

Our project aimed to create a mock streaming service with a correlating database. We utilized a Java front-end design connected to a MYSQL database to accomplish this. In our streaming service, everyone is considered a user and can either be an administrator or a member, or both. We give each user the option to have either a basic plan or an extra plan, which allows members to access the streaming service from one or three locations at a time.

Our front end allows for secure login and based upon your status as a user (administrator or member), it will greet you with the ability to search for different shows/movies by the director, actors, movie title, or genre. As a member, you can also see your streaming history and the media you've not yet streamed. It also offers a convenient checkbox system to where you can select and view multiple media items based on the awards, actors, director, etc.

As an administrator, our streaming service grants you access to several tools from the front end. You can add or remove shows or movies with the click of a button, view the streaming trend over the past 24 hours, view the streaming history of a particular movie/series, and view the ten most streamed media over the past month. You can also delete members; however, you cannot delete a user's data.

User login information for different levels of access

Admin:

(username), (password)

bill, password2

bob, password3

randy, password1

Member:

(username), (password)

nate, password6

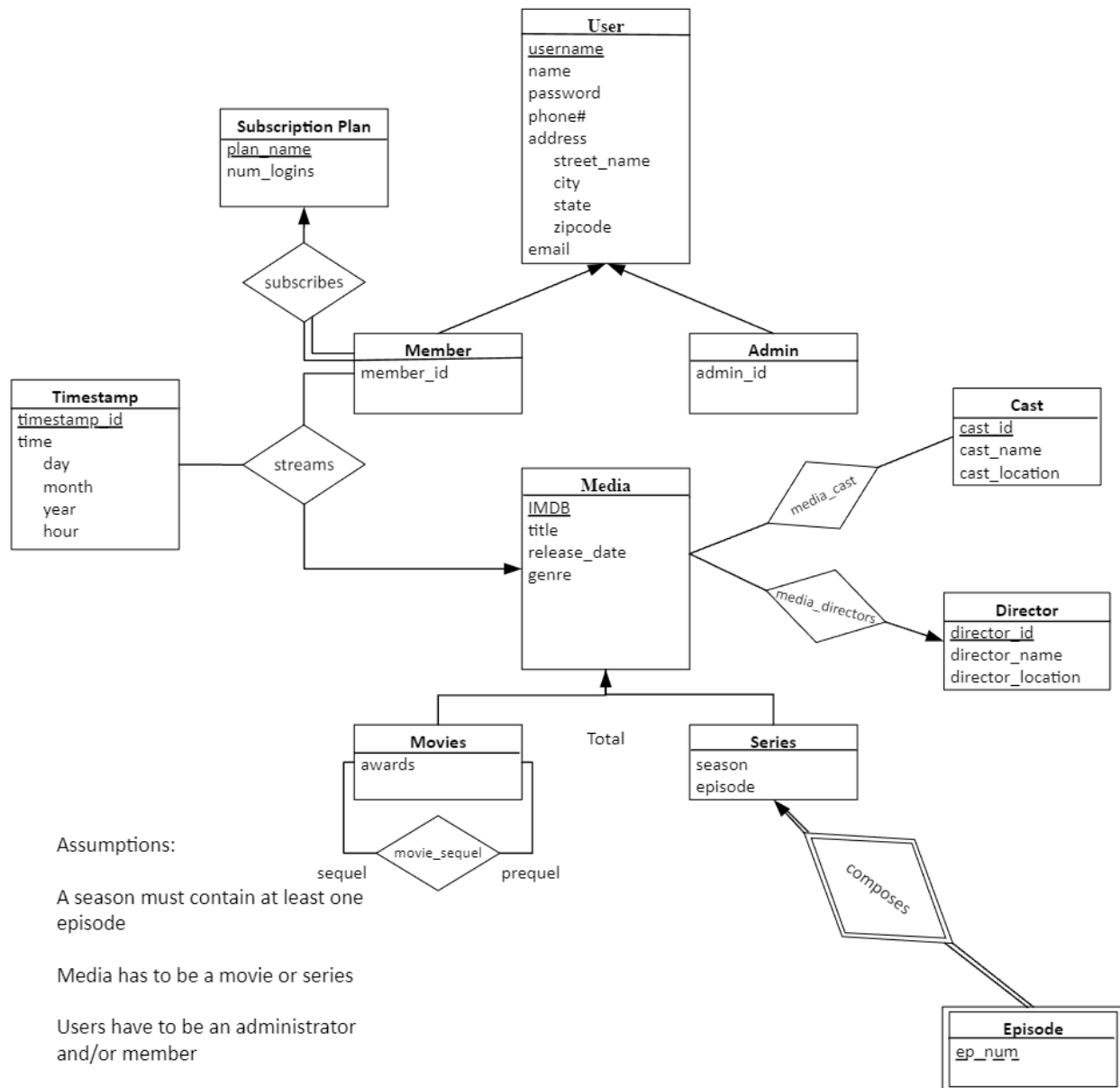
isaac, password5

Admin & Member:

(username), (password)

cole, newpassword

COMP 4410 GROUP 3 ER Diagram



Assumptions:

A season must contain at least one episode

Media has to be a movie or series

Users have to be an administrator and/or member

Administrators can be members

Every media must have at least one cast and director

Every time media is streamed, a timestamp is recorded

Each member must have a subscription plan but a subscription is not required to have members subscribed to it

Relation Schema

user(username, name, password, phone_num, street_name, city, state, zipcode, email)

member(username, member_id, plan_name)
plan_name is a FK that references subscription plan,

admin(username, admin_id)

subscription_plan(plan_name, num_logins)

timestamp(timestamp_id, day, month, year, hour)

streams(username, timestamp_id, IMDB)
username is a FK that references member
timestamp_id is a FK that references timestamp

media(IMDB, title, release, genre)

movies(IMDB, awards)

series(IMDB, season, episode)

Episode(ep_num, IMDB)
IMDB is a FK that references series

media_cast(IMDB, cast_id)
IMDB is a FK that references media
cast_id is a FK that references cast

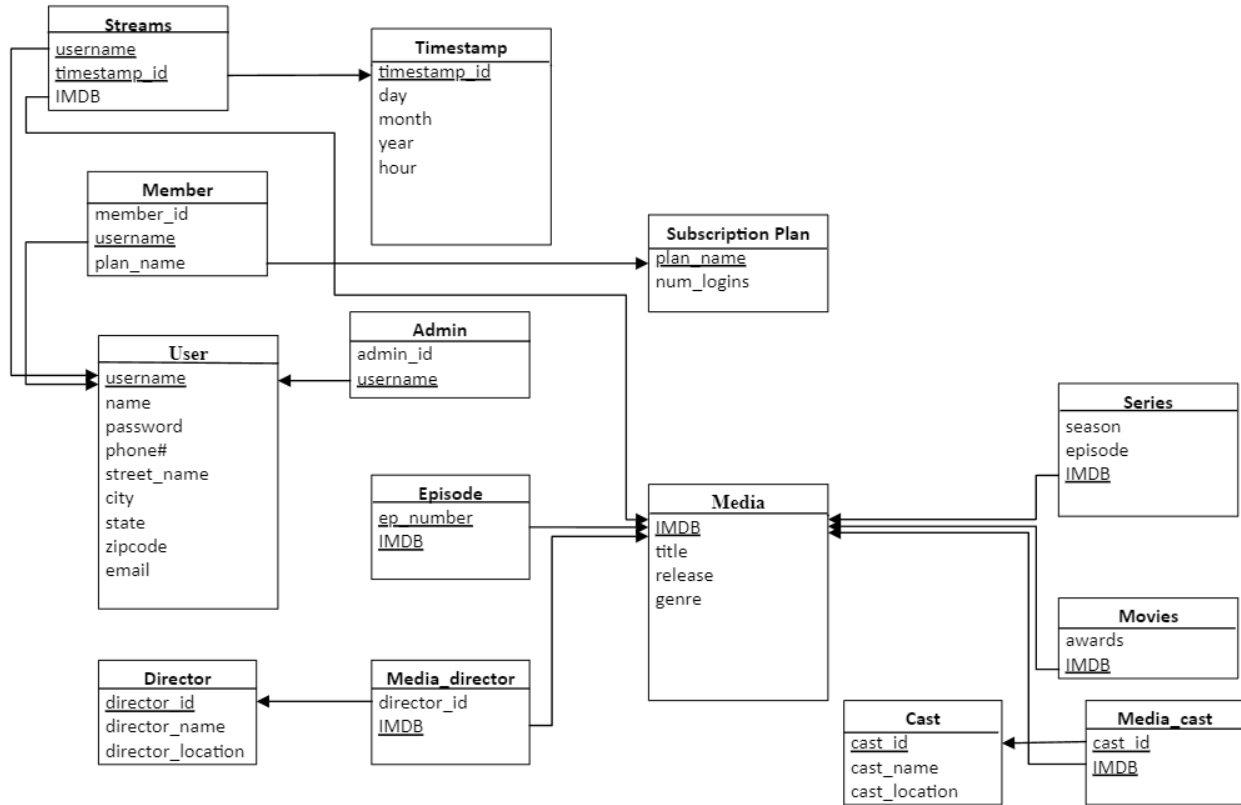
cast(cast_id, cast_name, cast_location)

