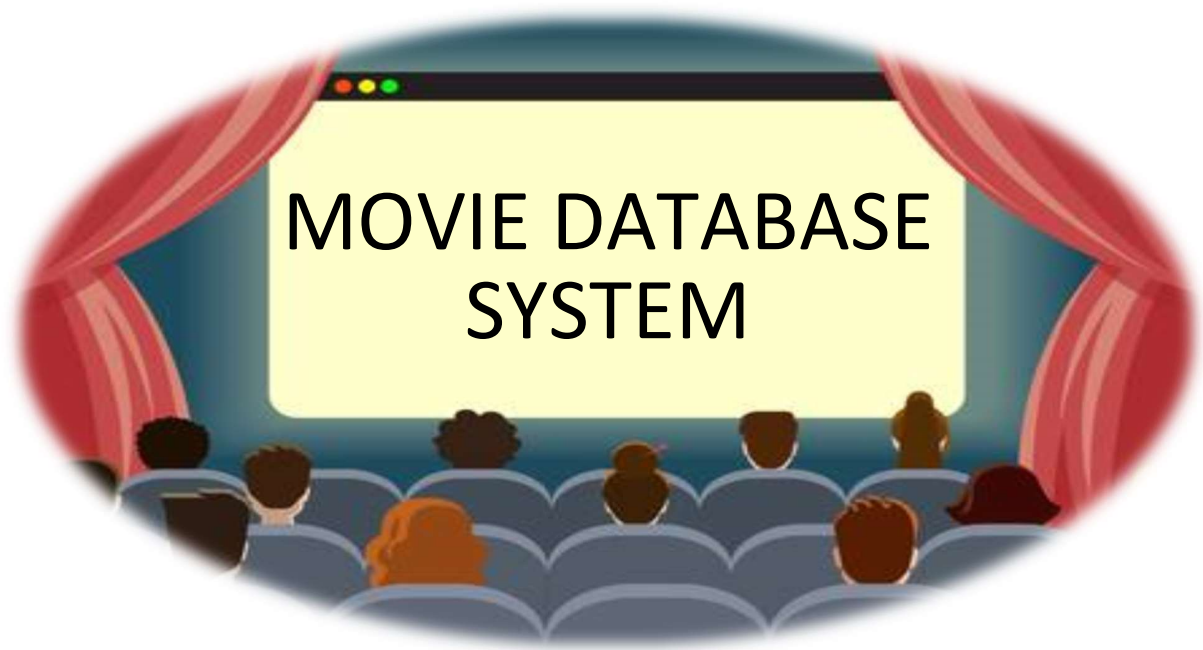


# DATABASE SYSTEM MINI – PROJECT



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CSE C

## **Abstract:**

The birth of cinema in late 1880's gave rise to a new form of entertainment content. Over the years as the number of viewers increased, the amount of content being filmed and produced annually has increased abundantly too. It is now almost hectic for viewers to keep track of movies and TV series that are being released our project tries to help the same by compiling various movies.TV series etc. As well as other data like critic ratings, production houses, directors and actors for those interested.

## **Problem Statement**

Designing and implementing a GUI based system to view the data about movie like year of release, actors, director, production house and most importantly the critics rating and user rating. User can find the movie details based on name, genre, actor name, year of release. The registered users can also rate the movies which will affect the overall user rating of the corresponding movie.

## DDL Commands to create tables with data:

1.

```
create table movies(id number(5) primary key,  
name varchar2(30),  
YOR number(4),  
user_rating number(2,1),  
critics_rating number(2,1),  
production_house varchar2(30),  
genre varchar2(20),  
actor_id number(5),  
director_id number(5),  
foreign key (actor_id) references actor,  
foreign key (director_id) references director);
```

ID	NAME	YOR	USER_RATING	CRITICS_RATING	PRODUCTION_HOUSE	GENRE	ACTOR_ID	DIRECTOR_ID
101	Dangal	2016	7.8		7.8 UTV Motion Pictures	Sports Drama	15	211
102	Sultan	2016	8.2		6.6 Yash Raj Films	Sports Drama	11	205
103	Airlift	2016	9.1		7.5 T-Series	Drama	2	214
104	Fan	2016	7.9		7.6 Yash Raj Films	Drama	12	202
105	Shivaay	2016			5.6 Ajay DevganFFilma	Drama	1	204
106	Simbaa	2018			6.3 Reliance Entertainment	Action	10	216
107	Zero	2018	7.1		6.3 Yash Raj Films	Drama	12	208
108	Bhadai Ho	2018			6.7 Junglee Pictures	Drama	4	207
109	Manikarnika	2019			6.3 Zee Studio	Period Drama	6	213
110	Andhadhun	2018			6.2 Viacom 18 Motion Pictures	Drama	4	221
111	Uri: The Surgical Strike	2019	8.8		6.1 RSVP Movies	Action	13	203
112	Padmavat	2018	8.5		5.7 Bhansali Productions	Period Drama	10	218
113	Stree	2018			6.9 Maddock Films	Comedy	8	206
114	Sanju	2018	8.4		7.1 Vinod Chopra Films	Biopic	9	215
115	Thackeray	2019			4.6 Viacom 18 Motion Pictures	Biopic	7	201
116	Padman	2018	7.4		6.9 Columbia Pictures	Drama	2	212
117	Raazi	2018	8.6		6.6 Junglee Pictures	Thriller	3	210
118	Why Cheat India	2019			7.9 T Series	Drama	5	220
119	Kick	2014	8.5		7 Nadiawala G.Entertainment	Action	11	217
120	Chak De India	2007	8.9		6.9 Yash Raj Films	Sports Drama	12	219
121	My name is Khan	2010	7.6		6.6 Red Chillies Entertainment	Drama	12	209
122	Bobby Velvet	2015			6.2 Phantom Films	Drama	14	222

22 rows selected.

