1. **What is Angular**

Angular is a JavaScript binding framework which bind the HTML UI and JavaScript Model.

This helps you to reduce your effort on writing those lengthy lines of code.

Adding to it, it also helps you to build SPA by using the concept of routing. It also has a lot of other features like HTTP, DI, Input output because of which you do no need other frameworks.

1. **Versiones de Angular**

AngularJS use JavaScript and Angular 2 and beyond use typescript

AngularJS use architecture controller and Agular 2+ use component

Angular2+ has mobile compliant, CLI, Lazy loading, SEO, and is server side

1. **What are directives in Angular**

Directives help you attach behavior to your HTML Dom, or Directive is a agular sintaxis inside HTML

Example Directive

[(ngModel)]=”value”

Even {{valorx}} puede verse como una directive

1. **Types of directives**

**S = Structural** : Change the DOM layout by adding and removing elements (NgIf, NgFor, NgSwith)

**A = Attribute**: Change the appearance and behaviour of HTML elements ([hidden],[disable])

**C = Component**: Directives with templates. Its like a user control. (Create own components like a grid or any custom control, we use @Component to created )

1. **What is it NPM and Node\_Modules folder?**

NPM is a package manager which makes installation of javascript framework easy.

Node\_modules is the folder where all the packages are installed.

What is the package.json file?

This file it has all javascript references needed for a project, so rather than installing one package at a time we can install all packages in one go.

1. **What is typescript?**

Typescript is a superset of javascript, it added types to javascript, the code typescript is converted to javascript.

It gives OOP environment which transpiles (converts to javascript)

Its strongly typed we will have less errors and because we can do OOP with javascript our productivity and quality also increases.

With the command tsc the javascript file is generated

Example: tsc demo.ts

1. **What is Angular CLI?**

Is a command line interface by which we can create initial Angular project template. So rather than starting from scratch we have some boiler plate code.

Npm install @angular/cli

Ng new myproject

Angular cli helps you to create a project base.

1. **What is a Component(@Component) and module(@NgModule) in Angular?**

Like angular is a binding framework, it helps you to bind your view and model easily

The Component is the mediator between the model and the view (html)

Module can group a angular components, this happens on large project where we have many views, components and models

We use decorator(@Component, @NgModule, @Inject) to define what kind of class is this in angular framework.

1. **What are Annotation or Metadata?**

The answer is the same: We use decorator(@Component, @NgModule, @Inject) to define what kind of class is this in angular framework.

1. **What is a template?**

Is an HTML view of angular in which we can write directives.

There are two ways of defining template, one is inline and other is a separate html file.

1. **Which are the four types of data binding in angular?**

String interpolation: **{{value}}**

Property binding: <img **[src]** = “imgurl”/>

Event binding: <button **(click)**=”save()”></button>

Two-way data binding: **[(ngModel)]** =”id”

1. **Explain architecture of angular?**

1 view

2 component

3 module

4 binding

5 directive

6 service

7 dependency injeccion

1. **What is SPA in angular?**

Is the concept to load a section of the page needed, so header, footer, sidebar and menus don’t reload on any action.

We implement SPA with routing, Routing is simple collection which has two things URL and when this url is called which component to load.

Routing helps you to define the navigation for your angular application. So if you want to move from one screen to other screen and you want to respect SPA that means not loading and refreshing the whole UI routing is needed.

We do this doing:

1 creating our routes in our app.modules

2 In our HTML add <router-outlet></router-outlet>

3 go to your menus and add [routerLink]=”[‘Home’]”\

1. **What is Lazy loading?**

Its on demand loading, this mean loading only the necessary HTML, CSS and javascript files, so that we going to get a better perfomance.

We can implement lazy loading, dividing the project in to modules, example customers, bills, sales, etc.

1. **Define Services?**

Services helps you to share common logic across angular projects

1. **What is Dependency Injection?**

DI is a design pattern where rather than create object instances from within the component, Angular injects it via the constructor.

1. **How implement Dependency Injection?**

Inside the @ngmodule in the providers property we define the class to load

1. **What is the benefit of Dependency Injection?**

DI helps to decouple class dependencies, so that when you add new dependencies you do not have change everywhere.

1. **What is the different ng serve and ng build?**

“Ng serve” builds inmemory while “ng build” build on disk, so when you want to go for production you have to use ng build

1. **Explain the –prod parameter in ng build command ?**

Ng build –prod flag compresses you js file, removes comments, creates GUIDs of your js files and make your application ready for production

1. **Explain ViewChild and ViewChildren ?**

“ViewChild” helps to reference view objects in the component to which is connected

Viewchild references one object while viewchildren references a collection.

1. **Why do we need template reference in angular ?**

Template reference helps you to refer a html dom elements and angular components and directives. To create a template reference I can use #nameobject

1. **What is content projection?**

Is when we want to project content, html content and component content from the parent component to the child component.

We want to show some html portin from one component (comp1) inside other component (comp2) inside the tags <ng-content>

1. **Explain content projection slot?**

We use <ng-content select=”slot1”> to specify in which ng content we want to show

1. **What is contentchild and contentchildren?**

Helps you to access projected contents from the parent component.

1. **ViewChild vs ViewChildren vs ContentChild vs ContentChildren?**

“ViewChild” and “ViewChildren” helps to reference view elements which belomgs to his own views.

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