

CSCE 315 Project 2

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Project Mission

Our team designed a crowd-sourced recommendation system housed on Amazon Web Services (AWS) for a content streaming company that includes a database management system (DBMS) and a corresponding graphical user interface (GUI), taking in existing watch history data to analyze trends and make personalized viewing recommendations.

Related Files

- database_design.pdf:

In this file, we illustrated how we design our database including high-level and low-level designs.

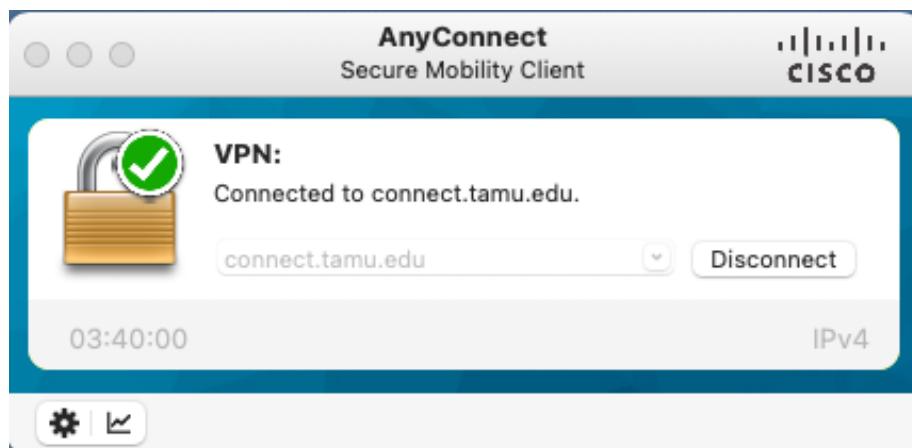
- GUI-sketch.pdf:

This is our first version of GUI sketch file.

Demo

Since connecting the AWS database need TAMU VPN request, in this case, here is a virtual demo of our project.