2.

```
create table actor(actor_id number(5) primary key,  
actor_name varchar(20),  
sex char(1),  
age number(2),  
dob date,  
number_of_movies number(3));
```

```
SQL> select * from actor;
```

ACTOR_ID	ACTOR_NAME	S	AGE	DOB	NUMBER_OF_MOVIES
1	Ajay Devgan	M	50	02-APR-69	31
2	Akshay Kumar	M	52	02-SEP-67	28
3	Alia Bhat	F	26	15-MAR-93	13
4	Ayushman Khurana	M	35	14-SEP-84	18
5	Emrran Hasmi	M	40	24-MAR-79	24
6	Kangana Ranawat	F	32	23-MAR-87	25
7	Nawazuddin Siddiqui	M	45	19-MAY-74	20
8	Rajkumar Rao	M	35	31-JUL-84	12
9	Ranbir Kapoor	M	37	28-SEP-82	27
10	Ranveer Singh	M	34	06-JUL-85	30
11	Salman Khan	M	54	27-DEC-65	44
12	Shah Rukh Khan	M	54	02-NOV-65	47
13	Vicky Kaushal	M	31	16-MAY-88	5
14	Karan Johar	M	46	25-MAY-72	2
15	Amir Khan	M	54	14-MAR-65	31

```
15 rows selected.
```

3.

```
create table director(director_id number(5) primary key,  
director_name varchar(20),  
sex char(1),  
age number(2),  
dob date,  
number_of_movies number(3));
```

```
SQL> select * from director;
```

DIRECTOR_ID	DIRECTOR_NAME	S	AGE	DOB	NUMBER_OF_MOVIES
201	Abhijit Panse	M	59	12-JAN-60	32
202	Aditya Chopra	M	50	02-APR-69	34
203	Aditya Dhar	M	48	02-SEP-67	54
204	Ajay Devgan	M	32	15-MAR-87	56
205	Ali Abbas Zafar	M	36	14-SEP-84	12
206	Amar Kaushik	M	42	24-MAR-79	23
207	Amit R. Sharma	M	52	23-MAR-67	24
208	Anand L. Rai	M	45	19-MAY-74	50
209	Karan Johar	M	35	31-JUL-84	13
210	Meghna Gulzar	M	37	28-SEP-82	45
211	Nitesh Tiwari	M	34	06-JUL-85	23
212	R. Balki	M	54	27-DEC-65	43
213	Radha Krishna	M	54	02-NOV-65	22
214	Raja Krishna Menon	M	31	16-MAY-88	11
215	Rajkumar Hirani	M	51	14-OCT-68	16
216	Rohit Shetty	M	41	15-SEP-78	64
217	Sajid Nadiawala	M	54	10-DEC-65	34
218	Sanjay L. Bhansali	M	47	09-MAR-72	23
219	Shimit Amin	M	43	07-APR-76	54
220	Soumik Sen	M	39	02-JUL-80	23
221	Sriram Raghavan	M	41	14-FEB-78	16
222	Anurag Kashyap	M	50	12-DEC-89	17

```
22 rows selected.
```

4.

create table earning(id number(5) primary key,  
domestic\_earning varchar(10),  
overseas\_earning varchar(10),  
gross\_earning varchar(10),  
foreign key (id) references movies);

```
SQL> select * from earning;
```

ID	DOMESTIC_E	OVERSEAS_E	GROSS_EARN
101	2.5M	1.2M	2.7M
102	3.5M	2.5M	6M
103	7.1M	2.9M	10M
104	10.3M	12M	22.3M
105	3.3M	2.2M	5.5M
106	1.2M	2.1M	3.3M
107	0.7M	0.4M	1.1M
108	12M	3M	15M
109	21M	12M	33M
110	7M	2.1M	9.1M
111	1.3M	2.1M	3.4M
112	7.2M	2.7M	9.9M
113	6.2M	6.2M	12.4M
114	10M	3.7M	13.7M
115	9.3M	10M	19.3M
116	1M	1.1M	2.1M
117	5.2M	1.1M	6.3M
118	12.3M	3.3M	15.5M
119	2.4M	2.4M	4.8M
120	34.4M	20M	54.4M
121	45.5M	34.4M	89.9M
122	16.5M	23.4M	39.9M

22 rows selected.

5.

create table critic\_rating(id number(5) primary key,  
india\_today number(2,1),  
toi number(2,1),  
imdb number(2,1),  
rotten\_tomato number(2,1),  
average number(2,1),  
foreign key (id) references movies);

```
SQL> select * from critic_rating;
```

ID	INDIA_TODAY	TOI	IMDB	ROTTEN_TOMATO	AVERAGE
101	7.3	8.4	6.8	8.9	7.8
102	5.1	6.7	7.3	7.4	6.6
103	7.6	6.7	8.2	7.8	7.5
104	6.7	7.6	8.3	8.1	7.6
105	4.7	6.7	7.6	3.5	5.6
106	5.7	7.6	3.5	8.7	6.3
107	3.5	8.7	4.5	8.8	6.3
108	5.5	6.8	4.9	9.6	6.7
109	5.6	7.6	3.6	8.4	6.3
110	3.7	7	4.7	9.6	6.2
111	5.7	9.7	3.5	5.8	6.1
112	6.5	5.6	3.4	7.6	5.7
113	7.6	3.6	7.5	9	6.9
114	4.5	7.5	9.8	6.6	7.1
115	3.5	3.5	6.7	5	4.6
116	7.8	6.7	4.6	8.7	6.9
117	4.4	7.6	8.9	5.7	6.6
118	9.4	7.8	9.8	4.6	7.9
119	4.6	8.7	9	5.7	7
120	7.2	4.8	9	6.9	6.9
121	5.5	6.6	8.7	5.8	6.6
122	3.7	7	4.7	9.6	6.2

22 rows selected.

