**Conditional Styling in Angular**

Conditional styling in Angular allows you to dynamically apply CSS classes or styles to HTML elements based on specific conditions or data within your component. This makes your applications more interactive and responsive to changes in the application state.

**1. ngClass Directive**

* **Purpose:** Conditionally apply or remove CSS classes from an element.
* **Syntax:**

HTML

<element [ngClass]="{'class1': condition1, 'class2': condition2, ...}">

* + condition1, condition2, etc.: Boolean expressions that determine whether to apply the corresponding class.
* **Example:**

HTML

<button [ngClass]="{'btn-primary': isPrimary, 'btn-secondary': !isPrimary}">Click Me</button>

**2. [style] Directive**

* **Purpose:** Dynamically apply inline styles to an element.
* **Syntax:**

HTML

<element [style.property]="expression">

* + property: The CSS property to style (e.g., color, background-color, font-size).
  + expression: An expression that evaluates to the desired style value.
* **Example:**

HTML

<p [style.color]="hasError ? 'red' : 'green'">

Status: {{ status }}

</p>

**3. Ternary Operator with [class]**

* **Purpose:** Combine ngClass with the ternary operator for concise conditional styling.

HTML

<div [ngClass]="isActive ? 'active' : 'inactive'">

Content

</div>

**Key Benefits:**

* **Dynamic Styling:** Adapt the appearance of your application based on user interactions, data changes, or other conditions.
* **Improved User Experience:** Provide visual feedback to users through changes in element styles.
* **Maintainability:** Encapsulate styling logic within your components, making your code more organized and easier to maintain.

**Example:**

TypeScript

import { Component } from '@angular/core';

@Component({

selector: 'app-my-component',

template: `

<button [ngClass]="{'btn-success': isSuccessful, 'btn-danger': isError}">

Submit

</button>

`

})

export class MyComponent {

isSuccessful: boolean = false;

isError: boolean = false;

}

In this example, the button's class will dynamically change to btn-success if isSuccessful is true, and to btn-danger if isError is true.

By effectively using conditional styling techniques, you can create visually appealing and user-friendly Angular applications that adapt to various conditions and user interactions.