media_director(IMDB, director_id)
IMDB is a FK that references media

director(director_id, director_name, director_location)

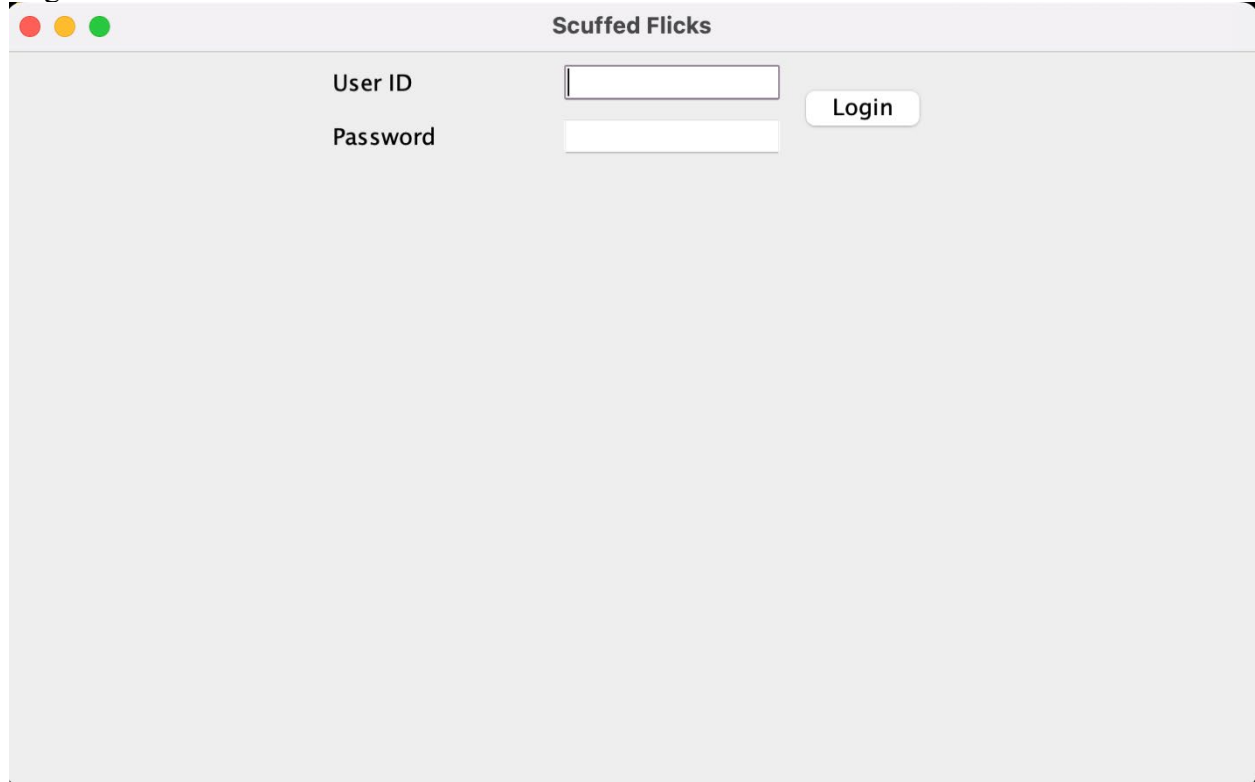
movie_sequel(sequel, prequel)
sequel is a FK that references movies
prequel is a FK that references movies

