

SRN:PES1UG21CS182

NAME:DILIP H

SEC:C

Github link: https://github.com/dilipharish/Cinemas_Rating

MVC LAB:

1. A)I used Cinemas.java to initialize the data Models and CinemasDto.java to access, update the Data Models.

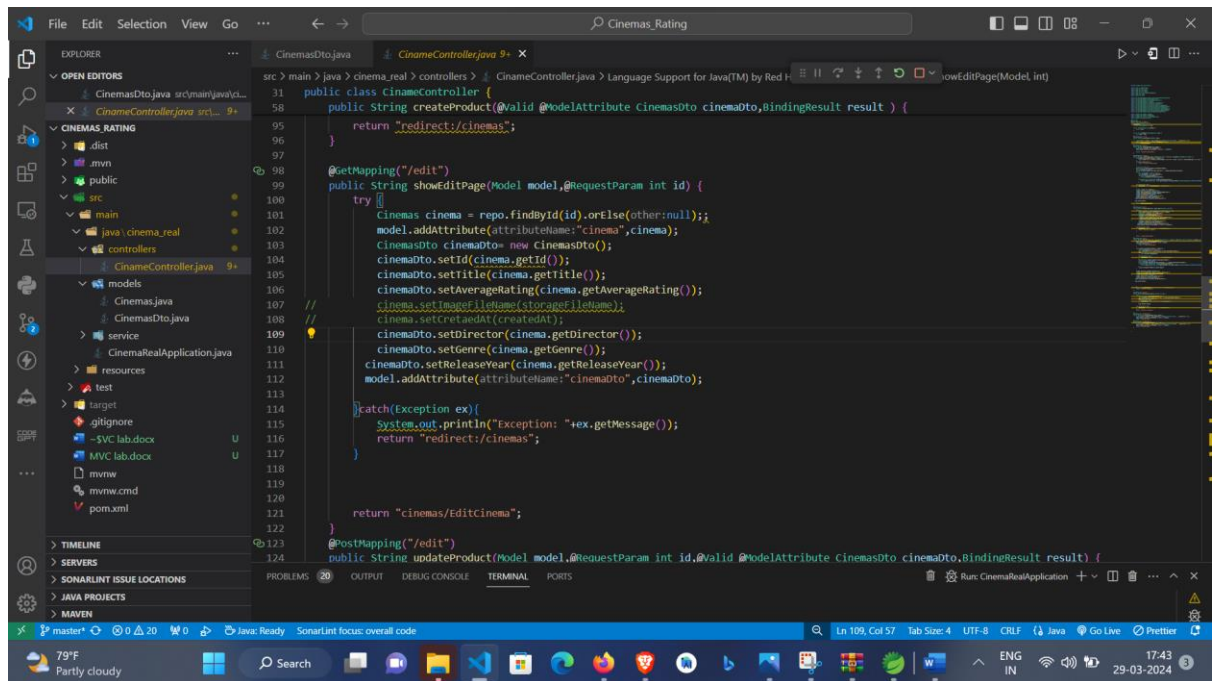
```
Cinemas.java X
src > main > java > cinema_real > models > Cinemas.java > {} cinema_real\models
9  @Table(name="products")
10 public class Cinemas {
11     @Id
12     @GeneratedValue(strategy=GenerationType.IDENTITY)
13     private Long id;
14     private String title;
15     public Long getId() {
16         return id;
17     }
18     public void setId(Long id) {
19         this.id = id;
20     }
21     public String getTitle() {
22         return title;
23     }
24     public void setTitle(String title) {
25         this.title = title;
26     }
27     public int getReleaseYear() {
28         return releaseYear;
29     }
30     public void setReleaseYear(int releaseYear) {
31         this.releaseYear = releaseYear;
32     }
33     public String getGenre() {
34         return genre;
35     }
36     public void setGenre(String genre) {
37         this.genre = genre;
38     }
39     public String getDirector() {
40         return director;
41     }
42     public void setDirector(String director) {
43         this.director = director;
44     }
45     public double getAverageRating() {
46         return averageRating;
47     }
48     public void setAverageRating(double averageRating) {
49         this.averageRating = averageRating;
50     }
51     public Date getCretaedAt() {
52         return cretaedAt;
53     }
54     public void setCretaedAt(Date cretaedAt) {
55         this.cretaedAt = cretaedAt;
56     }
57     public String getImageFileName() {
58         return imageFileName;
59     }
60     public void setImageFileName(String imageFileName) {
61         this.imageFileName = imageFileName;
62     }
63     private int releaseYear;
64     private String genre;
65     private String director;
66     private double averageRating;
67     private Date cretaedAt;
68     private String imageFileName;
69 }
```

```
Selection View Go ... ← →

# CinemasDto.java X
src > main > java > cinema_real > models > . CinemasDto.java > {} cinema_real.models

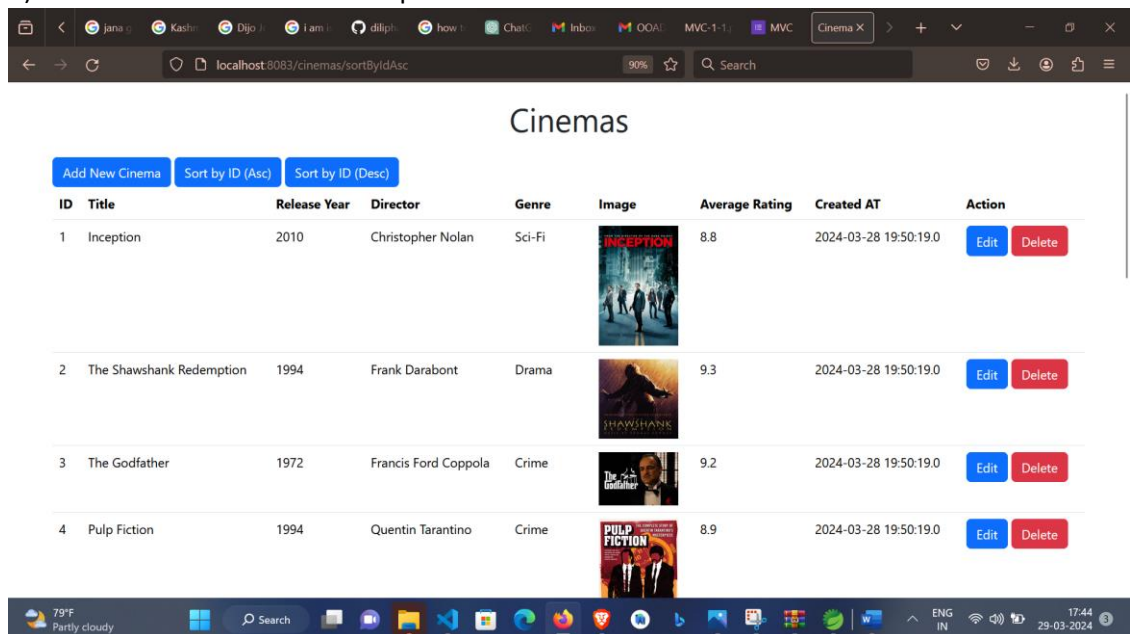
7
8 public class CinemasDto {
9     @NotEmpty(message = "The title is required")
10     private String title;
11     private Long id;
12
13     public String getTitle() {
14         return title;
15     }
16
17     public void setTitle(String title) {
18         this.title = title;
19     }
20
21     public String getGenre() {
22         return genre;
23     }
24
25     public void setGenre(String genre) {
26         this.genre = genre;
27     }
28
29     public String getDirector() {
30         return director;
31     }
32
33     public void setDirector(String director) {
34         this.director = director;
35     }
36
37     public double getAverageRating() {
38         return averageRating;
39     }
40
41     public void setAverageRating(double averageRating) {
42         this.averageRating = averageRating;
43     }
44
45     public int getReleaseYear() {
46         return releaseYear;
47     }
48
49     public void setReleaseYear(int releaseYear) {
50         this.releaseYear = releaseYear;
51     }
52
53     @NotEmpty(message = "The genre is required")
54     private String genre;
55
56     @NotEmpty(message = "The director is required")
57     private String director;
58
59     @Min(0)
60     private double averageRating;
61
62     @Min(1888)
63     private int releaseYear;
64
65     private MultipartFile imageFileName;
66
67     public MultipartFile getImageFileName() {
68         return imageFileName;
69     }
70
71     public void setImageFileName(MultipartFile imageFileName) {
72         this.imageFileName = imageFileName;
73     }
74
75     public Long getId() {
76         return id;
77     }
78
79     public void setId(Long id) {
80         this.id = id;
81     }
82 }
```





