CECS 323 LAB: MOVIES

OBJECTIVE: Give you some experience with resolving non-atomic and multi-valued attributes.

INTRODUCTION: Your local library has a collection of movies that they loan out. Patrons come to the front desk and ask for something like "Adventure Romance suitable for a 14 year old" and you want to be able to look through a listing of movies available to quickly find such a thing.

PROCEDURE: The library has a table of such data already, and it looks like this:

Title	Distributed by	Year Released	Description
Pirates of the Caribbean: the Curse of the Black Pearl	Disney Studios	2003	PG-13 | Action | Swashbuckling | Mock Violence
Star Trek Heart of Darkness	Paramount Pictures	2013	Science Fiction | Adventure | PG-13
Fast Times at Ridgemont High	Universal Pictures	1982	Romance | R | Action

It's your job to come up with an improved structure for this data to make it less likely that someone will input faulty data, as well as make the data more usable.

1. Model the improved data structure in UML
2. Model the improved data structure in relation scheme diagram.
3. Build the tables.
4. Load them with sample data. You do not have to use these movies, use your favorites if you like.
5. Write the following queries and demonstrate them:
    a. For each category of movie, show me the number of movies that we have in that category.
    b. For each movie, show me the number of categories that it fits into.
    c. For each rating, give me the number of movies that we have with that rating, even if that number is 0.

WHAT TO TURN IN:

- Your UML class model
- The relation scheme diagram
- Your DDL
- Your DML that you used for inserting the sample data.
- The sample output from your queries.
- Your team's filled out collaboration document. You can find a template for that here.