COMP 4410 GROUP 3 Relation Schema
Diagram



GUI/Program Capabilities:

Login



A screenshot of a login window titled "Scuffed Flicks". The window has a light gray background and a title bar with three colored buttons (red, yellow, green) on the left. The main content area contains two labels, "User ID" and "Password", each followed by a white text input field. To the right of the input fields is a rounded rectangular button labeled "Login".

User ID	<input type="text"/>	Login
Password	<input type="password"/>	

Queries

Basic Search

● ● ●

Scuffed Flicks

Explore Transactions

☐ Awards ☐ Not Streamed ☐ Actor ☐ Director ☐ Genre

title	IMDB	release_date
Spongebob	https://www.imdb.c...	02/20/2009
The Conjuring	https://www.imdb.c...	12/30/2022

● ● ●

Scuffed Flicks

Explore Transactions

☒ Awards ☐ Not Streamed ☐ Actor ☐ Director ☐ Genre

title	IMDB	awards
Billy Madison	https://www.imdb.c...	Best Comedy
The Lord of the Ring...	https://www.imdb.c...	Movie of the Year
The Lord of the Ring...	https://www.imdb.c...	Movie of the Year
The Conjuring	https://www.imdb.c...	Movie of the Year

Scuffed Flicks

ExploreTransactions

nate

Submit

☐ Awards

☒ Not Streamed

☐ Actor

☐ Director

☐ Genre

IMDB	title
https://www.imdb.com/title/tt0...	Spongebob
https://www.imdb.com/title/tt0...	The Lord of the Rings: The Two...
https://www.imdb.com/title/tt0...	The Lord of the Rings: The Fello...
https://www.imdb.com/title/tt0...	Billy Madison

Scuffed Flicks

ExploreTransactions

nate

Submit

☐ Awards

☐ Not Streamed

☐ Actor

☒ Director

☐ Genre

title	IMDB	director_name	release_date
Spongebob	https://www.i...	Nate	02/20/2009

Scuffed Flicks

ExploreTransactions

horror

Submit

☐ Awards

☐ Not Streamed

☐ Actor

☐ Director

☒ Genre

title	IMDB	genre	release_date
The Conjuring	https://www.i...	Horror	12/30/2022
The Conjuring 2	https://www.i...	Horror	12/30/2023

Scuffed Flicks

ExploreTransactions

Submit

☐ Awards

☐ Not Streamed

☒ Actor

☐ Director

☐ Genre

cast_name	title	IMDB	release_date
cole	The Lord of th...	https://www.i...	06/12/2022
cole	The Conjuring 2	https://www.i...	12/30/2023
isaac	Billy Madison	https://www.i...	12/12/2003
isaac	The Lord of th...	https://www.i...	06/12/2021
braden	Spongebob	https://www.i...	02/20/2009
nate	The Conjuring	https://www.i...	12/30/2022

Sequels

Scuffed Flicks

Explore Transactions

BrowseSequelsStreamingMembers ViedosTrendTop 10

Submit

sequel	release_date
The Lord of the Rings: The Two...	06/12/2022
The Conjuring 2	12/30/2023

Member Videos

Scuffed Flicks

Explore Transactions

Submit

Streamed On	username	title	IMDB
11/27/2023	isaac	Spongebob	https://www.i...
11/27/2023	nate	Spongebob	https://www.i...
11/28/2023	nate	Spongebob	https://www.i...
11/28/2023	nate	Spongebob	https://www.i...
11/29/2023	nate	Spongebob	https://www.i...
11/30/2023	nate	Spongebob	https://www.i...