B) Controller logic : GetMapping, PostMapping Used to do respective works



```
src > main > java > cinema_real > controllers > CinemaController.java > Language Support for Java(TM) by Red Hat
31 public class CinemaController {
58     public String createProduct(@Valid @ModelAttribute CinemaDto cinemaDto, BindingResult result) {
95         return "redirect:/cinemas";
96     }
97
98     @GetMapping("/edit")
99     public String showEditPage(Model model, @RequestParam int id) {
100         try {
101             Cinema cinema = repo.findById(id).orElse(null);
102             model.addAttribute(attributeName="cinema", cinema);
103             CinemaDto cinemaDto = new CinemaDto();
104             cinemaDto.setId(cinema.getId());
105             cinemaDto.setTitle(cinema.getTitle());
106             cinemaDto.setAverageRating(cinema.getAverageRating());
107             cinema.setImageFile(cinema.getImageFile());
108             cinema.setCreatedAt(createdAT);
109             cinemaDto.setDirector(cinema.getDirector());
110             cinemaDto.setGenre(cinema.getGenre());
111             cinemaDto.setReleaseYear(cinema.getReleaseYear());
112             model.addAttribute(attributeName="cinemaDto", cinemaDto);
113         } catch (Exception ex) {
114             System.out.println("Exception: " + ex.getMessage());
115             return "redirect:/cinemas";
116         }
117
118         return "cinemas/EditCinema";
119     }
120
121     @PostMapping("/edit")
122     public String updateProduct(Model model, @RequestParam int id, @Valid @ModelAttribute CinemaDto cinemaDto, BindingResult result) {
123
124     }
```