7.

```
create table user_rating(id number(5),
user_id number(5),
rating number(2,1),
add_comment varchar2(50),
primary key(id, user_id),
foreign key (id) references movies,
foreign key (user_id) references users);
```

```
SQL> select * from user_rating;
```

ID	USER_ID	RATING	ADD_COMMENT
101	301	7.8	Amazing
102	301	8.8	Deep
121	302	7.6	Quit Teaching
116	303	7.4	Superb Acting
119	304	8.9	Amazing Plot
103	305	9.1	
107	303	7.2	Nice Songs
104	305	7.9	Amazing
107	307	7.1	Superb End
120	308	8.9	Nice Songs
112	309	8.2	
117	301	8.9	
114	308	8.4	Deep
112	302	9.1	Quite Teaching
102	303	7.7	Nice Plot
117	303	8.3	Nice Plot
111	302	8.8	Amazing
112	301	8.3	Superb Acting
119	301	8.1	

19 rows selected.

8.

```
create table users(user_id number(5) primary key,
name varchar(20),
phone_number number(10),
age number(2),
date_added date);
```

```
SQL> select * from users;
```

USER_ID	NAME	PHONE_NUMBER	AGE	DATE_ADDE
301	Ram	3674876535	18	12-DEC-15
302	Shyam	3641875245	21	15-OCT-17
303	Abhijeet	1536575419	18	01-JAN-14
304	Ankit	1767455627	22	12-SEP-19
305	Prashant	1824355612	25	17-MAR-18
306	Raj	1652638565	43	19-FEB-17
307	Rupesh	3234355698	30	02-MAR-16
308	Akshat	2765425638	23	02-JUL-18
309	Jay	123123425	26	27-DEC-18
310	Akshay	2162853638	17	24-MAY-16

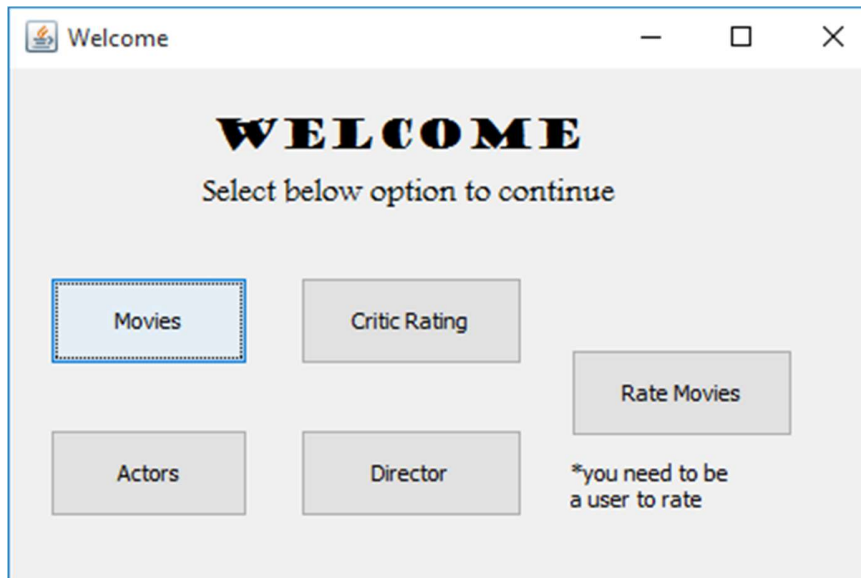
10 rows selected.

## **Code snippet demonstrating Database connectivity and access:**

```
import java.sql.Connection;
import java.sql.DriverManager;
public class sqlConnection {
    public static Connection databaseConnect() {
        Connection con1 = null;
        try {
            Class.forName("oracle.jdbc.driver.OracleDriver");
            con1=DriverManager.getConnection(
"jdbc:oracle:thin:@localhost:1521:xe","system","123");
            return con1;
        }catch(Exception e) {
            System.out.print(e);
            return null;
        }
    }
}
```