step 1: connect to TAMU VPN and make sure connect to database successfully



```
psql -h csce-315-db.engr.tamu.edu -U csce315904_3user csce315904_3db
> psql -h csce-315-db.engr.tamu.edu -U csce315904_3user csce315904_3db
Password for user csce315904_3user:
psql (14.0, server 12.7)
SSL connection (protocol: TLSv1.2, cipher: ECDHE-RSA-AES256-GCM-SHA384, bits: 256, compression: off)
Type "help" for help.

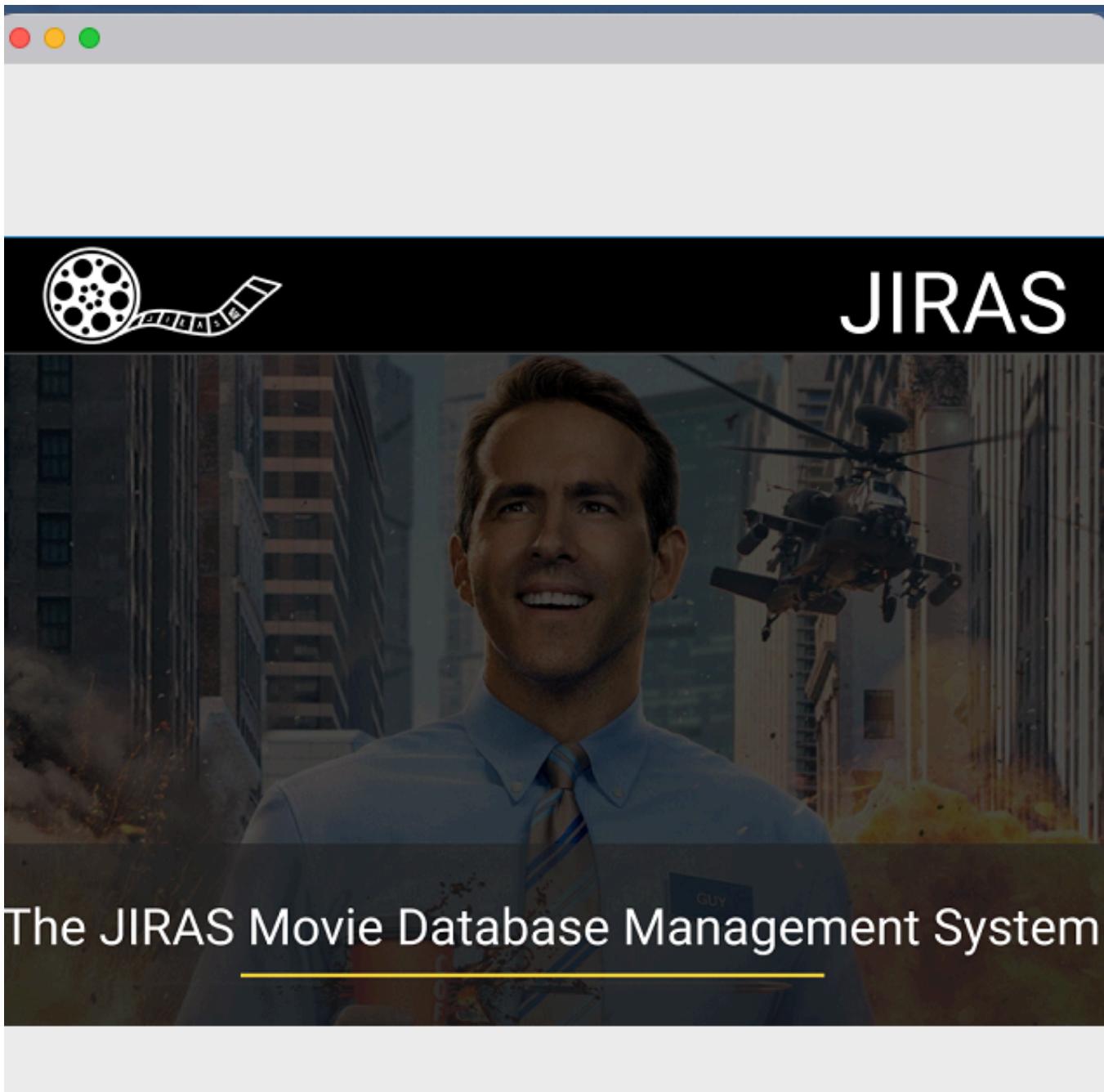
csce315904_3db=>
```

step 2: cd to the GUI_Files folder and compile the java files to start the program

```
1 | javac -cp ".:xchart-3.8.1.jar:postgresql-42.2.8.jar" Welcome.java
2 | java -cp ".:xchart-3.8.1.jar:postgresql-42.2.8.jar" Welcome
```

