1. we will give 3rd perameter as next and will call next() within function in **middleware**.
2. **Model** is like a database schema where we will put the info pertaining to the collections model name should be like collection name.
3. Node js default port – 8000
4. mongodb default port 27017

JAVA SCRIPT

1. JavaScript is a single-threaded programming language which means only one thing can happen at a time.
2. Using asynchronous JavaScript (such as callbacks, promises, and async/await), you can perform long network requests without blocking the main thread.
3. RxJS (Reactive Extensions for JavaScript) is a library for reactive programming using observables that makes it easier to compose asynchronous or callback-based code .The library also provides utility functions for creating and working with observables.
4. **RxJS** is a library that lets us create and work with observables.
5. **Injectable** means Dependency injection
6. **observables** are simply a function that are able to give multiple values over time, either synchronously or asynchronously
7. An Observable is like a Stream (in many languages) and allows to pass zero or more events where the callback is called for each event.
8. With Observable it doesn't matter if you want to handle 0, 1, or multiple events.
9. the main difference between a promise and an observable is that a promise emits only a single value, whereas an observable emits multiple values.
10. **Interceptors** allow us to intercept incoming or outgoing HTTP requests using the HttpClient.
11. we will generate the inceptor and it should be register in module.ts under the provider with [provide:HTTP\_INTERCEPTORS,useClass:BoyInterceptor,multi:true ]
12. hoisting- variables and function declarations are moved to the top of their scope before code execution - in this case function will be print but variable would become undefind.
13. var- we can declare again it and we can rewrite the value again

let -we can rewrite the value but we can not declare it again.

const-neither we can declare nor rewrite value.

1. **Closure** - to use the outside function variable in the inner function and closures can be perform with local variable and global variable.
2. pipes - uppercase, lowercase ,titlecase.
3. Route Guard- need to generate Guard and service
4. **@view child-USING COMPONENT** - its a decorator and it is used for component communication. if a parent component wants to use child component then we can use it.
5. **@view child-USING TEMPLATE VARIBALE**- its a decorator. WE will use ElementRef in it.
6. **Directives**- It is use for modify the DOM and HTML Element.We will use ElementRef in it.

Directives are classes that add additional behavior to elements in your Angular applications.

With Angular's built-in directives, you can manage forms, lists, styles, and what users see.

1. Data types - <String, Number, Boolean, Array, Object, Null>
2. OPERATOR <AND - && OR - || AND - && >
3. BOX < alert(); prompt(); confirm();>
4. <console.log("")
5. console.warn();

document.write();

console.table([1,2,3])

console.error()>

1. <Below console would be use togeather.>

console.time("test")

console.Endtime("test")

1. ARRAY METHOD <Array methods will be use with . >
2. var a = [ 1,2,3];
3. a.sort()
4. sort() - it will sort the array in alphabetical order or in number series order
5. reverse() - it will reverse the values of array
6. pop() - it will delete the last value of the array
7. push(value) - it will add the value in the last in the array.
8. shift()- it will delete the first value of the array
9. unshift() - it will add the value in the beginning in the array.
10. concat() - it will add the arrays value
11. join()
12. New feature of ANGULAR 11

Updated HMR

type script 5 suppot

webpack 5 support

moved from Tslint to ESLint

remove support from IE 9, 10

1. WEBPACK- its a bundler which put all the JS file in a single JS file. Webpack has its own server , the name is webpack-dev-server
2. GULP- Dist and src folder would be created
3. **INTERCEPTOR**- It is like a middleware

Interceptors are a unique type of Angular Service that we can implement.

Interceptors allow us to intercept incoming or outgoing HTTP requests using the HttpClient .

By intercepting the HTTP request, we can modify or change the value of the request.

1. Functions running in parallel with other functions are called asynchronous

A good example is JavaScript setTimeout()

1. ngOnInit() is a place to put the code that we need to execute at very first as soon as the class is instantiated.

Constructor initialize class members.

1. ActivatedRoute Contains the information about a route associated with a component loaded in an outlet.

It can also be used to pass data from one component to another component using route such as Id, flag, state etc.

1. SnapShot - If you don't want to update your URL parameter within the same component you are accessing it, then you can use the snapshot
2. ParamMap - A map that provides access to the required and optional parameters specific to a route.
3. The map supports retrieving a single value with get() or multiple values with getAll().
4. npm init command for create the package.json
5. ExpressJS manages the workflow between the front-end and the database and facilitates a smooth and secure transfer of data
6. Angular gives us 8 hooks to allow us to tap into the lifecycle of our components and trigger actions at specific points in the lifecycle.

ngOnChanges ngOnInit ngDoCheck ngAfterContentInit ngAfterContentChecked ngAfterViewInit ngAfterViewChecked ngOnDestroy.

1. **Decorators** are functions that allow a service, directive or filter to be modified prior to its usage

It adds additional metadata information like the template, selector name, styles etc.

1. CORS allows servers to specify who (i.e., which origins) can access the assets on the server, among many other things.
2. Concurrency - Concurrency is the concept of executing two or more tasks at the same time. We can handle it with events and callback in node js.
3. **ng-template** is an Angular element used to render HTML templates. We use ng-template with angular \*ngIf directive to display else template.
4. Two way binding get implemented with [(ngModel)]

When we need to display and update the same data then we used to two way binding