//src\app\reviews\agent-response\agent-response.component.css

//src\app\reviews\agent-response\agent-response.component.html

<h5>Respond to Review</h5>

<textarea [(ngModel)]="responseMessage" placeholder="Write a response..." required></textarea>

<br />

<button (click)="submitResponse()">Submit Response</button>

//src\app\reviews\agent-response\agent-response.component.spec.ts

import { ComponentFixture, TestBed } from '@angular/core/testing';

import { AgentResponseComponent } from './agent-response.component';

describe('AgentResponseComponent', () => {

  let component: AgentResponseComponent;

  let fixture: ComponentFixture<AgentResponseComponent>;

  beforeEach(async () => {

    await TestBed.configureTestingModule({

      imports: [AgentResponseComponent]

    })

    .compileComponents();

    fixture = TestBed.createComponent(AgentResponseComponent);

    component = fixture.componentInstance;

    fixture.detectChanges();

  });

  it('should create', () => {

    expect(component).toBeTruthy();

  });

});

//src\app\reviews\agent-response\agent-response.component.ts

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

import { CommonModule } from '@angular/common';

 import { FormsModule } from '@angular/forms';

  import { ReviewService } from '../review.service';

@Component({ selector: 'app-agent-response',

   standalone: true,

   imports: [CommonModule, FormsModule],

  templateUrl: './agent-response.component.html',

   styleUrls: ['./agent-response.component.css'] })

export class AgentResponseComponent { @Input() agentId!: number;

  @Input() reviewId!: number;

   responseMessage: string = '';

constructor(private reviewService: ReviewService) {}

submitResponse() { this.reviewService.postAgentResponse(this.agentId,

   this.reviewId,

   this.responseMessage) .subscribe(() => { alert("Response submitted successfully!");

   });

  } }

//src\app\reviews\post-review\post-review.component.css

//src\app\reviews\post-review\post-review.component.html

<h4>Post a Review</h4>

<form (ngSubmit)="submitReview()">

  <input type="number" [(ngModel)]="review.userId" name="userId" placeholder="User ID" required />

  <input type="number" [(ngModel)]="review.rating" name="rating" min="1" max="5" required />

  <textarea [(ngModel)]="review.comment" name="comment" placeholder="Your review..." required></textarea>

  <button type="submit">Submit Review</button>

</form>

//src\app\reviews\post-review\post-review.component.spec.ts

import { ComponentFixture, TestBed } from '@angular/core/testing';

import { PostReviewComponent } from './post-review.component';

describe('PostReviewComponent', () => {

  let component: PostReviewComponent;

  let fixture: ComponentFixture<PostReviewComponent>;

  beforeEach(async () => {

    await TestBed.configureTestingModule({

      imports: [PostReviewComponent]

    })

    .compileComponents();

    fixture = TestBed.createComponent(PostReviewComponent);

    component = fixture.componentInstance;

    fixture.detectChanges();

  });

  it('should create', () => {

    expect(component).toBeTruthy();

  });

});

//src\app\reviews\post-review\post-review.component.ts

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

 import { CommonModule } from '@angular/common';

  import { FormsModule } from '@angular/forms';

   import { ReviewService } from '../review.service';

@Component({ selector: 'app-post-review', standalone: true, imports: [CommonModule, FormsModule],

  templateUrl: './post-review.component.html',

  styleUrls: ['./post-review.component.css'] })

  export class PostReviewComponent { @Input() packageId!: number;

     review = { userId: 0, rating: 1, comment: '' };

constructor(private reviewService: ReviewService) {}

submitReview() { const reviewWithPackageId = { ...this.review, packageId: this.packageId };

 this.reviewService.postReview(reviewWithPackageId).subscribe(() => { alert("Review submitted successfully!");

 });

 }

}

//src\app\reviews\review-list\review-list.component.css

//src\app\reviews\review-list\review-list.component.html

<div \*ngIf="averageRating > 0" class="avg-rating">

    <h3>Average Rating: {{ averageRating.toFixed(1) }} / 5</h3>

  </div><div \*ngFor="let review of reviews" class="review-card">

    <p><strong>User:</strong> {{ review.userId }}</p>

    <p><strong>Rating:</strong> {{ review.rating }}</p>

    <p><strong>Comment:</strong> {{ review.comment }}</p>

    <p><strong>Posted:</strong> {{ review.timestamp | date:'medium' }}</p>

    <div \*ngIf="review.responses?.length > 0">

      <h5>Agent Response(s):</h5>

      <ul>

        <li \*ngFor="let response of review.responses">

          {{ response.responseMessage }} - <i>{{ response.responseTime | date:'short' }}</i>

        </li>

      </ul>

    </div>

  </div>

//src\app\reviews\review-list\review-list.component.spec.ts

import { ComponentFixture, TestBed } from '@angular/core/testing';

import { ReviewListComponent } from './review-list.component';

describe('ReviewListComponent', () => {

  let component: ReviewListComponent;

  let fixture: ComponentFixture<ReviewListComponent>;

  beforeEach(async () => {

    await TestBed.configureTestingModule({

      imports: [ReviewListComponent]

    })

    .compileComponents();

    fixture = TestBed.createComponent(ReviewListComponent);

    component = fixture.componentInstance;

    fixture.detectChanges();

  });

  it('should create', () => {

    expect(component).toBeTruthy();

  });

});