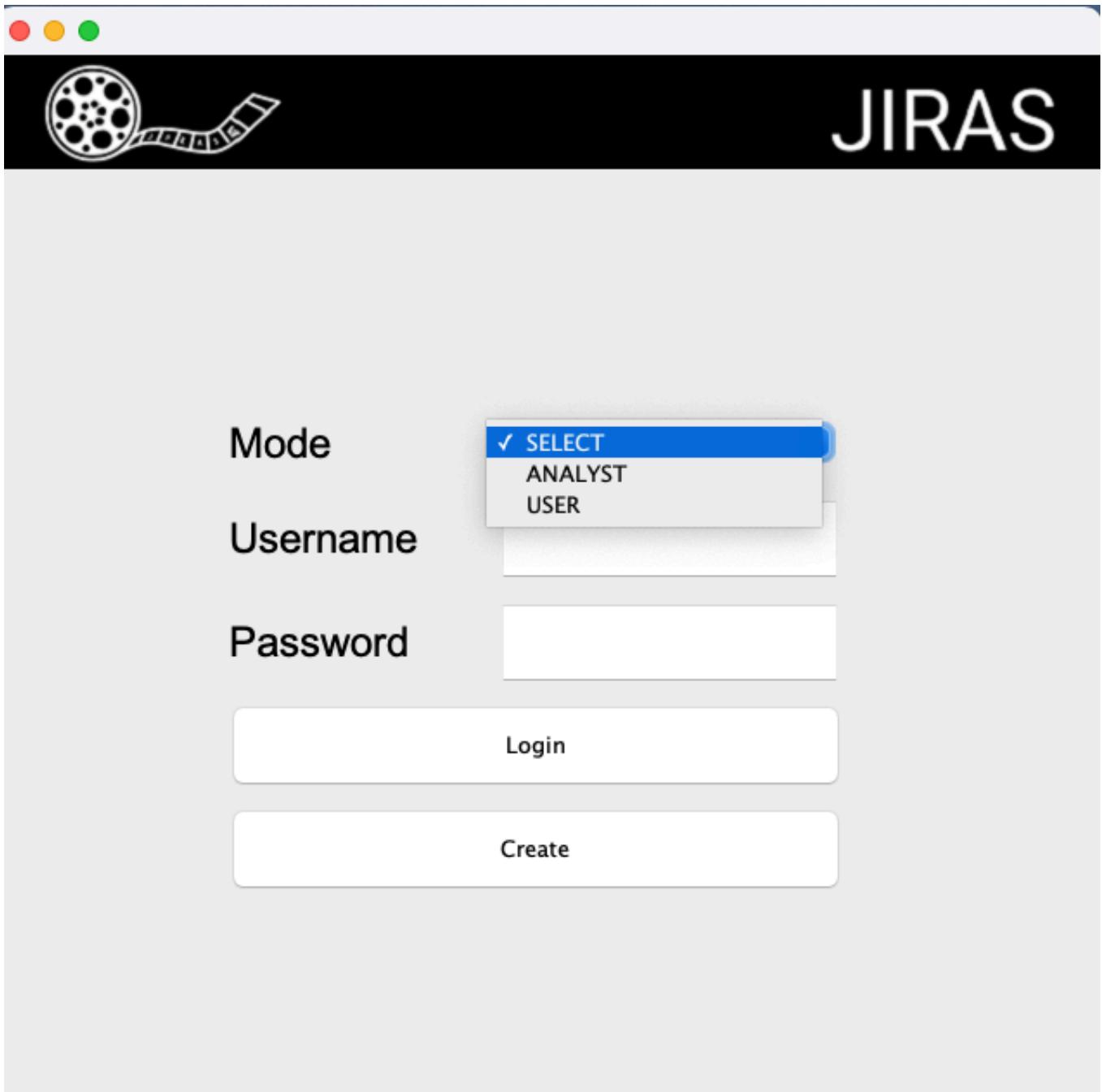
```
java -cp ".:xchart-3.8.1.jar:postgresql-42.2.8.jar" Welcome
> cd /Users/abby/Desktop/2021_fall/CSCE315_904/pop-video-recommender/GUI_Files
> javac -cp ".:xchart-3.8.1.jar:postgresql-42.2.8.jar" Welcome.java
> java -cp ".:xchart-3.8.1.jar:postgresql-42.2.8.jar" Welcome
```

