Project Final Report

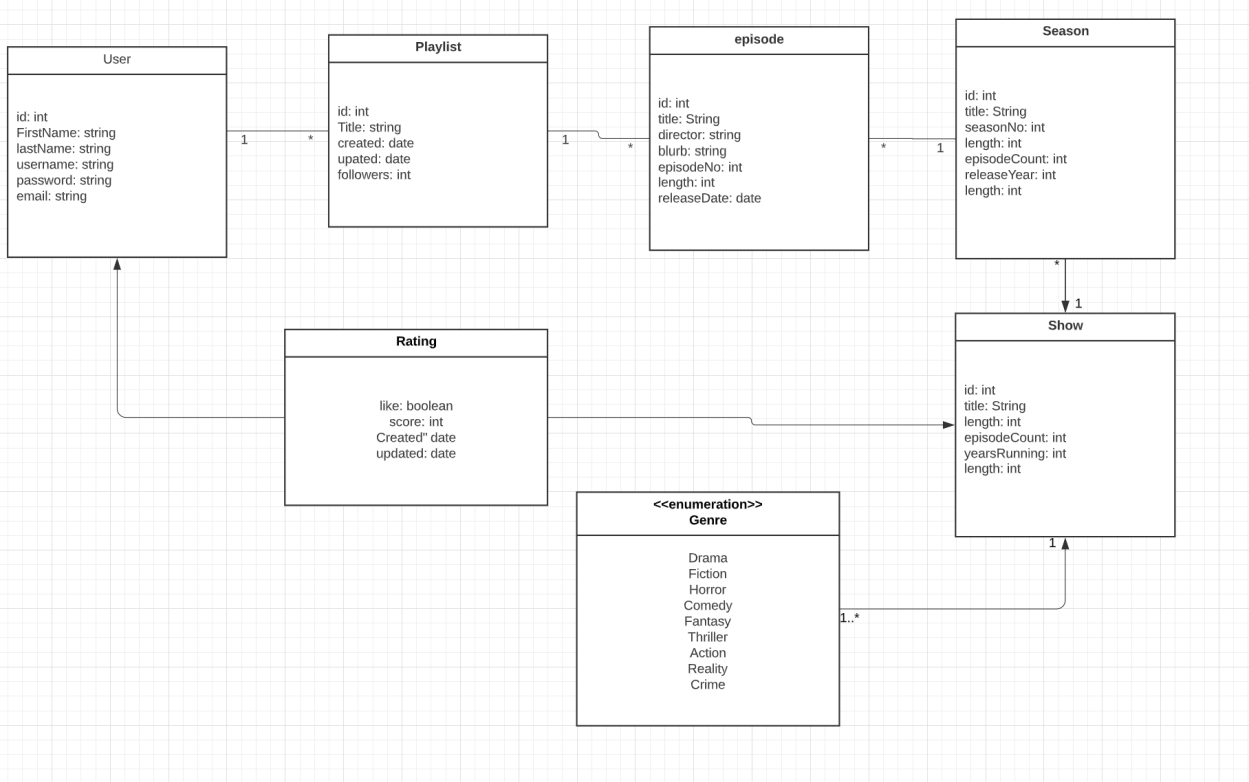
README

```
Authors: Siraj Akmal and Andres Rivera
Project: Providing users with television show information


------------------------------Design ----------------------------------
This project utilizes object-oriented design for accessing the schema.
A televisionApp class was created for the design. An instance of the
televisionApp will connect to the "tv" schema and will have functionality
that can query and modify data.




------------------------------Libraries ----------------------------------

    Make sure to pip/conda install the following libraries:
        1. pymysql (connector to our database sql)
        2. prettytable (Allows us to tabulate data in a clean way)



------------------------Running the Program ----------------------------------
Before running this program, make sure to run the sql file dump. This will create the schema
as well as the tables necessary for the program.


The user must run this program on either the python console or
 command line. If you are using pyCharm, click on "edit
 configuration" of the main.py file and select "emulate terminal
 in output console". When you are ready, run the program.

 The program will first prompt the user with user information
 (this will allow for the connection to the tv schema). Once connected,
 a menu of options will appear. The user has the choice to view/alter
 the tables "User", "Playlist", "Episodes", "Ratings". Once a table is selected,
 the user will be shown a sub-menu with the appropriate functionality.
 A user has the ability to display, create, edit, and delete information from the
 chosen table.
```