Streaming

Scuffed Flicks

Explore Transactions

Submit

Streamed On	username	title	IMDB	release_date
11/30/2023	cole	Billy Madison	https://ww...	02/10/1995
11/30/2023	cole	Billy Madison	https://ww...	02/10/1995
11/30/2023	cole	Billy Madison	https://ww...	02/10/1995
11/30/2023	cole	The Lord o...	https://ww...	12/16/2003
11/30/2023	cole	The Lord o...	https://ww...	12/16/2003
11/30/2023	cole	The Lord o...	https://ww...	12/16/2003
11/30/2023	cole	The Lord o...	https://ww...	12/16/2003
11/30/2023	cole	The Hobbit...	https://ww...	12/06/2012
11/30/2023	cole	The Hobbit...	https://ww...	12/06/2012
11/30/2023	cole	The Hobbit...	https://ww...	12/06/2012


Scuffed Flicks

Explore Transactions

spongebob

Submit

Streamed On	username	title	IMDB
11/27/2023	isaac	Spongebob	https://www.i...
11/27/2023	nate	Spongebob	https://www.i...
11/28/2023	nate	Spongebob	https://www.i...
11/28/2023	nate	Spongebob	https://www.i...
11/29/2023	nate	Spongebob	https://www.i...
11/30/2023	nate	Spongebob	https://www.i...

Streamed

OK

Trend

Scuffed Flicks

Explore Transactions

Submit

IMDB	title	Streamed
https://www.imdb.c...	Billy Madison	5
https://www.imdb.c...	The Lord of the Ring...	7
https://www.imdb.c...	Spongebob	2
https://www.imdb.c...	The Hobbit: An Une...	8
https://www.imdb.c...	Game of Thrones	5
https://www.imdb.c...	The Hobbit: The De...	7
https://www.imdb.c...	Napoleon	5
https://www.imdb.c...	The Conjuring	1
https://www.imdb.c...	The Hobbit: The Bat...	8
https://www.imdb.c...	The Conjuring 2	1

Top 10

Scuffed Flicks

Explore Transactions

Browse

Sequels

Streaming

Members Videos

Trend

Top 10

Submit

title	IMDB	Streams
The Hobbit: An Une...	https://www.imdb.c...	8
The Hobbit: The Bat...	https://www.imdb.c...	8
The Lord of the Ring...	https://www.imdb.c...	7
The Hobbit: The De...	https://www.imdb.c...	7
Spongebob	https://www.imdb.c...	6
Billy Madison	https://www.imdb.c...	5
Game of Thrones	https://www.imdb.c...	5
Napoleon	https://www.imdb.c...	5
The Mandalorian	https://www.imdb.c...	4
The Conjuring	https://www.imdb.c...	2

Transactions:

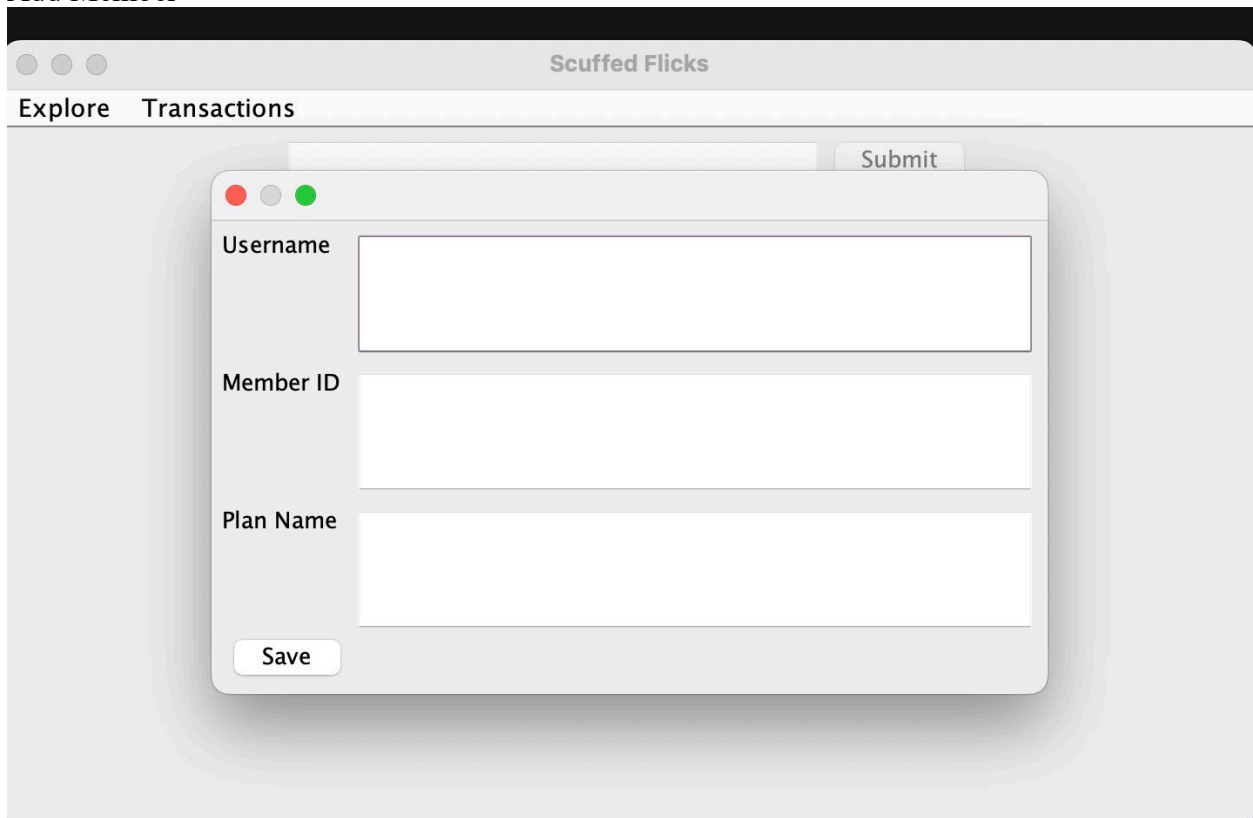
Edit Profile

The image shows a web application interface with a modal dialog for editing a user profile. The dialog is titled "Edit Profile" and contains the following fields:

Field	Value
Name	Cole Smith
Password	newPassword
Phone	1234567890
Street	123 Main Street
City	Fairmont
State	WV
Zip	26554
Email	colesmith@email.com

At the bottom of the dialog is a "Save" button. The background shows a navigation bar with "Explore" and "Transactions" tabs.

Add Member



The image shows a web application window titled "Scuffed Flicks". At the top, there are two tabs: "Explore" and "Transactions", with "Transactions" being the active tab. Below the tabs, there is a "Submit" button. The main content area features a modal form for adding a member. The form has three input fields: "Username", "Member ID", and "Plan Name". At the bottom of the form is a "Save" button.

