

Day 1 : 14/10/2023

4 phases

Course 1 or Phase 1

Agile

Git

MySQL

HTML

CSS

JavaScript

TypesCRIPT

Angular

Testing cucumber

E-Shopping – App

Actor or type of users

Admin

SignIn no SignUp

Emaild : admin@gmail.com

Password : admin@123

Admin Dashboard

Category : Add, Delete, Update, View

Product : Add, Delete, Update, View

Admin can view all customer order details.

Customer

SignUp and SignIn

Account : accno and amount

View all Products

Customer add the product in cart

Place the order

Customer can view its own order details.

Angular service to call Rest API using `HttpClient`

Node js provided external module ie `json-server` which help us to make

Normal json file as small db server or we can create our own rest api.

```
npm install -g json-server
```

```
json-server filename.json
```

create angular new project

```
ng new e-shopping-admin-app
```

routing -> yes

styling -> css

move inside a project folder using `cd projectname`

and run these below command to create component, service and model classes.

```
npm install -g @angular/cli
```

```
ng g c login          component
```

```
ng g class login      model class
```

```
ng g s login          service class
```

```
ng g c dashboard      component
```

```
app.component.html
```

```
ng g c category       component
```

```
ng g class category   model class
```

```
ng g s category       service class
```

```
ng g c product        component
```

```
ng g class product    model class
```

```
ng g s product        service class
```

According to Rest API

Get method : for retrieve the resource like category information

Select query

Post method : for create the resource or store

Insert query

Put method : update existing resource

Update query

Delete method : delete the resource

Delete query

Course 2 or Phase 2

Java

Course 3 or Phase 3

Course 4 or Phase 4

Promise Vs Observable

Promise is a pre defined javascript object which help to handle asynchronous event of data.

If we want to handle promise we need to use then and catch

`fetch("url")`

fetch is pre defined javascript function. Return type is promise

`fetch(url).then(callback).catch(callback).finally(callback);`

If promise resolve then call to load the data if promise rejected then catch will call.

After then or catch finally will execute.

Promise load whole data at time. And promise can't cancel.

Observable is a part of rxjs. (reactive js). Rxjs is third party library.

httpClient return type is observable. Observable is use to handle asynchronous event of data.

To handle the observable we need to use subscribe.

Subscribe take 3 parameters

1. Next : it is use to load the data one by one like then
 2. Error : while loading data if we get any error then 2nd parameter get call to handle the error like catch
 3. Complete : if any error then third parameter get called. Like Finally
- Observable can be cancel using un subscribe.

Day 2 : Pending topic from Course 1 ie Angular and Testing angular using cucumber

Custom pipe

About project

Angular testing using cucumber

Testing :

Testing is use to find the defect or error or bugs in the application.

Black box testing

Input process output

White box testing

Input process output

Unit testing : unit testing is type of software white box testing which help to test function functionality working or not.

Function

Method

Class

Modules etc

Jasmine : Jasmine is an open source unit testing framework provided by third party which help to test JavaScript or typescript or node js code.

Jasmine provided lot pre defined functions

ie

describe : describe function provided by jasmine or other testing framework. Which also known as test suite. Inside describe we can write more than one it function ie test case as well as

another test suite ie describe.

```
describe("Message",()=> {
```

```
  })
```

It : it is a pre defined function which help to test function functionality. Inside it we can write more than one assert functions.

```
describe("Message",()=> {
```

```
  it("first test",()=> {
```

```
  })
```

```
  it("second test",()=> {
```

```
  })
```

```
})
```

assert functions.

Karma : Karma is test runner which help to display the output or result on browser as well as console.

Angular user typescript code and they provided special classes

Like component, service, pipe, module

Angular internally provided configuration for jasmine and karma and it provide angular utilities

Classes to test angular **component, service, pipe or modules**.

ie **TestBed**.

Layer architecture application

UI layer

Business layer

Database layer

Rest api or controller layer

app.module.ts file is main module

login.module.ts

create more than component

customer.module.ts

customer related all component and service

angular testing using jasmine and karma.

ng new angular-jasmine-testing

routing → no

styling → css

E2E testing : End to End testing mainly use to do the behavioural testing.

Jasmine is unit testing.

Cucumber is a type of behaviour testing framework.

Internally angular provided E2E testing folder and they internally use **protractor** testing tool to do E2E testing.

Create new project ie

ng new angular-cucumber-test

cd angular-cucumber-test

ng e2e angular-cucumber-test

then select no

now run the command as **ng add @cypress/schematic**

two times please write Yes.

Then open the project in Vs code

In cypress folder

Open the folder as e2e

Then open the file as spec.cy.ts

And run the command as **ng e2e**

Chai is a third party library which provided lot of pre defined function to check expectation output.

Mocha with Chai

Typescript testing we can do

1. Jasmine with Karma
2. Mocha with Chai
3. JEST

Cucumber testing using plain text

So first install third party dependencies

```
npm install cypress-cucumber-preprocessor
```