#### course-info.component.html

```
<h2>Course Info</h2>
<hr/>
<form #courseForm="ngForm" *ngIf="course">
   <div class="form-group row">
        <label class="col-sm-2 col-form-label">Name</label>
        <div class="col-sm-10">
                                              <!--'is-invalid' o campo do formulário fica em vermelho quando está em branco-->
            <input [(ngModel)]="course.name" required name="name" #courseName="ngModel" [ngClass]="{'is-invalid' :</pre>
courseName.invalid}" class="form-control">
            <div class="invalid-feedback">
               <span>Course name is required</span> <!--quando estiver inválido, irá aparecer essa mensagem-->
            </div>
        </div>
    </div>
    <br/>
   <div class="form-group row">
        <label class="col-sm-2 col-form-label">Price</label>
                                              <!--'is-invalid' o campo do formulário fica em vermelho quando está em branco-->
        <div class="col-sm-10">
            <input [(ngModel)]="course.price" required name="price" #coursePrice="ngModel" type="number" [ngClass]="{'is-</pre>
invalid' : coursePrice.invalid}" class="form-control">
            <div class="invalid-feedback">
               <span>Course price is required</span> <!--quando estiver inválido, irá aparecer essa mensagem-->
            </div>
        </div>
    </div>
```

```
<br/>
    <div class="form-group row">
        <label class="col-sm-2 col-form-label">Price</label>
                                           <!--'is-invalid' o campo do formulário fica em vermelho quando está em branco-->
        <div class="col-sm-10">
            <input [(ngModel)]="course.rating" required name="rating" #courseRating="ngModel" type="number" [ngClass]="{'is-</pre>
invalid' : courseRating.invalid}" class="form-control">
            <div class="invalid-feedback">
               <span>Course rating is required</span> <!--quando estiver inválido, irá aparecer essa mensagem-->
           </div>
        </div>
    </div>
    <br/>
    <div class="form-group row">
        <label class="col-sm-2 col-form-label">Price</label>
        <div class="col-sm-10">
                                                <!--'is-invalid' o campo do formulário fica em vermelho quando está em branco-->
            <textarea [(ngModel)]="course.description" required name="description" #courseDescription="ngModel"</pre>
            [ngClass]="{'is-invalid' : courseDescription.invalid}" class="form-control"></textarea>
            <div class="invalid-feedback">
               <span>Course description is required</span> <!--quando estiver inválido, irá aparecer essa mensagem-->
           </div>
        </div>
    </div>
    <button [disabled]="courseForm.invalid" (clic)="save()" class="btn btn-primary" >Save</button>
```

## course-info.component.ts

```
@Component({
    templateUrl: './course-info.component.html'
export class CourseInfoComponent implements OnInit{
    course: Course;
    constructor(private activatedRoute: ActivatedRoute, private courseService: CurseService){ }
    ngOnInit(): void {
        this.courseService.retrieveById(+this.activatedRoute.snapshot.paramMap.get('id')).subscribe({
           next: course => this.course = course,
           error: err => console.log('Error', err)
        });
    save(): void {
        this.courseService.save(this.course).subscribe({
           next: course => console.log('Saved with sucess', course),
           error: err => console.log('Error', err)
        });
```

# }

# course-list.component.html

```
<h2>Course list</h2>
<div class="form-group row">
<label class="col-sm-2 col-form-label">Filter By</label>
<div class="col-sm-10">
  <input [(ngModel)]="filter" class="form-control">
</div>
</div>
<thead>
     Image
     Name
     Price
     Code
     Release Date
     Rating
     Options
     </thead>
  <img [src]="course.imageUrl" width="40" height="40">
     {{course.name}}
     {{course.price}}
     {{course.code | lowercase | replace: '-': ' '}}
     {{course.releaseDate | date: 'dd/MM/yyyy'}}
```

