Angular Training

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Schedule for Angular Training

Day#	Date	Topic
Day-1	21-Feb-2024	• Introduction to Angular, Components
Day-2	**24-Feb-2024**	• **Templates** • **Template Driven & Reactive Forms**
Day-3	25-Feb-2024	• Services & Dependency Injection • Pipes & Data Formatting
Day-4	26-Feb-2024	• Angular Routing • Angular Modules
Day-5	27-Feb-2024	• HTTP Client • Observables & RxJS Library
Day-6	28-Feb-2024	• Recap Angular and Q & A • Case Study

Index – Day2

- Recapping Angular Introduction
- Angular Components
- Templates
- Data Binding

Angular Introduction

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Introduction to Angular

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What is Anguar?

- Angular is an open-source framework for building dynamic web applications. It's written in TypeScript and maintained by Google.

- What Angular is used for Building single-page web applications (SPAs), Developing mobile applications, and Creating user interfaces (front-ends).

Features of Angular

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Features of Angular Framework

- Component Based

- TypeScript Language

- HTML Template

- Data Binding

- Routing

Angular CLI Environment Setup

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Environment Setup

- ## Install Node JS

- ## Install typescript

- ## Install Angular CLI

  npm install –g @angular/cli@16.1.0

Create angular project

- **ng new my-project**
- **cd my-project**
- **ng   s   -o**
  http://localhost:4200

Building Blocks of Angular Application

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Building Blocks of Angular Application

- Modules
- Components
- Pipes
- Services
- Directives
- Routing

Understanding Components

Component $=$ Template $+$ Class
properties
methods
$+$ @Component()
Metadata

UI

Code

Extra data

Component Decorator

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

@Component({
  selector: 'app-root',
  templateUrl: './app.component.html',
  styleUrls: ['./app.component.css']
})
export class AppComponent {
  title = 'my-app';
}
```

@Component() decorator


```typescript
src > app > TS app.component.ts > AppComponent
1    import { Component } from '@angular/core';
2
3    @Component({
4      selector: 'app-root',
5      templateUrl: './app.component.html',
6      styleUrls: ['./app.component.css']
7    })
8    export class AppComponent {
9
10     public uname:string  = "Scott";
11     public email:string  = "scott@gmail.com";
12     public age:number    = 25;
13     public isValidUser:boolean = true;
14   }
15
```

Tag Name

decorator
component decorator
provides metadata

UI Logic File

CSS Files

Practical Implementation

Templates in Angular

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Data Handling

Data Handling

1. Scalar

2. Arrays

3. Object

4. **Array of Objects**

George Bluth   Janet Weaver   Emma Wong   Eve Holt   Charles Morris   Tracey Ramos

Data Binding

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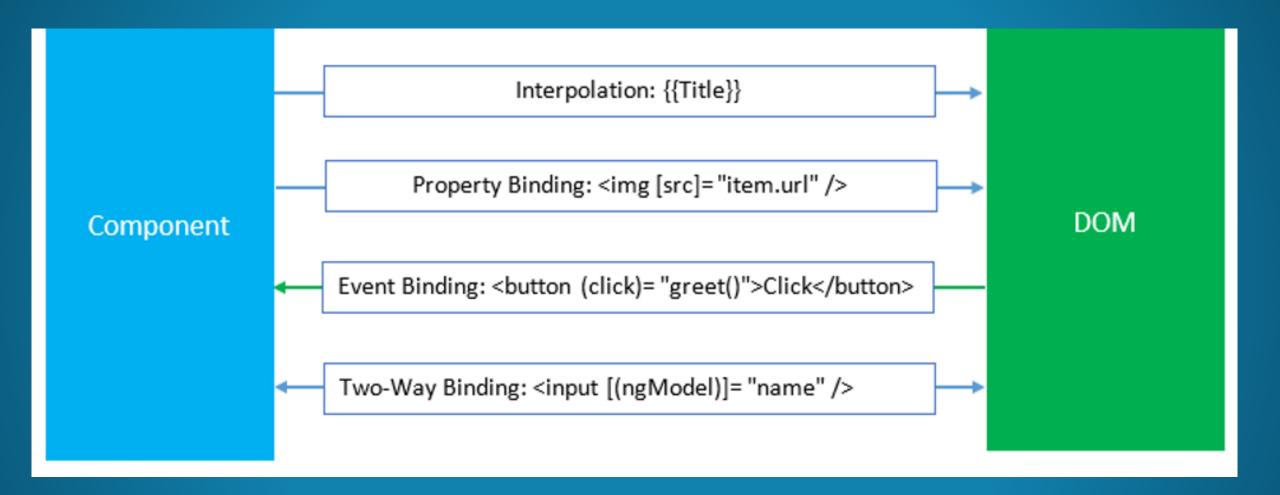
Data Binding

1. Interpolation   ---   {{ }}

2. Property binding   ---   []

3. Event binding   ---   ()

4. Two-way binding   ---   [()]

Question

1. How to use even and odd variables in *ngFor?

Directives in Angular

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Directives in Angular

1. Structural directives

2. Attribute directives

Directives in Angular

1. *ngIf, *ngFor, *ngSwitchCase, *ngSwitchDefault
2. ngSwitch, ngClass, ngStyle, ngModel

Usage of ngSwitch

