# Week 2: Intermediate Concepts

## Day 8: Conditional Rendering – Show/Hide Elements, If/Else in JSX

### 1. What is Conditional Rendering?

Conditional rendering means **showing UI based on a condition** (true/false). - Just like in plain JavaScript we use if, else, or ?: operator. - In React, we use these conditions **inside JSX** to control what gets displayed.

### 2. Why do we use it?

* To show different UI based on state or props.
* Examples:
  + Show a **login button** if the user is not logged in, otherwise show **logout button**.
  + Show an **error message** only if something went wrong.
  + Hide elements when they are not needed.

### 3. Different Ways of Conditional Rendering

#### a) Using if/else outside JSX

function WelcomeMessage({ isLoggedIn }) {  
 if (isLoggedIn) {  
 return <h2>Welcome back!</h2>;  
 } else {  
 return <h2>Please log in</h2>;  
 }  
}

#### b) Using Ternary Operator inside JSX

function LoginStatus({ isLoggedIn }) {  
 return (  
 <div>  
 {isLoggedIn ? <p>You are logged in ✅</p> : <p>You are logged out ❌</p>}  
 </div>  
 );  
}

#### c) Using Logical AND (&&) for Short Conditions

* If condition is true → render element
* If false → render nothing

function Cart({ items }) {  
 return (  
 <div>  
 <h2>Your Cart</h2>  
 {items.length > 0 && <p>You have {items.length} items in your cart.</p>}  
 </div>  
 );  
}

#### d) Conditional CSS/Hide Elements

function Notification({ show }) {  
 return (  
 <div style={{ display: show ? "block" : "none" }}>  
 🔔 You have a new notification!  
 </div>  
 );  
}

### 4. Example: Toggle Show/Hide Text

import React, { useState } from 'react';  
  
function ToggleText() {  
 const [show, setShow] = useState(false);  
  
 return (  
 <div>  
 <button onClick={() => setShow(!show)}>  
 {show ? "Hide" : "Show"} Message  
 </button>  
 {show && <p>This is a secret message 🤫</p>}  
 </div>  
 );  
}  
  
export default ToggleText;

### 5. Exercise (15–20 minutes)

👉 Build a component called **AuthPanel** that: 1. Has a state isLoggedIn (default: false). 2. If isLoggedIn is false → show a button: **Login**. 3. If isLoggedIn is true → show: - A message: *“Welcome, User!”* - A button: **Logout**. 4. Clicking **Login** should set isLoggedIn = true. 5. Clicking **Logout** should set isLoggedIn = false.

**Bonus Challenge:** Add a small greeting like: *“Good Morning”* if current hour < 12, otherwise *“Good Evening”*.

### Recap

* Use **if/else** for bigger blocks.
* Use **ternary operator** for inline small conditions.
* Use **&&** for quick conditional rendering.
* You can also hide elements with CSS (display: none).