C) View : Basic Html is Used to Implemented to View the UI







ID	Title	Release Year	Director	Genre	Image	Average Rating	Created AT	Action
1	Inception	2010	Christopher Nolan	Sci-Fi		8.8	2024-03-28 19:50:19.0	Edit Delete
2	The Shawshank Redemption	1994	Frank Darabont	Drama		9.3	2024-03-28 19:50:19.0	Edit Delete
3	The Godfather	1972	Francis Ford Coppola	Crime		9.2	2024-03-28 19:50:19.0	Edit Delete
4	Pulp Fiction	1994	Quentin Tarantino	Crime		8.9	2024-03-28 19:50:19.0	Edit Delete

localhost:8083/cinemas/sortByIdDesc

Cinemas

[Add New Cinema](#) [Sort by ID \(Asc\)](#) [Sort by ID \(Desc\)](#)

ID	Title	Release Year	Director	Genre	Image	Average Rating	Created AT	Action
13	Veer Savarkar	2024	Dheeraj	True Events		9.3	2024-03-29 13:13:41.0	Edit Delete
12	Gandhi Godse	2024	Rahul	Periodic		8.3	2024-03-29 13:12:47.0	Edit Delete
11	Razakars	2024	Nair	True Events		8.0	2024-03-29 13:11:52.0	Edit Delete
10	The Kerala Story	2023	mahendra	Tragedy		8.2	2024-03-29 13:10:57.0	Edit Delete

79°F Partly cloudy

2)Code Written by me:

Cinemas_Rating

```
src > main > java > cinema_real > controllers > CInameController.java > Language Support for Java(TM) by Red Hat
CInameController.java 9+
123
124 public class CInameController {
125     @PostMapping("/edit")
126     public String updateProduct(Model model,@RequestParam int id,@Valid @ModelAttribute CInemasDto cinemaDto,BindingResult result) {
127         try {
128             CInemas cinema=cinema_repo.findById(id).get();
129             model.addAttribute(attributeName:"cinema",cinema);
130             if(result.hasErrors()) {
131                 return "cinemas/EditCinema";
132             }
133
134             if(!cinemaDto.getImageFileName().isEmpty()) {
135                 String uploadDir="public/images/";
136                 Path oldImagePath=Paths.get(uploadDir+cinema.getImageFileName());
137                 try {
138                     Files.delete(oldImagePath);
139                 }
140                 catch(Exception ex) {
141                     System.out.println("Exception: "+ex.getMessage());
142                 }
143                 MultipartFile image=cinemaDto.getImageFileName();
144                 Date createdAt =new Date();
145                 String storageFileName=createdAt.getTime() + "-" +image.getOriginalFileName();
146                 try(InputStream inputStream = image.getInputStream()){
147                     Files.copy(inputStream, Paths.get(uploadDir+storageFileName),StandardCopyOption.REPLACE_EXISTING);
148                 }
149                 cinema.setImageFileName(storageFileName);
150             }
151             cinema.setTitle(cinemaDto.getTitle());
152             cinema.setAverageRating(cinemaDto.getAverageRating());
153             cinema.setImageFileName(storageFileName);
154             cinema.setCretaedAT(createdAT);
155             cinema.setDirector(cinemaDto.getDirector());
156
157             _rating,c1_0.cretaed_at,c1_0.director,c1_0.genre,c1_0.image_file_name,c1_0.release_year,c1_0.title from products c1_0 order by c1_0.id desc
```

master* 0 20 Java: Ready SonarLint focus: overall code Ln 165, Col 5 Tab Size: 4 UTF-8 CRLF Java Go Live Prettier