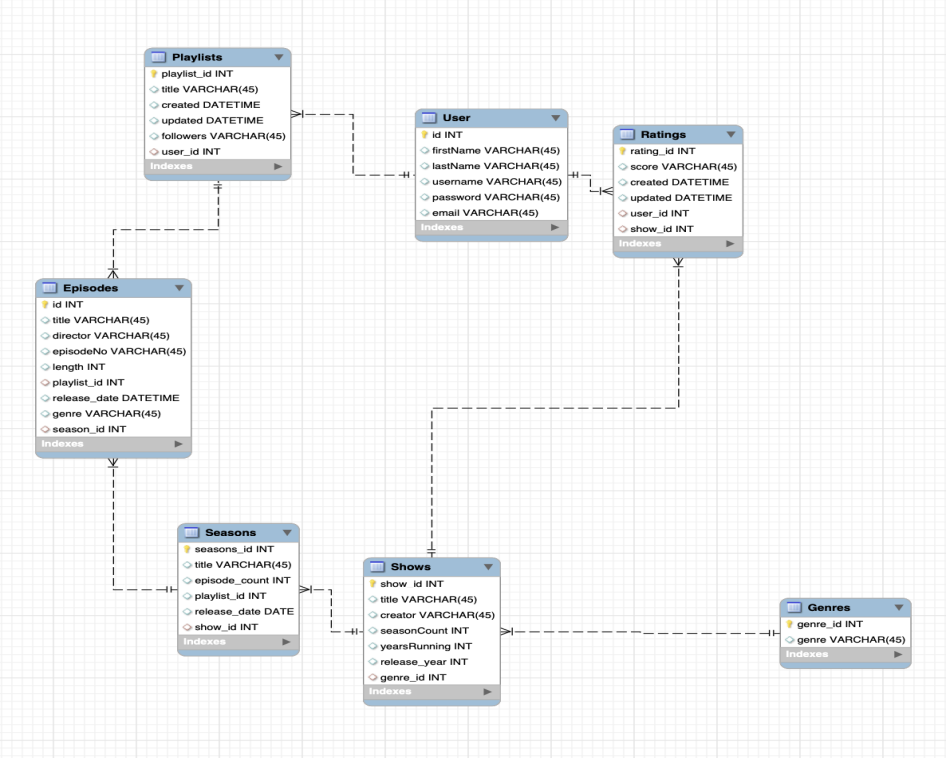
Technical Specifications

Python was used for the application interface. The libraries that support the program include the connector (pymysql) and prettytable for the tabulation of data.

UML Diagram



Logical Design



User Flow

The first menu when you run the program opens the menu allowing you to select a table from the choices Users, Playlists, Episodes, Ratings, and the choice to quit the program. After selecting one of the categories, you are again prompted to select from a menu. The secondary menu for these categories is the same, you can display, create, edit, and delete for each of the categories. Also in this second menu you can return to the main menu of the program. If you select create, you are then prompted to input the information you want to add.

Lessons Learned

Working together, I think we learned valuable teamwork and technical skills. This project definitely helped us learn more about practical uses of databases and how to bring them into the real world. This developed our ability to create programs in python that use SQL. One thing that we have to work on is time management. We kept saying we should have a lot more features, but in the end we did add everything that we wanted to. Our approach changed after our initial project proposal after realizing that our first idea didn't really open itself to more functionality, so we ended up changing our idea.

Future Works

Future use of the database would be to create playlists for our own personal use, as no major streaming platforms have this feature. It can be used to create collections unique to each user. For potential areas of functionality, we could add movies as a category as well, mixing both forms of media. Furthermore the ratings section could be more developed, where each episode, season, and overall show have a rating.