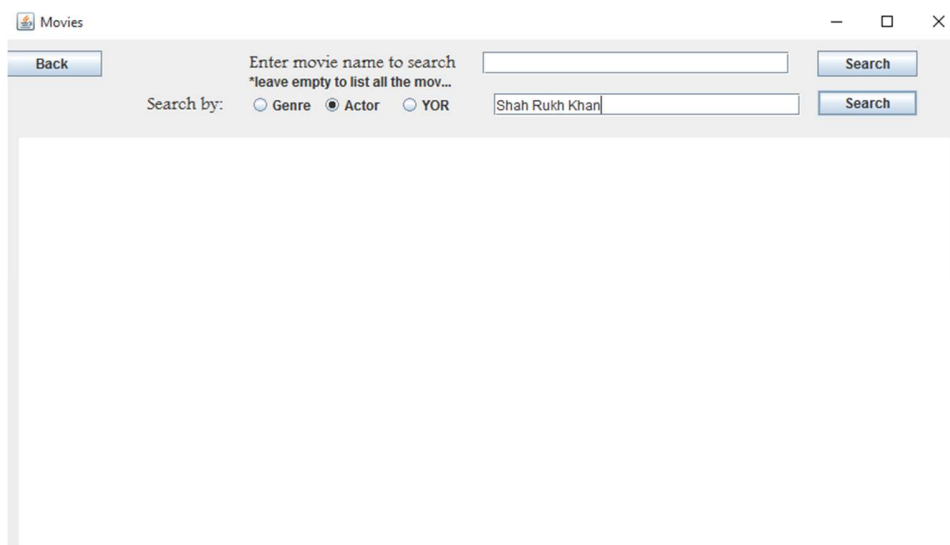
## Screenshots of UI Design:

(1). The welcome page



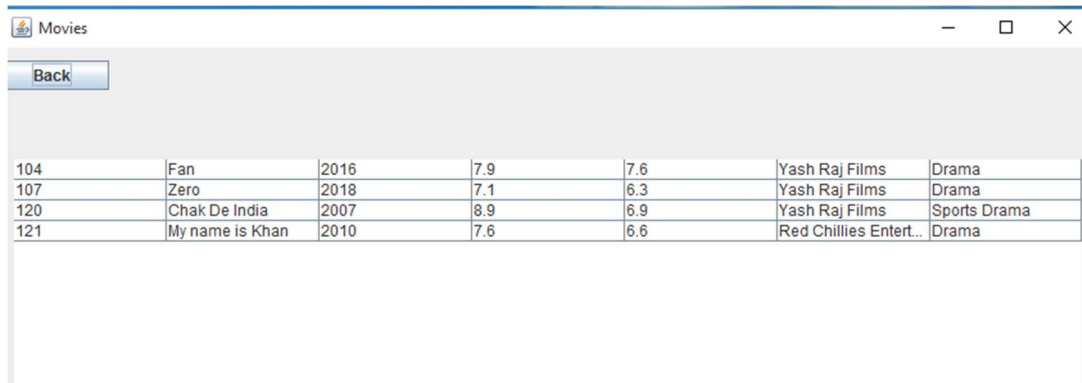
(2). The Movies Page:

In the movies page the user can search for movies based on their name, actor name, genre or the year of release. For example, if a user wants to search for all the movies done by Shah Rukh Khan, then he can search it this way. The back button takes you to the welcome screen.





The output for the movie searched by the user.



ID	Title	Year	Rating 1	Rating 2	Studio	Genre
104	Fan	2016	7.9	7.6	Yash Raj Films	Drama
107	Zero	2018	7.1	6.3	Yash Raj Films	Drama
120	Chak De India	2007	8.9	6.9	Yash Raj Films	Sports Drama
121	My name is Khan	2010	7.6	6.6	Red Chillies Entert...	Drama

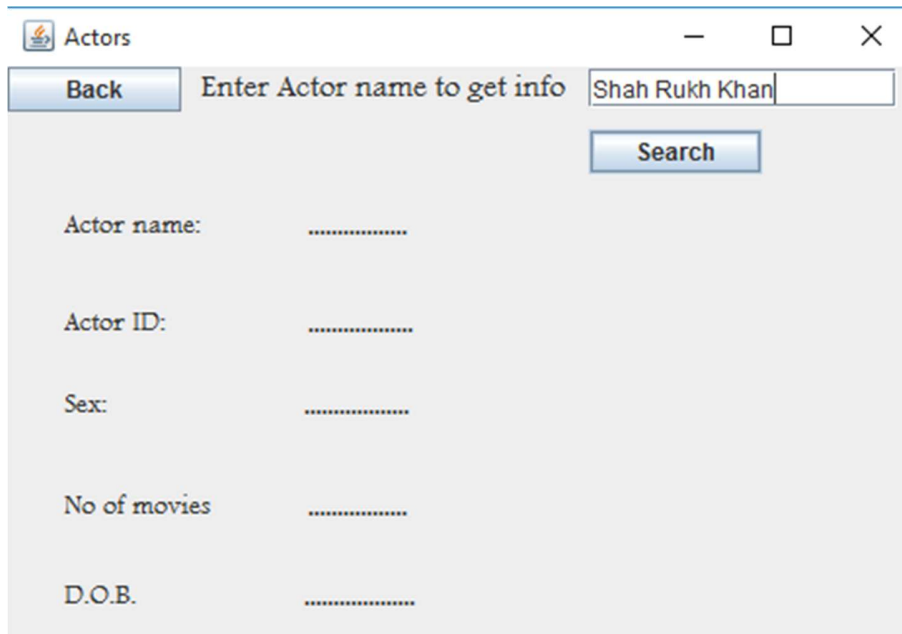
Also, leaving the search box blank will list all the movies.



