# Angular Training (Intermediate to Advanced)

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## Schedule for React JS Training

Day1 : Custom Pipes in Angular

**Day2**: Parent-Child Communication

Day3 : Custom Directives in Angular

Day4 : Working with Reactive Forms

Day5 : Dependency Injection and Services in Angular

Day6: RxJS Library – Observables

Day7: Http Client – Server calls in Angular

Day8: Routing and Security in Angular

# Day2 Parent-Child Component Communication



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## Index – Day2

- Component communication
- Data Sharing between components
- Parent- Child using @Input()
- Child Parent using @Output

## Sharing data between child and parent

- A common pattern in Angular is sharing data between a parent component and one or more child components.
- Implement this pattern with the @Input() and @Output() decorators.

## @Input and @Output

- @Input() and @Output() give a child component a way to communicate with its parent component.
- @Input() lets a parent component update data in the child component.
- Conversely, @Output() lets the child send data to a parent component.



# @Input()

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# @Input

Parent

data flow

Child

## @Input()

 To use the @Input() decorator in a child component class, first import Input decorator and then decorate the property with @Input()

#### greeting.component.ts

```
import { Component, Input } from '@angular/core';
export class GreetingComponent {
     @Input() uname = "; // decorate the property with @Input()
}
```

## @Input() - Configure Child

#### greeting.component.ts

```
import { Component, Input } from '@angular/core';
export class GreetingComponent {
     @Input() uname = "; // decorate the property with @Input()
}
```

#### greeting.component.html

<h3>Welcome to {{uname}}</h3>

### **Configure Parent component**

#### app.component.ts

```
import { Component, Input } from '@angular/core';
export class AppComponent {
        user1:string = "John";
}
```

#### app.component.html

```
<app-greeting uname="Narasimha"></app-greeting> <app-greeting [uname]="user1"></app-greeting>
```

#### **Parent & Child**

#### greeting.component.ts

```
import { Component, Input } from '@angular/core';
export class GreetingComponent {
         @Input() uname = ";
}
```

#### greeting.component.html

<h3>Welcome to {{uname}}</h3>

#### app.component.ts

```
import { Component, Input } from '@angular/core';
export class AppComponent {
        user1:string = "John";
}
```

#### app.component.html

```
<app-greeting uname="Scott"></app-greeting> <app-greeting [uname]="user1"></app-greeting>
```

# Practical HandsOns



# Output

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# @Output() decorator

- The @Output() decorator in a child component lets data flow from the child to the parent.
- @Output() marks a property in a child component as a doorway through which data can travel from the child to the parent.

# @Output

Parent

data flow

Child

# @Output() decorator

- The child component uses the @Output() property to raise an event to notify the parent of the change.
- To raise an event, an @Output() must have the type of EventEmitter,
- EventEmitter is a class in @angular/core that you use to emit custom events.

# @Output() decorator --- configure child

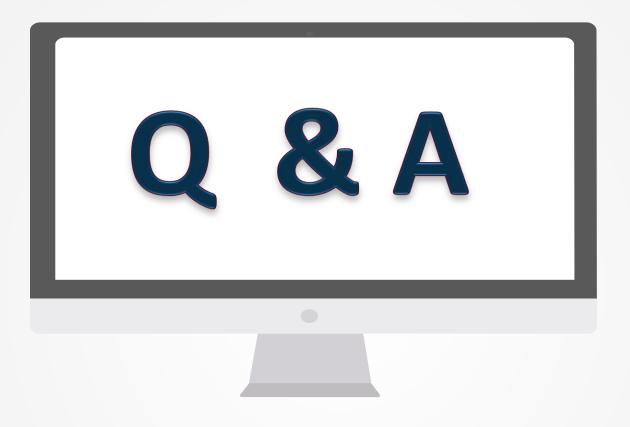
- 1. import { Output, EventEmitter } from '@angular/core';
- @Output() onDeptRemove:EventEmitter<number> = new EventEmitter();
- this.onDeptRemove.emit(dno);

# @Output() decorator --- configure parent

<app-dept-details
 (onDeptRemove)="deptRemove\_click\_parent(\$event)">
 deptRemove\_click\_parent(dno:number) { ... }

- The event binding, (onDeptRemove)="deptRemove\_click\_parent(\$event)",
  - connects the event in the child onDeptRemove,
  - to the method in the parent deptRemove\_click\_parent().
- The \$event contains the data that the user selected department in child template UI.

# Practical Hands-Ons



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