```
<tag [ngSwitch]="variable">
    <tag *ngSwitchCase=" value ">  </tag>
    <tag *ngSwitchCase=" value ">  </tag>
    ........

    ........
    <tag *ngSwitchDefault> </tag>
</tag>
```

1. Mr./Ms. **Scott** joined in Angular course.
2. Mr./Ms. **Smith** joined in HTML5 course.
3. Mr./Ms. **Smith** joined in React JS course.
4. Mr./Ms. **James** joined in Angular course.
5. Mr./Ms. **Adam** joined in Java Script course.
6. Mr./Ms. **Sathya** joined in React JS course.
7. Mr./Ms. **Mark** joined in Angular course.
8. Mr./Ms. **Peter** joined in HTML5 course.
9. Mr./Ms. **Maneesh** joined in React JS course.
10. Mr./Ms. **Ramesh** joined in Angular course.
11. Mr./Ms. **Vinush** joined in Java Script course.
12. Mr./Ms. **Haneesh** joined in React JS course.

S.No.	Student Name	Course Name
1	Scott	Angular
2	Smith	HTML5
3	Smith	React JS
4	James	Angular
5	Adam	Java Script
6	Sathya	React JS
7	Mark	Angular

Scott	Smith	Smith	James
Angular	HTML5	React JS	Angular
Adam	Sathya	Mark	Peter
Java Script	React JS	Angular	HTML5
Maneesh	Ramesh	Vinush	Haneesh
React JS	Angular	Java Script	React JS

Usage of ngIf

```
<div *ngIf="uid == 'admin' ">
  Content to render when condition is true.
</div>
```

Usage of ngClass

```
<div [ngClass]=" 'first second' ">
...
</div>
```
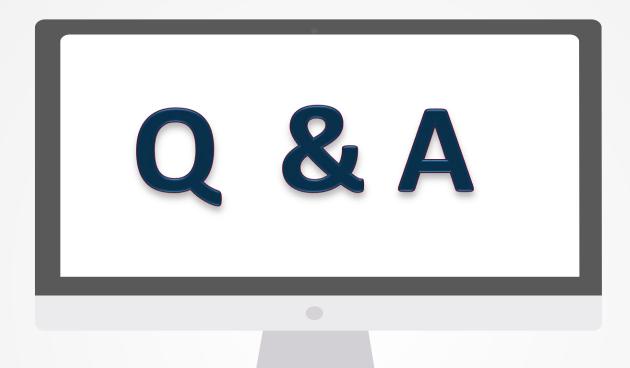
```
<div [ngClass]=" {'first': true, 'second': true} ">
...
</div>
```

Practical Assignment

Templates in Angular Components

1. Where is the template location?
2. Wat is Data Binding?
3. Explain The Mustache {{ }} Syntax
4. How to setting DOM Element Properties?
5. How to setting Element Body Text?
6. What is Event Binding?
7. Explain how to looping Using ngFor?
8. What are the Attribute Directives?
9. What are the Structural Directives
10. What is two-way data binding?