Angular Interview Questions

Decorators – used extensively and are also used to compile a code. Can create custom

* Class decorators - @Component, @NgModule
* Property decorators - @Input, @Output
* Method decorators - @HostListener
* Parameter decorators @Inject

Used @Component, @Injectable, @NgModule, @Routes

CLI Commands

Component directory structure

* Module.ts – module is declared @NgModule decorator is used which initializes the different aspects of angular applications. AppComponent is also declared in it.
  + Declarations are which directives belong to the module
  + Imports which other modules this module uses
  + Bootstrap – startup
  + Providers – service
* Components.ts – defines the components in angular and this is the place where the app-root sector is also defined. A title attribute is also declared in the component
* Component.html – html template

\*ngFor – for loop to iterate through a list

Property Binding – {{}} string Interpolation

\*ngIf – if directive

Angular diff between component and directive

* @component vs @directive
* Directive is used to add behavior to an existing element where a component is used to create a component with attached behavior.
* directive attached different behaviors to existing dom element.
* Component break app into smaller components

Isolated Unit Tests – testing individual units of code.

Routing –

What is Angular

* Typescript based front end web app

Different Versions

Library – collection of functions which are useful when writing web apps. jQuery

Frameworks – a particular implementation of a web application, where your code fills in the details. The framework is in charge and it calls into your code when it needs something app specific

Difference between observable and promises

* Observable is a more powerful way of handling HTTP asynchronous requests. Whereas, A promise handles a single event when an asynchronous operation completes or fails.
* Observable is like a stream which allows passing zero or more events where the callback is called for each event. A promise eventually calls the success or failed callback even when you don’t need the notification or the result in provides anymore.
* Observable works with multiple values for a particular time. Promise works with and even returns a single value at a time.
* Observables can be canceled. Promise cannot be canceled.
* Observable supports map, filter, reduce and similar operations. Promises have more readable codes with try/catch and async/await.
* Observable supports retry and can be used to retry whenever needed. Promises cannot be retried.

Constructors vs NgOnInit

* Constructors are used for initializing class members and for dependency injection.
* NgOnInit for initialization work.
* Both called when component created.
* Constructor called when class instantited, used for property initializing
* NgOnInit is the class we import when implementing the constructor in order to use it in a class.

Shared module used for components used in more than one lazy loaded module.

ActivatedRoute & RouterState

* ActivatedRoute consists of the information about a route associated with a component loaded in an outlet. Whereas, RouterState represents the state in which the writer actually is
* We need ActivatedRouteSnapchat to traverse all the activated routes. Whereas, during a navigation, after redirects have been applied, the router creates a RouterStateSnapshot.
* ActivatedRouteSnapshot has old data. When route changes, ActivateRouteSnapshot has data from previous route. RouteState cares about application components

Angular vs AngularJS

* No scope
* [] for property () for event
* Mobile dev – desktop development is much easier when mobile performance issues are handled firt
* Modularity – much core functionality has moved to modules, producing a lighter, fater core
* Modern Browser only – reducing the need for browser compatibility workarounds
* TypeScript
  + Class based Object Oriented Programming
  + Static Typing
  + Generics

JSON Web Token – used for Authentication & information exchange

* HMAC algorithm
* RSA algorithm

JSON Web Token Structure

* Header
* Payload
* Signature