Angular2/4 Testing Answer

1. **What’s New in Angular 2? (10 credits)**

Answer: **1.**    Smaller & Faster Apps

**2.**    View Engine Size Reduce

**3.**    Animation Package

**4.**    NgIf and ngFor Improvement

**5.**    Template

**6.**    NgIf with Else

**7.**    Use of AS keyword

**8.**    Pipes

**9.**    HTTP Request Simplified

**10.** Apps Testing Simplified

**11.** Introduce Meta Tags

**12.** Added some Forms Validators Attributes

**13.** Added Compare Select Options

**14.** Enhancement in Router

**15.** Added Optional Parameter

**16.** Improvement Internationalization

**(2) What Happen when I Import the same Module Twice in Angular 4? (10 credits)**

Answer: No problem! We can import the same module twice but Angular does not like modules with circular references.

1. **How to use Dependency Injection (DI) correctly in Angular 2? Write an example in Angular2 code? (15 credits)**

Answer: The basics Steps of Dependency injection,

1. A class with @Injectable() to tell angular 2 that it’s to be injected “UserService”.

2. A class with a constructor that accepts a type to be injected.

Example, UserService marked as @Injectable as,

**import** {Injectable, bind} from 'angular2/core';**import** {Http} from 'angular2/http';

@Injectable() /\* This is #Step 1 \*/**export** **class** UserService {

**constructor**(http: **URL** /\* This is #Step 2 \*/ ) {

**this**.http = URL;

}

}

**import** {Injectable} from "@angular/core";

@Injectable()**export** **class** InjectToService {

id: **string**;

**constructor**() {

**this**.resetPasscode();

}

resetPasscode(): **void** {

**this**.id = **this**.generatePasscode();

}

**private** generatePasscode(): **string** {

**var** date = **new** Date().getTime();

**var** pascode = '00X000-00000-7000-Z0000-00000'.replace(/[xy]/, **function**(f) {

**var** random = (date + Math.random() \* **16**) % **16** | **0**;

date = Math.floor(date / **16**);

**return** (f == '0' ? random : (random & **0x3** | **0x8**)).toString(**16**);

});

**return** pascode;

};

}

1. **What Is the forRoot Method in Angular 4? (10 credits)**

Answer: The forRoot is a static method and it’s very easy for developers to configure the modules and the best example is - **RouterModule.forRoot**.

**(5) What Is Pipes? Write at least four built-in pipes. Why Use Pipes in Angular? (15 credits)**

Answer: “Pipes transform displayed values within a template.” Sometimes, the data is not displays in the well format on the template that time where using pipes. **Pipe’s Key Points** - Pipe class implements the “**PipeTransform**” interfaces transform method that accepts an input value and returns the transformed result.

There will be one additional argument to the transform method for each parameter passed to the pipe.

The “@**Pipe**” decorator allows us to define the pipe name that is globally available for use in any template in the across application.

**Angular Built-in Pipes -**

1.          DatePipe,

2.          UpperCasePipe,

3.          LowerCasePipe,

4.          CurrencyPipe,

5.          PercentPipe,

6.          JsonPipe,

7.          AsyncPipe,

**Why Use Pipes in Angular?**

Sometimes, your data is not displays in the correct format on the template that time where using pipes. You can also execute a function in the template to get its returned value.

**(6) Using Angular code write a custom pipe to realize the string reverse. (10 credits)**

import { Pipe, PipeTransform } from '@angular/core';

@Pipe({name: 'reverseStr'})

export class ReverseStr implements PipeTransform {

transform(value: string): string {

let newStr: string = "";

for (var i = value.length - 1; i >= 0; i--) {

newStr += value.charAt(i);

}

return newStr;

}

}

**(7) Write a component with click event binding. (10 credits)**

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

@Component({

selector: 'on-click',

template: '<div> <button (click)="onClick()">Click me!</button>{{message}} </div>'

})

export class OnClickComponent {

message = "";

onClick() {

this.message = 'Hey, How are You?';

}

}

**(8) What elements can be add to module’s declarations? (10 credits)**

Answer: We can add the declarable classes like components, directives and pipes in the module's declarations list.

**(9)What is ngForOf? (10 credits)**

Answer: The NgForOf directive instantiates a template once per item from an iterable. The context for each instantiated template inherits from the outer context with the given loop variable set to the current item from the iterable.