**React 12**

### ****1. Conditional Rendering in React****

Conditional rendering in React means **dynamically showing or hiding components or elements** based on certain conditions (like a boolean, value, or state).

#### Using if/else:

if (isLoggedIn) {

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

} else {

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

}

#### Using Ternary Operator:

<h1>{isLoggedIn ? 'Welcome' : 'Please login'}</h1>

#### Using Logical AND (&&):

{hasAccess && <p>You have access.</p>}

#### With switch (inside a function):

switch (userRole) {

case 'admin': return <AdminPanel />;

case 'guest': return <GuestView />;

default: return <LoginScreen />;

}

### ****2. Define Element Variables****

**Element variables** are variables that hold JSX elements. You can assign different components or HTML blocks to them based on logic.

#### Example:

let message;

if (isLoggedIn) {

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

} else {

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

}

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

### ****3. How to Prevent Components from Rendering****

There are several ways to **prevent a React component or element from rendering**:

#### ****Return**** null from a component:

function Warning({ show }) {

if (!show) {

return null; // component renders nothing

}

return <div className="warning">This is a warning!</div>;

}

#### ****Conditional rendering with**** &&:

{shouldShow && <Component />}

#### ****Early return in**** render() ****or function body****:

if (!props.visible) return null;

**Output for this lab:**

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