Input decorator in Angular 18

## Understanding @Input in Angular 18

The @Input decorator in Angular is used to pass data from one component to another. It enables parent-to-child communication and is a core feature of Angular’s component interaction mechanism.

### Basic Usage

1. Decorate a property in the target component with @Input.
2. Use property binding ([ ]) in the source component to pass data.

**Understanding @Input in Angular 18**

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**Basic Usage**

1. Decorate a property in the target component with @Input.
2. Use property binding ([ ]) in the source component to pass data.

**Example:**

**appComponent (HTML):**

<app-profile-card [userName]="'John Doe'"></app-profile-card>

**Profile-cardComponent (HTML):**

<p>User: {{ userName }}</p>

**Profile-cardComponent (TypeScript):**

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

@Component({

selector: 'app-profile-card',

templateUrl: './profile-card.component.html',

})

export class ProfileCardComponent {

@Input() userName!: string;

}

This binds the value 'John Doe' to the userName property in the target component.

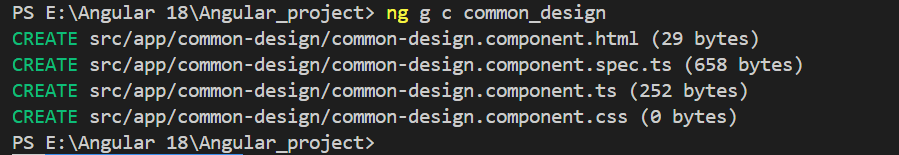
**Default Values**

You can define a default value in the target component if the source does not pass one:

@Input() userName: string = 'Default User';

# Practical Example :

* Creating a component name common-design :



* Creating a card design in common design component html page

## Common-design.component.html

<div class="product-card">

    <img src={{productImage}} alt="Product Image" class="product-image">

    <h2 class="product-name">{{productName}}</h2>

    <p class="product-price">{{productPrice}}</p>

    <p class="product-description">{{productDescription}}</p>

    <button class="btn btn-primary">Add to Cart</button>

    <button class="btn btn-secondary">View Details</button>

</div>

Interpolating the productImage,productName,productPrice and productDescription and added that in the ts page

## Common-design .component.ts

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

@Component({

  selector: 'app-common-design',

  imports: [],

  templateUrl: './common-design.component.html',

  styleUrl: './common-design.component.css'

})

export class CommonDesignComponent {

  @Input() productName: string = "";

  @Input() productDescription: string = "";

  @Input() productPrice=0;

  @Input() productImage: string = "";

}

## Common-design.component.css

.product-card {

    border: 2px solid #333;

    padding: 20px;

    border-radius: 12px;

    max-width: 350px;

    height: 550px;

    text-align: center;

    background-color: #e0f7fa; /\* Light blue background color \*/

    box-shadow: 0 6px 12px rgba(0, 0, 0, 0.2); /\* Stronger box shadow \*/

}

.product-image {

    width: 100%;

    height: 250px;

    border-radius: 12px;

    margin-bottom: 20px;

}

.product-name {

    font-size: 1.8em;

    margin-bottom: 10px;

    color: #00796b; /\* Dark teal color \*/

}

.product-price {

    color: #d32f2f; /\* Dark red color \*/

    font-size: 1.4em;

    margin-bottom: 10px;

}

.product-description {

    font-size: 1.1em;

    margin-bottom: 20px;

    color: #555; /\* Dark gray color \*/

}

.btn {

    padding: 12px 24px;

    margin: 8px;

    border: none;

    border-radius: 6px;

    cursor: pointer;

    font-size: 1em;

}

.btn-primary {

    background-color: #0288d1; /\* Blue color \*/

    color: white;

}

.btn-secondary {

    background-color: #7b1fa2; /\* Purple color \*/

    color: white;

}

* Component calling at the app.component.html page
* Set import in page first to call the component in screen

imports: [CommonDesignComponent],

also add the datas inside the app.component.ts page

## app.component.ts

import { Component } from ‘@angular/core’;

import { RouterOutlet } from ‘@angular/router’;

import { CommonDesignComponent } from ‘./common-design/common-design.component’;

@Component({

  selector: ‘app-root’,

  imports: [CommonDesignComponent],

  templateUrl: ‘./app.component.html’,

  styleUrl: ‘./app.component.css’

})

export class AppComponent {

  title=’Angular\_project’;

  image1=”https://cdn.mos.cms.futurecdn.net/gnG2Z6pK7CTBJmw4pRUy8i.jpg”

  name1=”asus Rog”;

  description1=”Gaming Laptop with high performance and advanced cooling system.”;

  price1=100000;

  image2 = “https://cdn.mos.cms.futurecdn.net/2HzsmyJhitHkQkhgWYyY2j-1200-80.jpg”;

  name2 = “Dell XPS”;

  description2 = “Ultrabook Laptop with sleek design and long battery life.”;

  price2 = 120000;

  image3 = “https://th.bing.com/th/id/R.3d06291b74f917da6cca8676b94c2f67?rik=dr%2fxyTPkQl%2bShw&riu=http%3a%2f%2fcdn.mos.cms.futurecdn.net%2fXRA9zN22EKkhUYrqtwXkBZ.jpg&ehk=HS%2bifYXUxcbXYlTLdegecjAK%2bWD1WGnij1LFjEbaoLM%3d&risl=&pid=ImgRaw&r=0”;

  name3 = “MacBook Pro”;

  description3 = “Professional Laptop with powerful hardware and Retina display.”;

  price3 = 150000;

  image4 = “https://th.bing.com/th/id/OIP.npF\_yl3KF\_0TL-XZbnB1zwHaHa?w=1000&h=1000&rs=1&pid=ImgDetMain”;

  name4 = “HP Spectre”;

  description4 = “Convertible Laptop with 360-degree hinge and touch screen.”;

  price4 = 110000;

}

* Now call the page in html

## App.component.html

<div class="main">

    <app-common-design [productName]="name1" [productImage]="image1" [productPrice]="price1" [productDescription]="description1"></app-common-design>

    <app-common-design [productName]="name2" [productImage]="image2" [productPrice]="price2" [productDescription]="description2"></app-common-design>

    <app-common-design [productName]="name3" [productImage]="image3" [productPrice]="price3" [productDescription]="description3"></app-common-design>

    <app-common-design [productName]="name4" [productImage]="image4" [productPrice]="price4" [productDescription]="description4"></app-common-design>

</div>

## App.component.css

.main{

    display: flex;

    justify-content: space-evenly;

}

* Then run the code :

**OutPut is :**