ID	Title	Year	Rating 1	Rating 2	Studio	Genre	Count 1	Count 2
101	Dangal	2016	7.8	7.8	UTV Motion Pi...	Sports Drama	15	211
102	Sultan	2016	8.2	6.6	Yash Raj Films	Sports Drama	11	205
103	Airlift	2016	9.1	7.5	T-Series	Drama	2	214
104	Fan	2016	7.9	7.6	Yash Raj Films	Drama	12	202
105	Shivaay	2016		5.6	Ajay DevganFF...	Drama	1	204
106	Simbaa	2018		6.3	Reliance Enter...	Action	10	216
107	Zero	2018	7.1	6.3	Yash Raj Films	Drama	12	208
108	Bhadai Ho	2018		6.7	Junglee Pictur...	Drama	4	207
109	Manikarnika	2019		6.3	Zee Studio	Period Drama	6	213
110	Andhadhun	2018		6.2	Viacom 18 Mot...	Drama	4	221
111	Uri: The Surgic...	2019	8.8	6.1	RSVP Movies	Action	13	203
112	Padmavat	2018	8.5	5.7	Bhansali Prod...	Period Drama	10	218
113	Stree	2018		6.9	Maddock Films	Comedy	8	206
114	Sanju	2018	8.4	7.1	Vinod Chopra ...	Biopic	9	215
115	Thackeray	2019		4.6	Viacom 18 Mot...	Biopic	7	201
116	Padman	2018	7.4	6.9	Columbia Pict...	Drama	2	212
117	Raazi	2018	8.6	6.6	Junglee Pictur...	Thriller	3	210
118	Why Cheat India	2019		7.9	T Series	Drama	5	220
119	Kick	2014	8.5	7	Nadiawala G....	Action	11	217
120	Chak De India	2007	8.9	6.9	Yash Raj Films	Sports Drama	12	219
121	My name is Kh...	2010	7.6	6.6	Red Chillies E...	Drama	12	209
122	Bobby Velvet	2015		6.2	Phantom Films	Drama	14	222

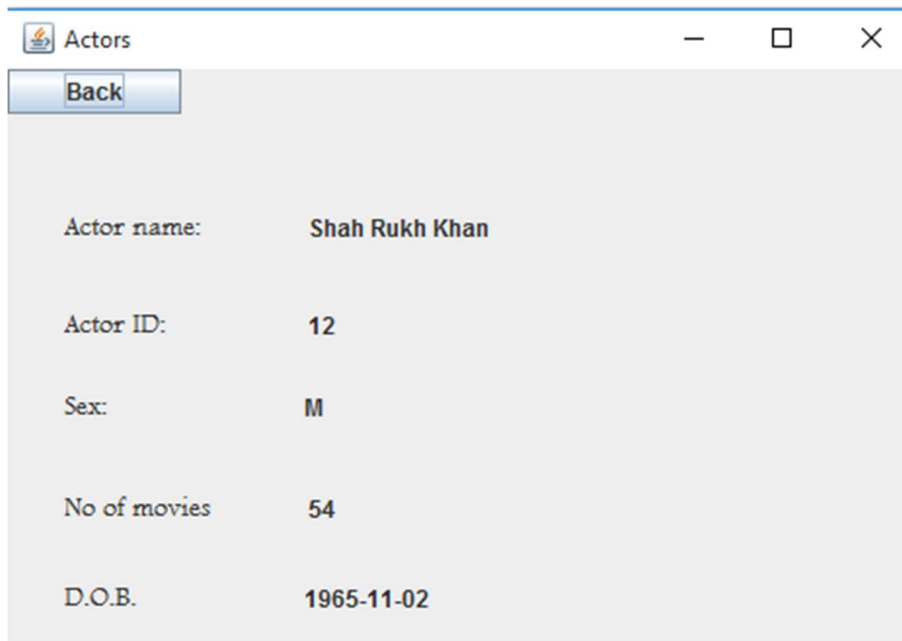
(3). The Actor Page:

Here the user can search about actor info. The back button takes you to the welcome screen.



The screenshot shows a window titled "Actors" with standard Windows window controls (minimize, maximize, close). Inside the window, there is a "Back" button on the left. To its right is a label "Enter Actor name to get info" followed by a text input field containing "Shah Rukh Khan". Below the input field is a "Search" button. Further down, there are five labels with corresponding dotted lines for input: "Actor name:", "Actor ID:", "Sex:", "No of movies", and "D.O.B.".

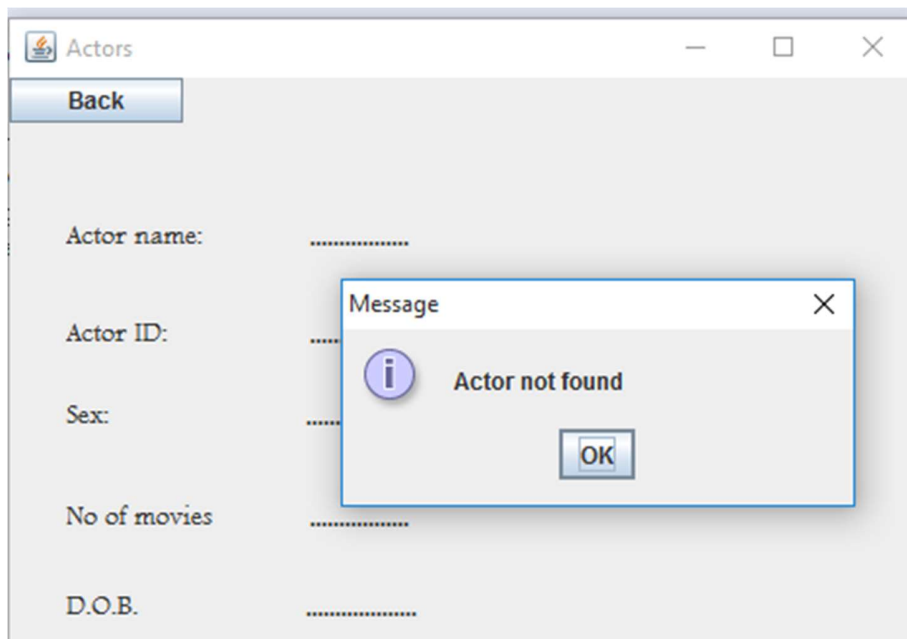
Output for the actor "Shah Rukh Khan" info.