79°F Partly cloudy

3) Screenshot of console with application running

The screenshot shows a web browser displaying a movie catalog with the following data:

ID	Movie Title	Year	Director	Genre	Rating	Release Time
9	Godhra	2024	Kumar	True Events	8.5	2024 13:05
8	The Kashmir Files	2022	Vivek	True Events	9.1	2024 12:55
6	Jana Gana Mana	2022	Dijo Jose Antony	True Events	9.4	2024 22:35
5	The Dark Knight	2008	Christopher Nolan	Action	9.0	2024 19:50
4	Pulp Fiction	1994	Quentin Tarantino	Crime	8.9	2024 19:50

The VS Code terminal shows the application logs for the 'Cinemas_Rating' application, indicating successful startup and database initialization.

4) Screenshot of UIs related to the two scenarios with values, outputs, errors

Adding New Movie's Rating:

The screenshot shows a web browser displaying a 'New Cinema' form with the following data:

Field	Value
Title	The Attacks of 26/11
Genre	True Events
Director	Mohan
Release Year	2015
Average Rating	8.6
Image	the_attacks_of_26_11.jpg

The VS Code terminal shows the application logs for the 'Cinemas_Rating' application, indicating successful startup and database initialization.

5) Screenshot of database with data items

The screenshot displays the phpMyAdmin web interface. The left sidebar shows a list of databases, with 'cinema' selected. The main panel shows the 'products' table in the 'cinema' database. The table contains 14 rows of movie data, including columns for id, average_rating, created_at, director, genre, release_year, title, and image_file_name. The interface includes navigation tabs like Browse, Structure, SQL, Search, Insert, Export, Import, Privileges, Operations, Tracking, and Triggers. The bottom status bar shows the server version (127.0.0.1) and the current time (18:01 on 29-03-2024).

	id	average_rating	created_at	director	genre	release_year	title	image_file_name
<input type="checkbox"/>	1	8.8	2024-03-28 19:50:19.000000	Christopher Nolan	Sci-Fi	2010	Inception	inception.jpg
<input type="checkbox"/>	2	9.3	2024-03-28 19:50:19.000000	Frank Darabont	Drama	1994	The Shawshank Redemption	the_shawshank_redemption.jpg
<input type="checkbox"/>	3	9.2	2024-03-28 19:50:19.000000	Francis Ford Coppola	Crime	1972	The Godfather	the_godfather.jpg
<input type="checkbox"/>	4	8.9	2024-03-28 19:50:19.000000	Quentin Tarantino	Crime	1994	Pulp Fiction	pulp_fiction.jpg
<input type="checkbox"/>	5	9	2024-03-28 19:50:19.000000	Christopher Nolan	Action	2008	The Dark Knight	the_dark_knight.jpg
<input type="checkbox"/>	6	9.4	2024-03-28 22:35:33.000000	Dijo Jose Antony	True Events	2022	Jana Gana Mana	1711645533210_jana_gana_man.jpg
<input type="checkbox"/>	8	9.1	2024-03-29 12:55:32.000000	Vivek	True Events	2022	The Kashmir Files	1711697132916_the_khasmir_files.jpg
<input type="checkbox"/>	9	8.5	2024-03-29 13:09:47.000000	Kumar	True Events	2024	Godhra	1711697987982_godhra.jpg
<input type="checkbox"/>	10	8.2	2024-03-29 13:10:57.000000	mahendra	Tragedy	2023	The Kerala Story	1711698057383_the_kerala_story.jpg
<input type="checkbox"/>	11	8	2024-03-29 13:11:52.000000	Nair	True Events	2024	Razakars	1711698112933_razakar.jpg
<input type="checkbox"/>	12	8.3	2024-03-29 13:12:47.000000	Rahul	Periodic	2024	Gandhi Godse	1711698167180_gandhi_godse.jpg
<input type="checkbox"/>	13	9.3	2024-03-29 13:13:41.000000	Dheeraj	True Events	2024	Veer Savarkar	1711698221363_veer_sawarkar.jpg
<input type="checkbox"/>	14	8.6	2024-03-29 17:56:13.000000	Mohan	True Events	2015	The Attacks of 26/11	1711715173879_the_attacks_of_26_11.jpg