Welcome page



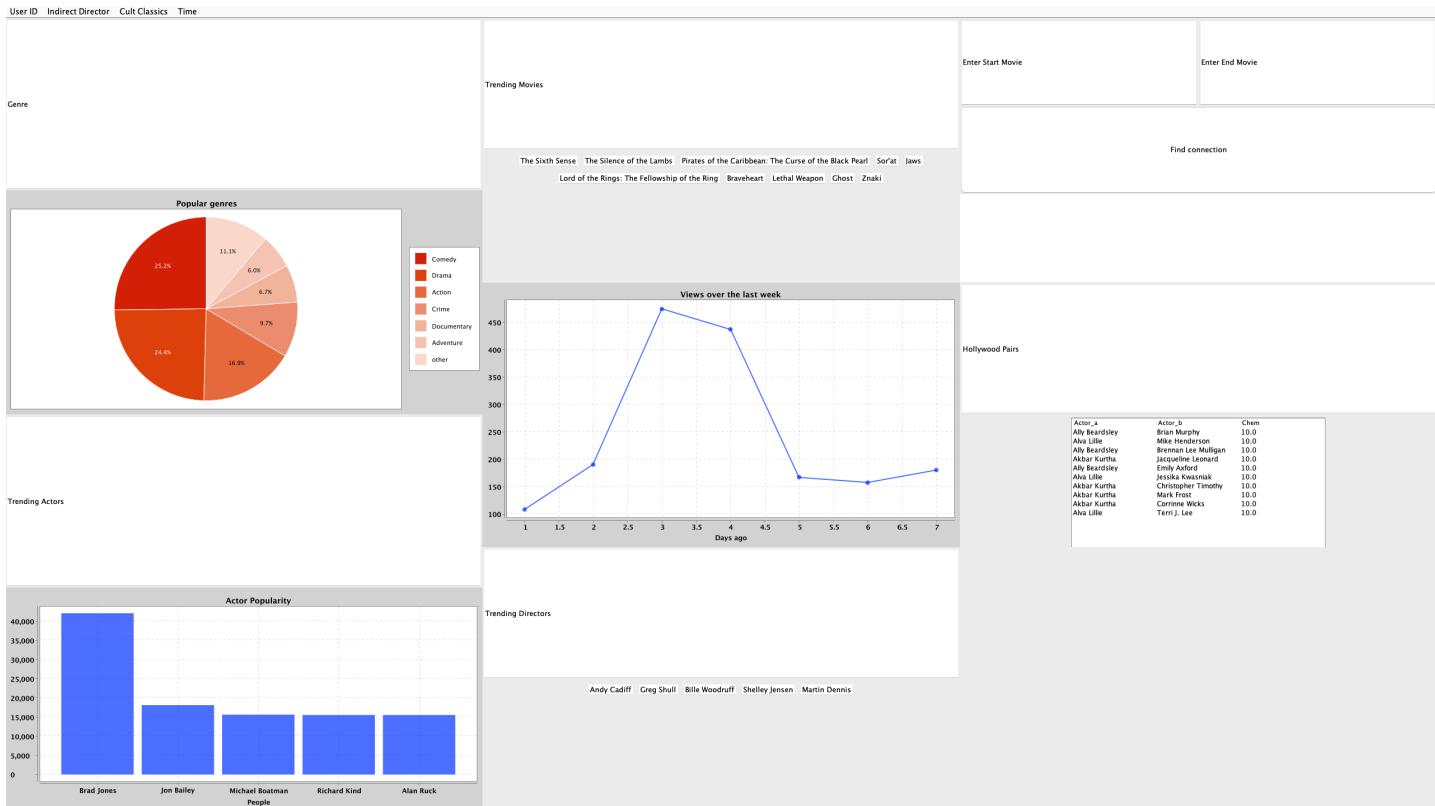
Login page

We have two roles in this program: analyst and user. Analysts are able to have the access of users watch history and the statistics of popular trending videos. Users only have the access of their own watch history.



Analyst Page

(It takes a while since there is A LOT OF calculations....)



For the left two cols we have some charts of pop trending videos statistics. In the top right corner, the analyst can input two movies to find their connection (due to actors or directors). At the right bottom we have the hollywood pairs where shows the Top couples with highest average movie ratings which they acted together. Check hollywoodPair_SQL.pdf for related SQL commands.

User page

User has to use their User_ID to login. This page just simply lists the related user's watching information.

User ID Watch History

Trending Movies

The Sixth Sense	The Silence of the ...	Pirates of the Cari...	Sor'at	Jaws	Lord of the Rings: ...	Braveheart	Ghost	Lethal Weapon	Znaki
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Movies By Directors You Like

The Ghost and Mr...	Operation Pacific	Lilies of the Field	This Property Is C...	The Devil's Brigade	The Green Berets	Summer of '42	The Day of the Jac...	The Cowboys	The Maltese Falcon
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Movies Starring Actors You Like

This Property Is C...	Three Days of the ...	Silver Streak	Time Bandits	Silkwood	Police Academy 2...	The Clan of the Ca...	Innerspace	The Serpent and t...	Operation Pacific
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Viewer's Choice - revisit movies you really liked

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Viewers Beware

Superstar	Bride of Chucky	The Toxic Avenger	Grease 2	My Science Project	Fright Night	Let It Ride	Gerry	Armed and Dange...	Head in the Clouds
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