Outline of Data Model - COMP2406 Project Check-In
By: Kyle Poirier-Szekely (101104274) & Kaushik Paul (101158930)

We will be storing our information into 1 database with 4 separate sub-collections using MongoDB; 1 for movies, 1 for users, 1 for reviews, and 1 for people who worked on movies (persons).

MOVIE COLLECTION

The movie collection will store movie objects retrieved from a JSON file, the movie objects' data will contain:

Movie Object:

Data Member	Member Value	Description
"Title"	string	Movie title/name
"Year"	string	Year the movie was released
"Rated"	string	Rating of the movie
"Released"	string	Date the movie was released
"Runtime"	string	Length of the movie
"Genre"	string	Genre(s) pertaining to the movie
"Director"	string	Movie director
"Writer"	string	Writer(s) of the movie
"Actors"	string	Actor(s) in the movie
"Plot"	string	Short summary of the movie
"Awards"	string	Awards the movie has won
"Poster"	string	A link of the movie poster
"ID"	int	An ID created to keep track of the movie
"reviews"	array	Array of reviewIDs to link the review object

The movie collection will let us display movie information on different webpages. Contributing users will have the ability to add a movie to the collection.

USER COLLECTION

The user collection will store user objects containing:

User Object:

Data Member	Member Value	Description
“name”	string	Username for login
“password”	string	Password for login
“type”	bool	Store user type to see if the user is contributing or regular
“reviews”	array	Array of review IDs from the user
“watchlist”	array	Array of movie IDs the user has selected from the movieDB
“followers”	array	Array of usernames that are following the user
“following”	array	Array of usernames that the user follows
“followingActors”	array	Array of people that the user follows

Registration: Every time a user tries to register we will check the collection to see if the user has already been registered, if the user was not found, the user will be registered (if they provided a valid password). If the user is found in the collection, a message will be shown telling the user to login or that another user has created an account under the same name.

Login: We will check the collection for a specific username that a user has entered, if it is not in the collection, the user will be shown an error message telling them to create an account. If the username is in the collection we will check to see if the password the user has entered matches the password in the collection. If the passwords do not match, an error will be shown asking the user to input the correct password. If the passwords do match, the user will be logged in.

User Type: There will be 2 different types of users, Regular, and Contributing. Contributing users will have access to add movies and actors into the movie collection whilst regular uses will not.

Reviews: Reviews made by the user will be stored in an array with their reviewIDs, the ID’s will connect to the review object which will be shown in the review collection

REVIEW COLLECTION

The review collection will store review objects created by the user on a movie page that they have selected. The review object will contain the following data:

Review Object:

Data Member	Member Value	Description
“reviewer”	string	Username of the reviewer
“movie”	int	Stores the movie ID from the review
“score”	int	Score is stored as an int from 1-10
“sum”	string	Short text of the movie review
“full”	string	Longer text of the movie review
“id”	int	Creates review ID

PERSONS COLLECTION

The persons collection will contain various persons objects which will store information related to the people that worked on a movie (director/writer/actor). The person object will contain the following data:

Person Object:

Data Member	Member Value	Description
“name”	string	Name of the person
“freqCol”	array	Array of usernames that contributed in creating/adding a movie with that person
“writer”	array	Array of movie IDs that this person has written for
“director”	array	Array of movie IDs that this person has directed for
“actor”	array	Array of movie IDs that this person has acted for