className="App">

      <h1>Ticket Booking App</h1>

      {content}

    </div>

  );

}

export default App;

**Output:**



A screenshot of a computer

AI-generated content may be incorrect.