CS450 Fall 2023 Project 3

DUE: 12/3/2023 by 11:59PM

You have the option to complete this project either individually or in a group, with a maximum of two students per group. Please make sure to sign up for Project 3 either as an individual or within a group through Blackboard. If you choose to work in a group, the late days allowed for your group will be the average of late days for each group member, rounded down to the nearest whole number. Only one submission is needed for each group.

Read the following manuals:

- https://www.mongodb.com/docs/manual/tutorial/getting-started/
- https://www.mongodb.com/docs/manual/tutorial/query-documents/

MongoDB Community Edition is available at
https://docs.mongodb.com/manual/administration/install-community/

Running a Script in mongo shell:

To run a script of mongo commands within the mongo shell, just use the load() command. For example, if you have all the mongo commands in a file named mongoCommands.js that is in your current working directory:

load("mongoCommands.js")

Descriptions:

You are provided with a JS file: loadMovieDetailsDataset.js. Within the Mongo shell, load it into a database called "video". Perform the following queries on the movieDetails collection: (10 points each)

1. How many movies were directed by George Lucas?

2. Find the director of each movie that was released in 2010 and has a rating of PG.

3. Show the titles of the movies that are rated PG and have exactly 10 award nominations.

4. How many movies have one award wins or three award nominations?

5. How many movies do not contain the metacritic field?

6. Find the imdb rating for the movie that lists just two writers: "Ethan Coen" and "Joel Coen", **in that order**.

7. How many movies list "Family" among its genres?

8. How many movies list "Western" **second** among its genres?

9. How many movies have an imdb rating greater than 8 and the plot field is not null?

10. Show the leading actor (the first element of the array "actors") of each movie that lists "Ethan Coen" or "Joel Coen" among their writers.

Deliverables:

In a PDF file, attach copies of running your mongo commands and the output. In a text file, include the mongo commands for the GTAs to run your queries.