//src\app\reviews\review-list\review-list.component.ts

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

 import { CommonModule } from '@angular/common';

  import { ReviewService } from '../review.service';

@Component({ selector: 'app-review-list',

   standalone: true,

   imports: [CommonModule],

    templateUrl: './review-list.component.html',

    styleUrls: ['./review-list.component.css'] })

export class ReviewListComponent implements OnInit {

  @Input() packageId!: number;

   averageRating: number = 0;

    reviews: any[] = [];

constructor(private reviewService: ReviewService) {}

ngOnInit(): void { this.loadAverageRating(); this.loadReviews(); }

loadAverageRating() { this.reviewService.getAverageRating(this.packageId).subscribe(data => { this.averageRating = data; }); }

loadReviews() { this.reviewService.getReviews(this.packageId).subscribe(reviews => {

   this.reviews = reviews; this.reviews.forEach(review => {

     this.reviewService.getAgentResponses(review.reviewId).subscribe(responses => { review.responses = responses; });

    });

   });

   }

     }

//src\app\reviews\review.service.spec.ts

import { TestBed } from '@angular/core/testing';

import { ReviewService } from './review.service';

describe('ReviewService', () => {

  let service: ReviewService;

  beforeEach(() => {

    TestBed.configureTestingModule({});

    service = TestBed.inject(ReviewService);

  });

  it('should be created', () => {

    expect(service).toBeTruthy();

  });

});

//src\app\reviews\review.service.ts

// == File 1: review.service.ts ==

// src/app/reviews/review.service.ts

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

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

import { Observable } from 'rxjs';

@Injectable({ providedIn: 'root' })

export class ReviewService {

  private reviewBaseUrl = 'http://localhost:8084/api/reviews';

  private responseBaseUrl = 'http://localhost:8084/api/agent-responses';

  constructor(private http: HttpClient) {}

  getAverageRating(packageId: number): Observable<number> {

    return this.http.get<number>(`${this.reviewBaseUrl}/${packageId}/average-rating`);

  }

  getReviews(packageId: number): Observable<any[]> {

    return this.http.get<any[]>(`${this.reviewBaseUrl}/${packageId}`);

  }

  postReview(review: any): Observable<any> {

    return this.http.post<any>(this.reviewBaseUrl, review);

  }

  postAgentResponse(agentId: number, reviewId: number, responseMessage: string): Observable<any> {

    return this.http.post<any>(`${this.responseBaseUrl}/${agentId}/${reviewId}`, { responseMessage });

  }

  getAgentResponses(reviewId: number): Observable<any[]> {

    return this.http.get<any[]>(`${this.responseBaseUrl}/${reviewId}`);

  }

}

//src\app\app.component.html

<h1>Angular is working</h1>

//src\app\app.component.spec.ts

import { TestBed } from '@angular/core/testing';

import { AppComponent } from './app.component';

describe('AppComponent', () => {

  beforeEach(async () => {

    await TestBed.configureTestingModule({

      imports: [AppComponent],

    }).compileComponents();

  });

  it('should create the app', () => {

    const fixture = TestBed.createComponent(AppComponent);

    const app = fixture.componentInstance;

    expect(app).toBeTruthy();

  });

  it(`should have the 'reviewfrontend' title`, () => {

    const fixture = TestBed.createComponent(AppComponent);

    const app = fixture.componentInstance;

    expect(app.title).toEqual('reviewfrontend');

  });

  it('should render title', () => {

    const fixture = TestBed.createComponent(AppComponent);

    fixture.detectChanges();

    const compiled = fixture.nativeElement as HTMLElement;

    expect(compiled.querySelector('h1')?.textContent).toContain('Hello, reviewfrontend');

  });

});

//src\app\app.component.ts

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

import { ReviewListComponent } from './reviews/review-list/review-list.component';

import { PostReviewComponent } from './reviews/post-review/post-review.component';

 import {RouterModule} from '@angular/router';

@Component({ selector: 'app-root',

  standalone: true,

   templateUrl: './app.component.html' })

   export class AppComponent { packageId = 1;

    title = "My Front End Page";

    }

//src\app\app.config.ts

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

import { provideAnimations } from '@angular/platform-browser/animations';

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

export const appConfig = {

  providers: [

    provideHttpClient(),

    provideAnimations(),

  ]

};

//src\app\app.routes.ts

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

import { provideAnimations } from '@angular/platform-browser/animations';

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

export const appConfig = {

  providers: [

    provideHttpClient(),

    provideAnimations(),

  ]

};

//src\app\app.routes.ts

import { Routes } from '@angular/router';

import { ReviewListComponent } from './reviews/review-list/review-list.component';

export const appRoutes: Routes = [

  {

    path: 'packages/:id/reviews',

    component: ReviewListComponent

  }

];

src\index.html

<!doctype html>

<html lang="en">

<head>

  <meta charset="utf-8">

  <title>Reviewfrontend</title>

  <base href="/">

  <meta name="viewport" content="width=device-width, initial-scale=1">

  <link rel="icon" type="image/x-icon" href="favicon.ico">

</head>

<body>

  <app-root></app-root>

</body>

</html>

//src\main.ts

import { bootstrapApplication } from '@angular/platform-browser';

import { appConfig } from './app/app.config';

import { AppComponent } from './app/app.component';

bootstrapApplication(AppComponent, appConfig)

  .catch((err) => console.error(err));