The screenshot shows the same "Actors" window, but now it displays the search results for "Shah Rukh Khan". The "Back" button is still present. The output is displayed as follows:

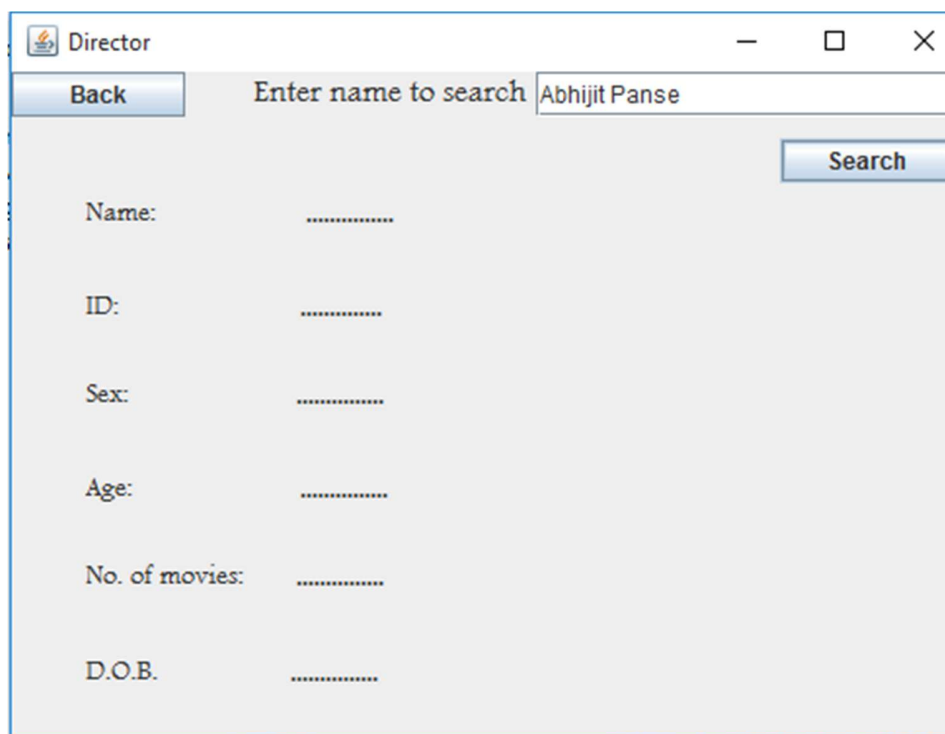
Actor name:	Shah Rukh Khan
Actor ID:	12
Sex:	M
No of movies	54
D.O.B.	1965-11-02

Entering an invalid name for the actor(not in database or empty) gives a pop up message.

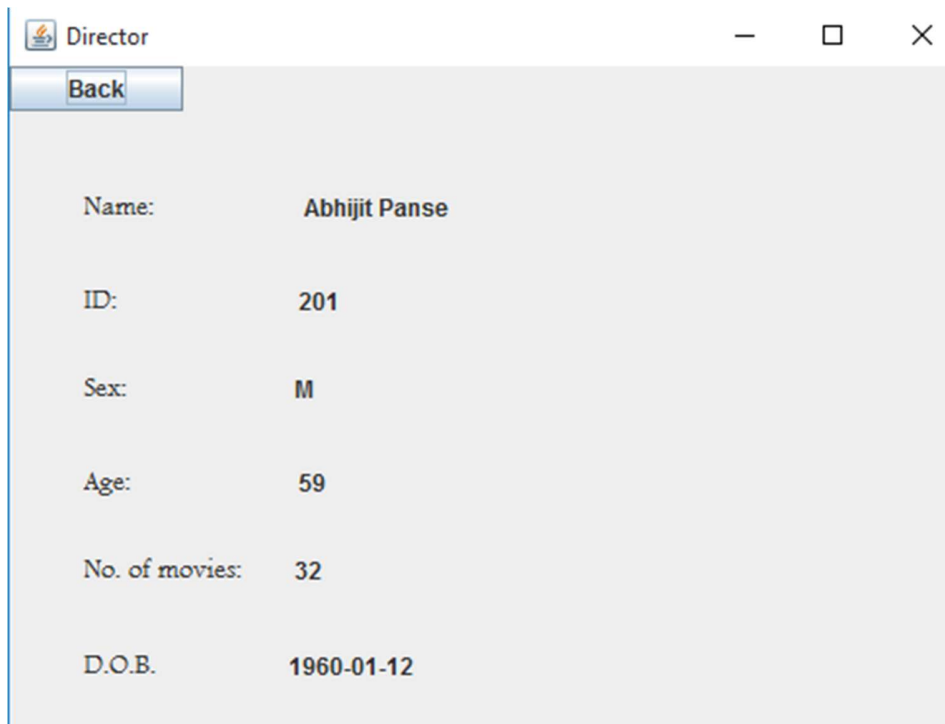


### (3). The Director Page:

The user can search the info about a particular director here.