Scuffed Flicks

Explore Transactions

Submit

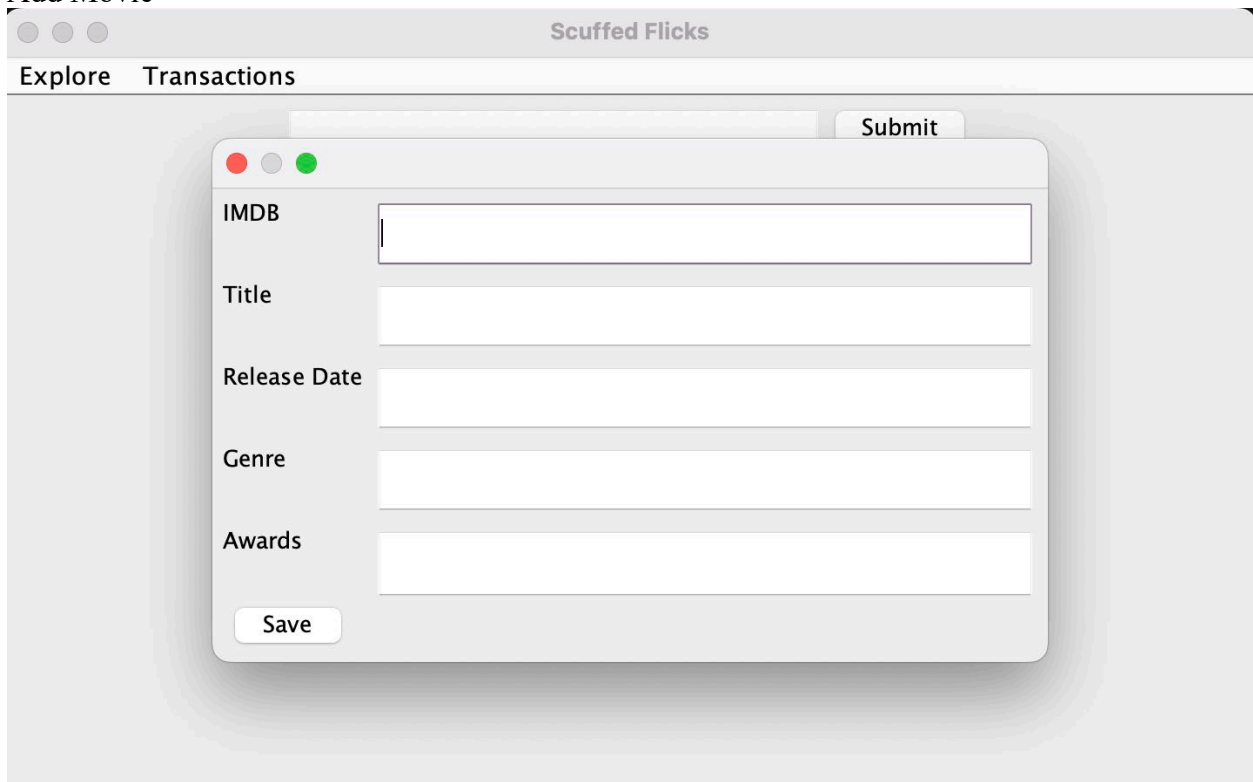
Username

Member ID

Plan Name

Save

Add Movie



The image shows a web application window titled "Scuffed Flicks". At the top, there are two tabs: "Explore" and "Transactions", with "Transactions" being the active tab. Below the tabs, there is a "Submit" button. The main content area features a modal form for adding a movie. The form has five input fields: "IMDB", "Title", "Release Date", "Genre", and "Awards". At the bottom of the form is a "Save" button.