# courseOlist.component.ts

```
@Component({
    templateUrl: './course-list.component.html'
})
export class CourseListComponent implements OnInit{
    filteredCourses: Course[];
    _courses: Course[] = [];

_filterBy: string;
constructor(private courseService: CurseService){ }
    ngOnInit(): void {
```

```
this.retrieveAll();
    retrieveAll(): void {
        this.courseService.retrieveAll().subscribe({
            next: course => {
                this._courses = course;
                this.filteredCourses = this. courses;
            },
            error: err => console.log('Error', err)
       })
    deleteById(courseId: number): void{
         this.courseService.deleteById(courseId).subscribe({
             next: () => {
                 console.log('Deleted with success');
                 this.retrieveAll();
             },
             error: err => console.log('Error', err)
         })
    set filter(value: string){
      this._filterBy = value;
      this.filteredCourses = this._courses.filter((course: Course) =>
course.name.toLocaleLowerCase().indexOf(this._filterBy.toLocaleLowerCase()) > -1);
    get filter(){
```

```
return this._filterBy;
                                                              course.ts
export class Course{
    id: number;
    name: string;
    imageUrl: String;
    price: number;
    code: string;
    duration: number;
    rating: number;
    releaseDate: string;
    description: string;
                                                            curse.service.ts
import { HttpClient } from "@angular/common/http";
import { Injectable } from "@angular/core";
import { Observable } from "rxjs";
import { Course } from "./course";
@Injectable({
    providedIn: 'root'
export class CurseService{
    private courseUrl: string = 'http://localhost:3100/api/courses';
```

```
constructor(private httpClient: HttpClient){}
   retrieveAll(): Observable<Course[]>{
       return this.httpClient.get<Course[]>(this.courseUrl);
   retrieveById(id: number): Observable<Course>{
      return this.httpClient.get<Course>(`${this.courseUrl}/${id}`);
   save(course: Course): Observable<Course> {
       if(course.id){
          return this.httpClient.put<Course>(`${this.courseUrl}/${course.id}`, course);
       } else {
           return this.httpClient.post<Course>(`${this.courseUrl}`, course);
   deleteById(id: number): Observable<any>{
       return this.httpClient.delete<any>(`${this.courseUrl}/${id}`);
var COURSES: Course[] = [
       name: 'Angular: CLI',
       releaseDate: 'November 2, 2019',
       description: 'Neste curso, os alunos irão obter um grande conhecimento nos principais recursos do CLI.',
       duration: 120,
       code: 'XLF-1212',
       rating: 3,
```

```
price: 12.99,
        imageUrl: '/assets/images/cli.png',
        name: 'Angular: Forms',
        releaseDate: 'November 4, 2019',
        description: 'Neste curso, os alunos irão obter um conhecimento aprofundado sobre os recursos disponíveis no módulo de
Forms.',
        duration: 80,
        code: 'DWQ-3412',
        rating: 3.5,
        imageUrl: '/assets/images/forms.png',
       name: 'Angular: HTTP',
        releaseDate: 'November 8, 2019',
        description: 'Neste curso, os alunos irão obter um conhecimento aprofundado sobre os recursos disponíveis no módulo de
HTTP.',
        duration: 80,
        code: 'QPL-0913',
        rating: 4.0,
        price: 36.99,
        imageUrl: '/assets/images/http.png',
       name: 'Angular: Router',
```

```
releaseDate: 'November 16, 2019',
        description: 'Neste curso, os alunos irão obter um conhecimento aprofundado sobre os recursos disponíveis no módulo de
Router.',
        duration: 80,
        rating: 4.5,
        price: 46.99,
        imageUrl: '/assets/images/router.png',
       name: 'Angular: Animations',
        description: 'Neste curso, os alunos irão obter um conhecimento aprofundado sobre os recursos disponíveis sobre
Animation.',
       duration: 80,
        rating: 5,
        price: 56.99,
        imageUrl: '/assets/images/animations.png',
```

# error-404.component.html

<h2>Error 404</h2>

error-404.component.ts

```
import { Component } from "@angular/core";
@Component({
   templateUrl: './error-404.component.html'
export class Error404Component{
                                                    nav-bar.component.html
<nav class="navbar navbar-expand-lg navbar-dark bg-dark">
    <a [routerLink]="['/courses']" class="navbar-brand">Course Manager</a>
    <button class="navbar-toggler" type="button" data-toggle="collapse" data-target="#navbarSupportedContent"</pre>
       aria-controls="navbarSupportedContent" aria-expanded="false" aria-label="Toggle navigation">
       <span class="navbar-toggler-icon"></span>
    </button>
    <div class="collapse navbar-collapse" id="navbarSupportedContent">
       <a [routerLink]="['/courses']" routerLinkActive="active" class="nav-link">Courses</a>
           </div>
                                                     nav-bar.component.ts
import { Component } from "@angular/core";
@Component({
```

```
selector: 'app-nav-bar',
    templateUrl: './nav-bar.component.html'
export class NavBarComponent{
                                                            replace.pipe.ts
       { Pipe, PipeTransform } from "@angular/core";
@Pipe({
    name: 'replace' /* nome do pipe que será utilizado no html */
export class ReplacePipe implements PipeTransform{
    transform(value: string, char: string, valueToReplace: string) {
        return value.replace(char, valueToReplace);
                                                          star.component.css
.crop{
    overflow: hidden;
                                                          star.component.html
<div class="crop" [style.width.px]="starWidth" [title]="rating">
<div style="width: 100px;">
    <span class="fa fa-star"></span>
    <span class="fa fa-star"></span>
    <span class="fa fa-star"></span>
    <span class="fa fa-star"></span>
```

```
<span class="fa fa-star"></span>
</div>
</div>
                                                           star.component.ts
@Component({
    selector: 'app-star',
    templateUrl:'./star.component.html',
    styleUrls: ['./star.component.css']
export class StarComponent implements OnChanges{
    @Input()
    rating: number = 0;
    starWidth: number;
    ngOnChanges(): void {
        this.starWidth = this.rating * 74 / 5;
                                                          app.component.html
<app-nav-bar></app-nav-bar>
<div class="container nt-4">
 <router-outlet></router-outlet>
</div>
                                                           app.component.ts
@Component({
```

```
selector: 'app-root', templateUrl: './app.component.html', styleUrls: ['./app.component.css']
export class AppComponent {
 title = 'course-manager';
 name: string = 'Alan';
                                                            app.module.ts
@NgModule({
 declarations: [
    AppComponent, CourseListComponent, StarComponent, ReplacePipe, NavBarComponent, Error404Component, CourseInfoComponent
  ],
  imports: [
    BrowserModule, FormsModule, HttpClientModule,
    RouterModule.forRoot([
        path: '', redirectTo: 'courses', pathMatch: 'full'
      },
        path: 'courses', component: CourseListComponent
      }, {
        path: 'courses/info/:id', component: CourseInfoComponent
      },
        path: '**', component: Error404Component
  providers: [],
  bootstrap: [AppComponent]
```

# 回の哲却 ✓ COURSE-MANAGER > node\_modules ✓ src √ app ∨ courses ourse-info.component.html TS course-info.component.ts course-list.component.html TS course-list.component.ts TS course.ts TS curse.service.ts ✓ error-404 orror-404.component.html TS error-404.component.ts ✓ nav-bar nav-bar.component.html TS nav-bar.component.ts ✓ pipe TS replace.pipe.ts ✓ star # star.component.css star.component.html TS star.component.ts # app.component.css app.component.html TS app.component.spec.ts TS app.component.ts TS app.module.ts assets ✓ images animations.png cli.png