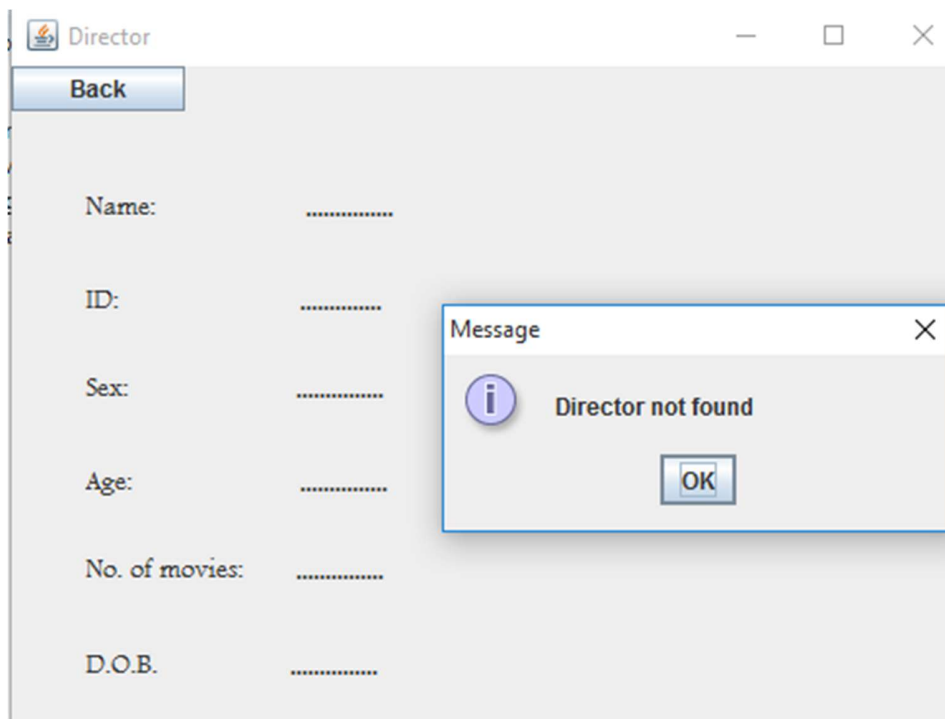
Sample output when searched for director "Abhijit Panse".



The screenshot shows a window titled "Director" with a "Back" button at the top left. Below the button, the search results for "Abhijit Panse" are displayed in a list format:

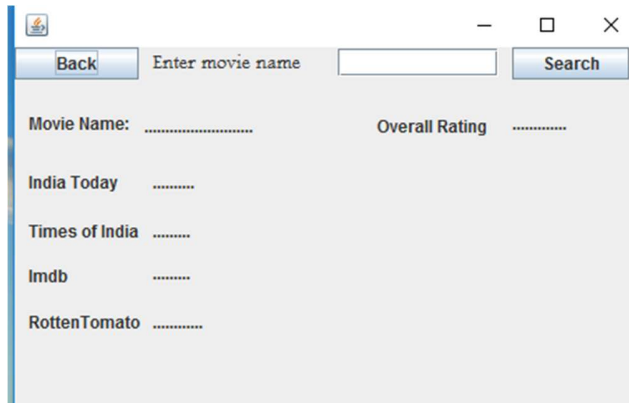
Name:	Abhijit Panse
ID:	201
Sex:	M
Age:	59
No. of movies:	32
D.O.B.	1960-01-12

Entering an invalid search string gives a pop up message, like below:



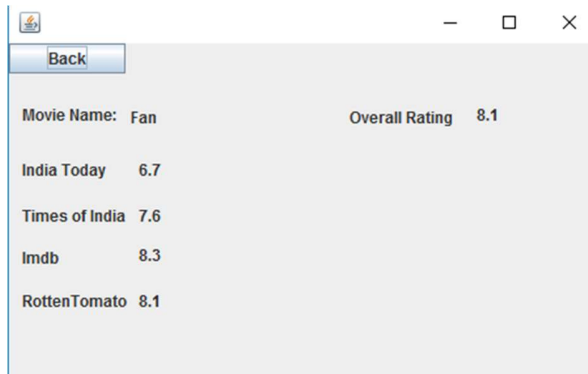
The screenshot shows the "Director" window with search fields for Name, ID, Sex, Age, No. of movies, and D.O.B. All fields contain asterisks, indicating an invalid search. A "Message" dialog box is overlaid on the window, displaying the text "Director not found" with an information icon and an "OK" button.

(4). The Critics Rating Page:



A screenshot of a web application window titled "Critics Rating Page". The window has a standard Windows-style title bar with minimize, maximize, and close buttons. Below the title bar, there is a "Back" button on the left and a "Search" button on the right, separated by a text input field labeled "Enter movie name". The main content area displays a form with two columns: "Movie Name:" and "Overall Rating:". Under "Movie Name:", there are four rows of text input fields labeled "India Today", "Times of India", "Imdb", and "RottenTomato". The "Overall Rating:" column is currently empty.