Scuffed Flicks

Explore Transactions

Submit

IMDB

Title

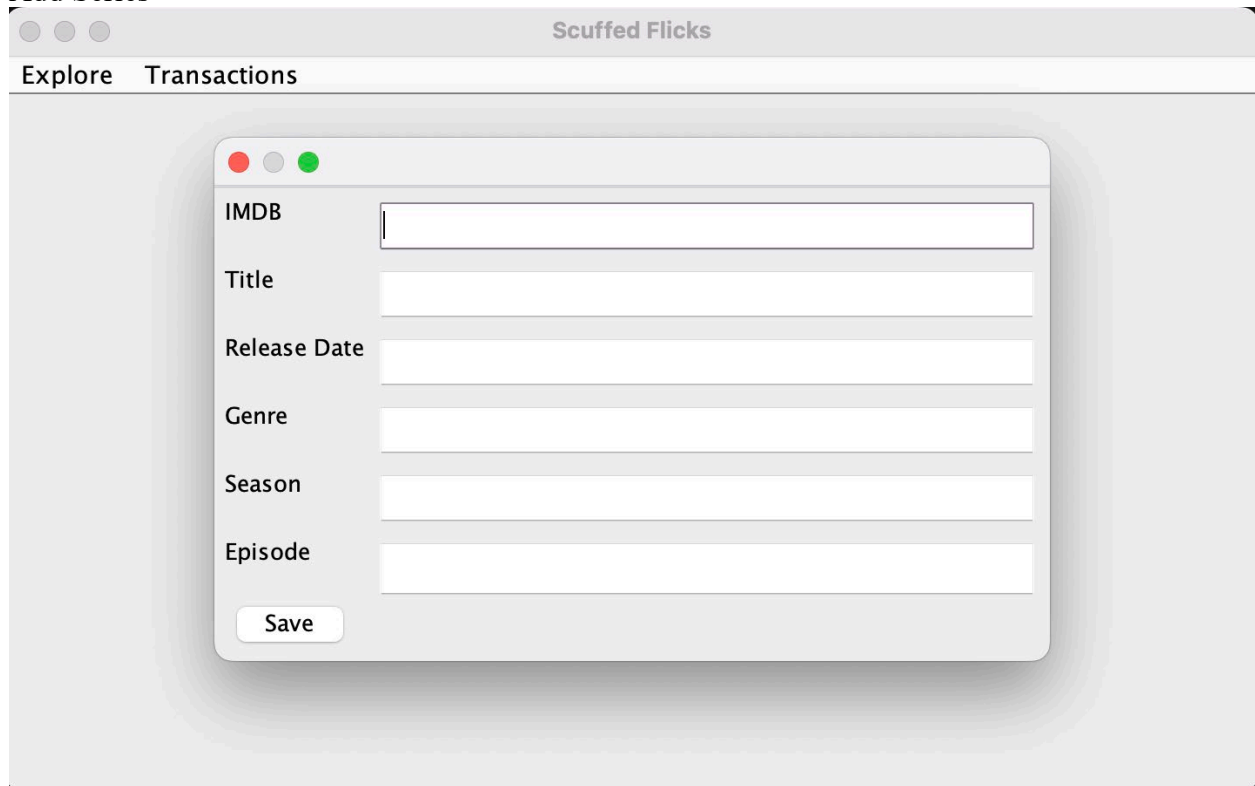
Release Date

Genre

Awards

Save

Add Series



The screenshot shows a macOS-style window titled "Scuffed Flicks" with a menu bar containing "Explore" and "Transactions". A modal dialog box is open in the center, titled "Add Series". The dialog contains the following fields and a button:

- IMDB: A text input field.
- Title: A text input field.
- Release Date: A text input field.
- Genre: A text input field.
- Season: A text input field.
- Episode: A text input field.
- Save: A button at the bottom left of the dialog.

Trigger used in MYSQL



```
1 CREATE DEFINER='admin'@'%' TRIGGER `media_AFTER_DELETE` AFTER DELETE ON `media` FOR EACH ROW BEGIN
2   DELETE FROM series
3     WHERE series.IMDB = OLD.IMDB;
4
5   DELETE FROM movies
6     WHERE movies.IMDB = OLD.IMDB;
7 END
```

Limitations of Program:

For the final version of our project the GUI works exactly as intended. All the queries and transactions function as they need to. However, that doesn't mean that there isn't room for improvement. The biggest improvement that can be made about our program would have to be the visuals of the GUI. The buttons could be more intuitive to pull the users to the queries and transaction they may need to use. When doing a transaction, we could add in a visual

representation that pops up to show that the transaction went through without needing to look at the database itself. And we could format the GUI so that the client can resize the window or customize the look of the GUI to their own personal preference. However, these changes wouldn't do anything to affect the way the program works.

If given more time we would also have loved to implement more functionality to the program. Specifically new users being able to create an account from the login screen if they don't already have one as well as being able to click on a part of the cell to open a new window that plays a trailer for the user from the piece of media. Finally, the program could be improved further if we were able to add in triggers for every type of specific transaction that can take place in the program however those would be too numerous to list them all.