**Project Hand-in**

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THIS INFORMATION ALSO IN ASSIGNMENT README

PROJECT REPORT

1. Code and database initialization:

- Before testing the movie database webpage, check that all required files are downloaded:

- controllers (folder)

- contribution-router.js

- index-router.js

- logout-router.js

- movie-router.js

- person-router.js

- profile-router.js

- review-router.js

- search-router.js

- signin-router.js

- user-router.js

- models (folder)

- MovieModel.js

- PersonModel.js

- ReviewModel.js

- UserModel.js

- movieData (folder)

- movie-data-2500.json

- views (folder)

- pages (folder)

- contribute.pug

- index.pug

- movie.pug

- person.pug

- profile.pug

- review.pug

- search.pug

- signin.pug

- user.pug

- partials (folder)

- header.pug

- database-init.js

- package-lock.json

- package.json

- README.md

- server.js

- Once all files have been verified, install all required modules by typing "npm install" in a terminal within this directory

- To start initializing databases, ensure you are using mongodb and "use moviedb"

- To initializes databases, run the databse-init.js file by typing "node database-init.js" in a terminal within this directory:

You will see all the documents being loaded to the database in the terminal console.

2. Once all files, modules, and databases required are correctly installed you may begin testing the webpage:

- To start the webpage run the server.js file by typing "node server.js" in a terminal within this directory.

- Go to your preffered webpage on address http://localhost:27017 to see the page, or click on the address link in the terminal console.

3. Testing the webpage:

- The webpage will consist of 5 main pages: Home, Profile, Signin/Up, Search and Contribute.

- The webpage will also consist of 3 sub pages: movie, person, and review.

PART 1: Main Pages

1. Home Page

- This page is the main area which provides links to other parts of the website.

- Will have links to sign in, profile, and search pages.

2. Profile Page

- If you are not logged in already, the profile page will prompt you to log in or create an account

- Once you are logged in the profile page will display your information:

- username

- watchlist

- followed People (with links to their page)

- reviews made (with links to the review)

- When on the profile page, if your account is declared as a contributor account, a link will appear to reach the contributor page

- Notifications when a user you follow creates a review will be displayed in your profile.

3. Signin/up Page

- this page will prompt to login or sign up if you are not already logged in

4. Search Page

- The search page will start out with a list of movies

- There is a prompt to search for movies with the requested title name, genres, and actors

- After searching with a criteria, the list will display movies with the same title name, genres and actors.

- You can also go through the searched list by clicking next or previous to see all the movies in that search query.

5. Contribute Page

- The contribution page will display 2 different prompts.

- Add person:

- This prompt will request a person name

- Upon entering a name, and clicking the button a new person will be created if the name is unique.

- Add Movie:

- This prompt will request a required movie title, runtime, release year and genre and also optional: writer, director, and actor;

- Please note that if the person (director, writer, or actor) does not exist, you must first create their person document by using the "add person" prompt that the top of the page.

- Once the button is pressed, the movie will be added to the database if the name is unique.

PART 2: SUB PAGES

1. Movie Page

- While NOT logged in:

- The movie page will display the movie poster, actors, directors, writers, review, and plot.

- While logged in:

- The movie page will display the same information as not logged in, but will also include a prompt to create your own review, and button to add movie to your watchlist.

- the review will include the base review, summary of review and rating.

- After submitting a review, the movie will keep that review, your profile will keep the review and you will be redirected to that reviews page.

2. Person Page

- In a person page it will have a button to either follow or unfollow (if you are logged in)

- It will also diplay the movies that they have acted in, written or directed.

3. Review Page

- The review page will display a specific review consisting of the movie title, link to movie page, creator of review and link to their profile, review rating, summary of review and the full review.

PROJECT CRITIQUE:

1. Functionality/Implementations:

- Home Page displaying links to main pages.

- Profile page:

- if the current user is not logged in the profile page will display the signin page and prompt.

- if the current user is logged in, the profile page will display the information of the user.

- profile implementations: contributor status, followed people, watchlist, followed users, notifications, movie recommendations, logout button. (Links to all of these things)

- Signin page to signin

- Search page:

- Initially displays all movies in data base in sets of 10 movies.

- Next and previous buttons to navigate through the movelist

- Search to look for movies meeting title, genre, and actor criterion

- movies are links to movie pages.

- Contribution page:

- only available as a contributer

- Gives the ability to add people to the database

- Gives the ability to add movies to the database (and there for the ability to be listed in search page)

- Person Page:

- person page includes person information: movies written, acted in, and directed.

- Movies Page:

- Displays all movie information: poster if it has, title, actors, directors, writers, similar movies, reveiws, plot, description.

- This page also gives the ability for users that are logged in to create reviews.

- Reviews Page:

- Displays the current review and links back to person who created and movie it was for

2. Design Critique:

We believe that our webpage is done fairly well with organized pages and visibility handling. For example, when there are no followed users, the followed users section will not be displayed on the profile page. Our webpage also has a good flow once you have used it a few times. It begins at a home page stating all the main pages like search and signgin, and if you sign in the profile information is ready and visible. Upon making yourself a contributor, a link to the contribution page appears making it so that only accounts with contributor status are able to reach that page.

Some things we can learn from creating this webpage is planning pages and routes in ways that will be efficient for certain information to be transferred instead of recreated throughout different pages. At times this can make loading certain things a bit easier. Also, in terms of run times, the planning plays a part because there are portions in which we were forced to use nested for-loops to get this required information needed to display on a page. One thing that was done well in our opinion was the structure of our database collections in terms of keeping information of documents from other collections. For example, getting information like the contributing actors, directors, and writers from a movie by directly having those specific people's \_id in the movie.actor, movie.director, and movie.writer lists and the movie in the person's respective fields as well. This directly links their \_ids each other.

3. Algorithms:

- Recommendation:

- The recommended list is based on the people you follow:

- It consists of up to 5 movies that users you follow have contributed to. (acted, directed, written)

- The algorithm takes the first person in your followed list and adds the movies they have contributed to onto the recommendation list.

- We then take the next person's contribution of movies and so on until we have gone through all our following list.

- Once we have our recommendation list we send the top 5 to display and link to those movies.

- Similar Movies:

- In each movie page, there will be a list of 5 similar movies.

- The criteria for similar movies is based on the current viewed movie's genres.

- For example, if the movie is a thriller, 5 movies with the thriller genre will be listed.

- If multiple genres exist for the one movie, then the list will take the top 5 of the first genre unless there are less than 5

- This is done by taking only up to 5 movies for the similar movie list.

- Notifications

- When a user you follow writes a review, a notification tab will appear on your profile with that information.