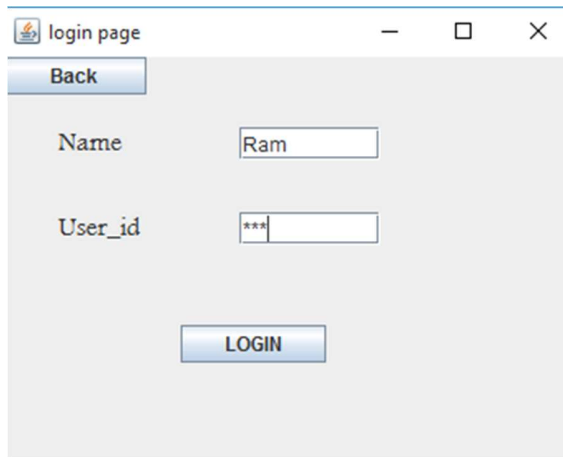
Output for the Critics Rating page when the user searches for the movie "Fan":



A screenshot of the same web application window after a search for the movie "Fan". The "Back" button is still present. The "Enter movie name" field now contains the text "Fan". The "Overall Rating" column now displays the value "8.1". The four rows of text input fields under "Movie Name:" are now populated with the following values: "India Today" (6.7), "Times of India" (7.6), "Imdb" (8.3), and "RottenTomato" (8.1).

(5). The Rate Movie Page:

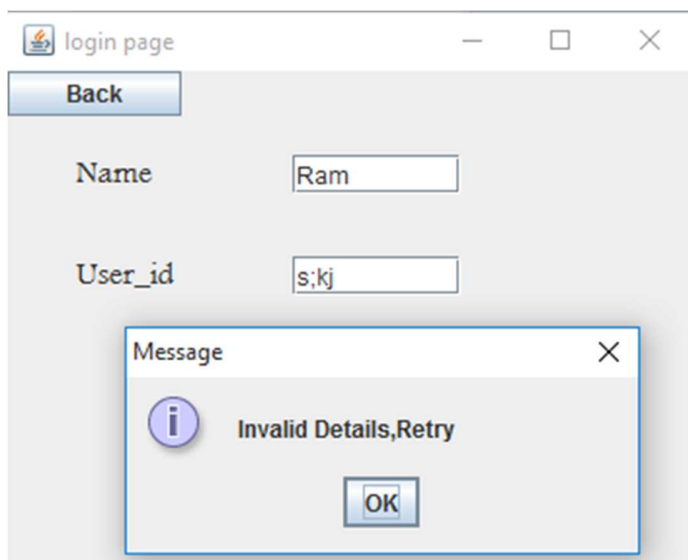
To rate a movie, the user first has to login.



A screenshot of a web application window titled "login page". It features a "Back" button at the top left. Below it are two input fields: "Name" with the text "Ram" and "User\_id" with masked characters "\*\*\*". A "LOGIN" button is positioned at the bottom center of the form area.

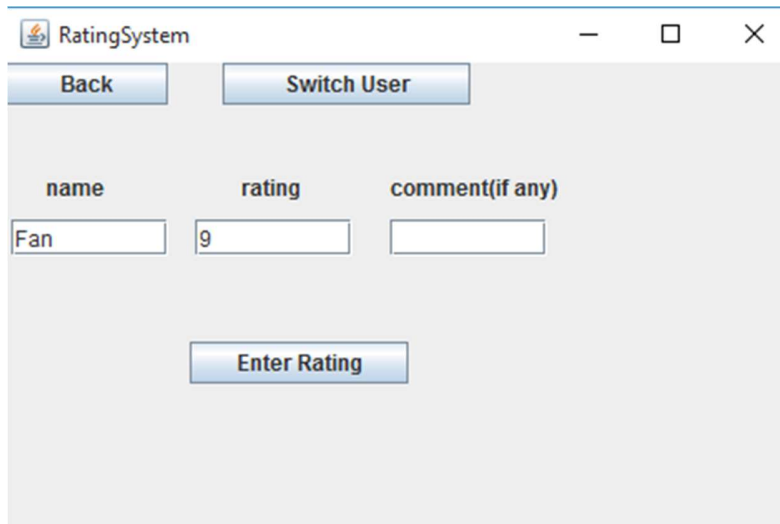
Once the user id and password are verified, he will be directed to the rate movie page where first he enters the name of the movie where he rates the movie along with some additional comments if any.

Entering any invalid combo of name, user\_id would lead to a pop up message, user won't be able to proceed to rate in such a case.



A screenshot of the same "login page" window, but with an error message displayed. The "Name" field contains "Ram" and the "User\_id" field contains "s;kj". A modal dialog box titled "Message" is overlaid on the form. It contains an information icon (i) and the text "Invalid Details,Retry". An "OK" button is located at the bottom of the dialog box.

Following is how the rating page looks like. After entering the movie name, rating, and comments(optional) press enter rating to enter rating into the database. After successfully rating the said entry, the same opens again, allowing the user to rate another movies. Though one user can rate one movie atmost once. The switch user button allows to login as another user and the back button takes the user to the welcome page.



The screenshot shows a window titled "RatingSystem" with standard Windows window controls (minimize, maximize, close). Inside the window, there are two buttons at the top: "Back" and "Switch User". Below these buttons is a form with three input fields. The first field is labeled "name" and contains the text "Fan". The second field is labeled "rating" and contains the number "9". The third field is labeled "comment(if any)" and is currently empty. Below the input fields is a button labeled "Enter Rating".

name	rating	comment(if any)
Fan	9	

That sums up the mini project.

## References:

- <https://stackoverflow.com/>
- <https://www.tutorialspoint.com/>
- <http://www-mdp.eng.cam.ac.uk/web/CD/engapps/drawing/dia-manual.pdf>
- <https://www.geeksforgeeks.org/>
- <https://docs.oracle.com/javase/tutorial/uiswing/index.html>
- <https://www.javatpoint.com/java-swing>