HTTP Interceptor

* Http interceptor in angular are used to intercept and modify HTTP request or responses.
* It is useful for adding authentication tokens,logging,error handling, modify headers

Step:1 Create New App

* ng new interceptor-app
* cd interceptor-app

Step:2 Create New Service :HTTP

* ng g s services/data

import { HttpClient } from '@angular/common/http';

import { Injectable } from '@angular/core';

import { Observable } from 'rxjs';

@Injectable({

  providedIn: 'root'

})

export class DataService {

  //DI

  constructor( private http: HttpClient) {}

  getData():Observable<any>{

    return this.http.get('https://jsonplaceholder.typicode.com/posts');

  }

}

Step:3 Create Interceptor

* ng generate interceptor interceptors/auth

import { Injectable } from '@angular/core';

import {

  HttpRequest,

  HttpHandler,

  HttpEvent,

  HttpInterceptor,

  HttpErrorResponse

} from '@angular/common/http';

import { catchError, Observable, throwError } from 'rxjs';

@Injectable()

export class AuthInterceptor implements HttpInterceptor {

  constructor() {}

  intercept(request: HttpRequest<any>, next: HttpHandler): Observable<HttpEvent<any>> {

    //return next.handle(request);

    // 1. clone the request and add authorization header

      const token=' Bearer sample-token-123';

      const cloneRequest=request.clone({

        setHeaders:{

          Authorization: token

        }

      });

    // 2. Handle the response and catch the errors

    return next.handle(cloneRequest).pipe(

      catchError((error: HttpErrorResponse)=>{

        console.log('Http Error:',error);

        return throwError(()=>error);

      })

    )

  }

}

Step:4 Provide the Interceptor

* update app.module.ts file

providers: [

    {

      provide: HTTP\_INTERCEPTORS,

      useClass:AuthInterceptor,

      multi: true // important for chaining multiple interceptors

    }

  ],

**Step:5 Use Service in Your Component**

App.component.html

<div class="container">

  <h1>HTTP APP</h1>

  <ul>

    <li \*ngFor="let p of posts">{{p.title}}</li>

  </ul>

</div>

App.component.ts

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

import { DataService } from './services/data.service';

@Component({

  selector: 'app-root',

  templateUrl: './app.component.html',

  styleUrls: ['./app.component.css']

})

export class AppComponent implements OnInit {

  posts: any[]=[];

  constructor(private service: DataService){}

  ngOnInit(): void {

   this.service.getData().subscribe({

    next:data=> this.posts=data,

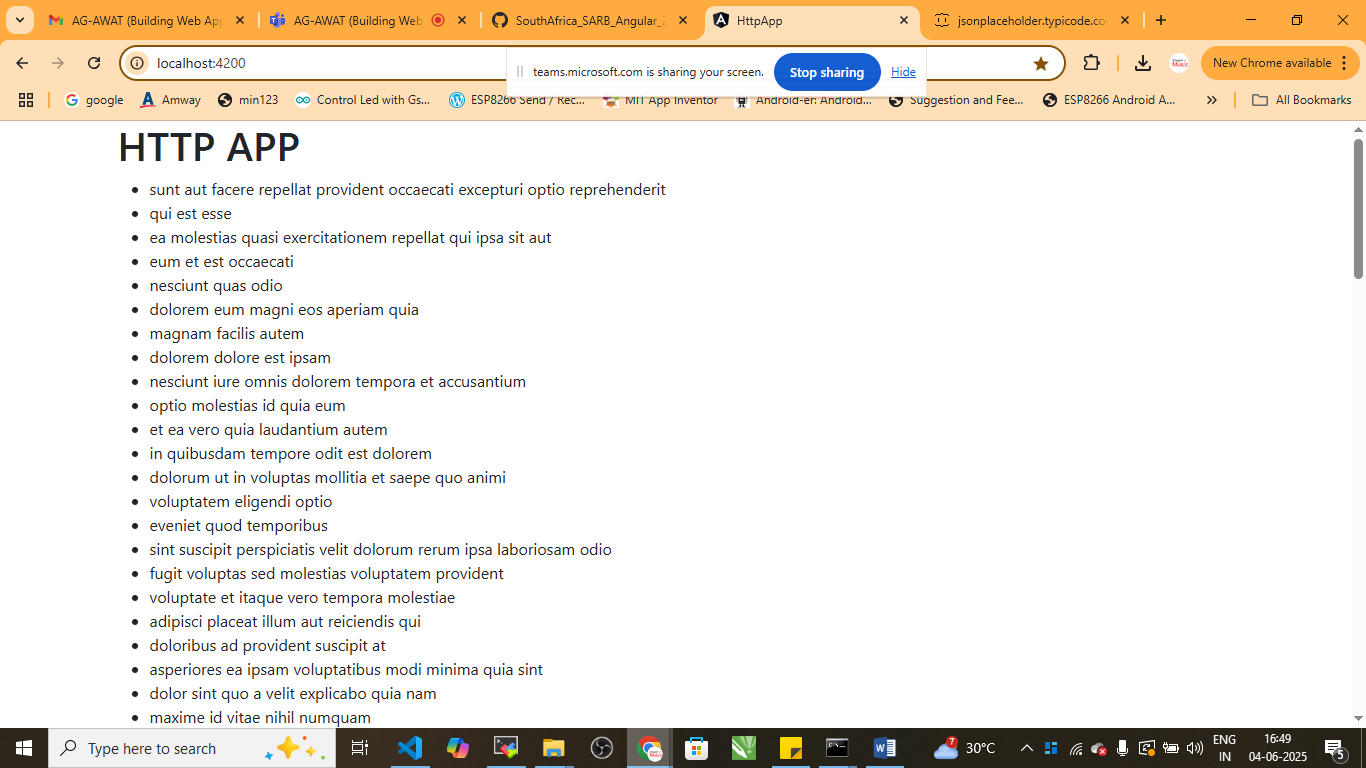
    error: err=> console.log('Component Error: ',err)

   });

  }

  title = 'HttpApp';

}



**Task: Create an Auth Token and Error Handling Interceptor with a Spinner**

**🎯 Objective:**

Build an Angular 15 app that:

1. Uses an HTTP interceptor to:
   * Add a fake **Authorization** header to each request.
   * Show a loading spinner while the request is in progress.
   * Hide the spinner once the request completes (success or error).
   * Log any HTTP error to the console.