The R2D2s Project Report Nikita Khavronin, Nisarg Shah, Mayank Vashisht University of Regina

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We worked on a Movie Generator WebApp for our ENSE374 project. This is a movie targeted database which sorts and narrows down movie recommendations to the user's particular niche of the school. A lot of movie databases exist but they cater to a broader audience which is not very representative of what someone in a university setting would particularly like. So working under the assumption that people in the same educational groups would like similar media to what their peers in the same classes, faculties, or universities do.

Project Introduction

Background

A movie database with all the information you might need for upcoming movies like release dates, what streaming services it will be on, trailers, etc. Users will be asked to sign up for an account. They will be able to rate and review movies/TV shows and the said reviews will be sorted according to the user's classes/faculty/school. There can also be a message board where the users will be able to engage with their peers. This service will allow the users to see what is popular with their peers and engage in (hopefully) productive discourse. There will be a tab with the latest industry news.

Business Need

There are a lot of services that act as movie/TV show databases which will let you review a movie. There are a lot of services that will tell you what streaming service a media is on. But no one serves the most important media consuming demographic i.e. college and university students specifically. Our web-app will fill that void. Students will be able to easily find out their peers enjoy. Instead of reading a rating/review by anyone and everyone, they will be able to

zoom in on what people their age, people with the same academic interest as them enjoy and share their opinions in a more personal environment.

Our MVPs

To start the project up we brain stormed on what we should be aiming to deliver by the end of it. It was an interesting aspect considering none of us was actually very experienced in creating such a high level project with such intensive need of collaboration. We ended up dividing our goals in to three functionality levels depending on the complexity we thought we would be able to achieve in the given timeframe.

Basic functionality

- Users will be able to access a movie database and reviews by their peers.
- Users have to enter the classes/faculties/institutions by themselves.
- Ability to rate, review, and comment on the movies/TV shows.
- Ability to find the streaming services.

Moderate functionality

- Basic functionality
- Users have the ability to log in to their accounts and they get everything sorted into. They select their sorting criteria at the time of sign up.
- Users have to manually change their credentials when they change.
- The media will have discussion/message board sorted according to the user's credentials.

Full Functionality

- Moderate functionality
- User profiles are completely synced with the user's institution accounts.
- The user's credentials (classes, faculties, etc.) are updated as they change in real life.
- User's browsing habits and ratings are used to recommend new media to the users.

Figure 1. The different levels of functionality

After a cost benefit analysis, we ended up concluding that Basic functionality will not be satisfy the need of the project and that the scope might be too small. The Full functionality MVP

we envisioned we think might have been actually deliverable but we felt that asking the university for all sorts of permissions and then integrating such functionality in to the WebApp will be tricky, filled with a lot of red tape and probably not feasible so we proceeded with the Moderate functionality MVP which we are proud to say that we were able to achieve.

Cost-Benefit Analysis

- Basic Functionality:
 - Cost
 - o Scope too small for the project
 - o Might be too manual for the user.
 - Users are searching every time they visit the WebApp.
 - Benefits
 - Will be simple to implement and completion is almost guaranteed with all the promised functions.
 - o MVP is very attainable.
- Moderate Functionality
 - Cost
 - o Might not be implement all the features specified.
 - Users will have to manually switch over every time a credential is changed.
 - Will end up needing some manual moderation.
 - Benefits
 - A viable MVP, ready to be used extensively.
 - User friendly, interactive, and community friendly.
 - Users from any loosely organized group can use the WebApp just as well
- Full Functionality
 - Cost
 - Timeframe may not be sufficient.
 - Team coding skills might not be up to par for the required constraints.
 - The WebApp gets very specifically targeted towards traditionally organized institutions.
 - Benefits
 - o Impressive MVP functionality.
 - A complete user experience along with tailored suggestions.

Figure 2. Cost-Benefit Analysis

Our Design Process

We started off documenting who will be responsible for which part of the project. Nisarg and Nikita being the most experienced and fluent with coding handled most of the back-end programming and Mayank was tasked with creating attractive views and keeping the

documentation up to date. We followed our RACI chart and everyone was able to keep up with what they were tasked with at the start.

With a solid grasp of what we needed to deliver at the end we started some prototyping and creating some lo-fi sketches so as to what our WebApp should look like. At roughly the same time we had also started thinking about what classes we might end up needing and how the model, view, and controller will interact with each other.

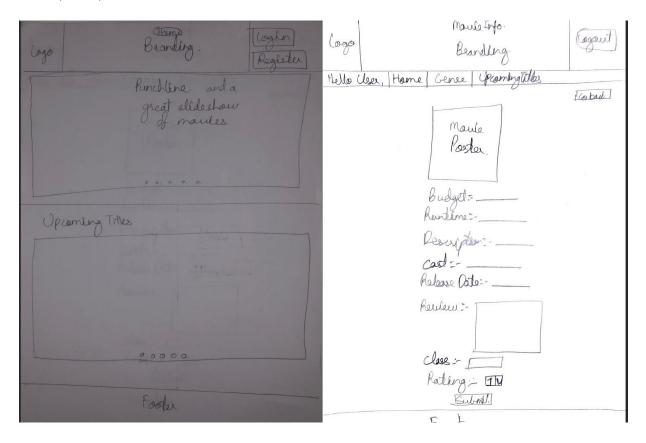


Figure 3. Lo-Fi sketches

Observer Feedback

The observer feedback helped us a lot so as to where our project was at. We were able to update our documentation according to the feedback given by The Post its. "You didn't recommend which functionality you're planning for your MVP in the document itself, only in the vlog. Consider updating your doc to reflect the "moderate functionality" your team is aiming

for." We were able to update our documentation. There was a fair amount of feedback we did not quite agree with but it did give us some much needed pointers on where we needed to improve and we appreciated all the feedback we got. It was detailed, clear, and helpful.

Final Deliverables

Over the Past few months we have worked really hard on the project and we are quite satisfied with the product we are delivering. It encompasses all of what we set out to do when we stated the project. The Moderate Functionality MVP has been achieved and we thoroughly believe that this could be expanded as we go, to encompass even more diverse organised groups so we plan keeping on improving and adding to the features of the WebApp.

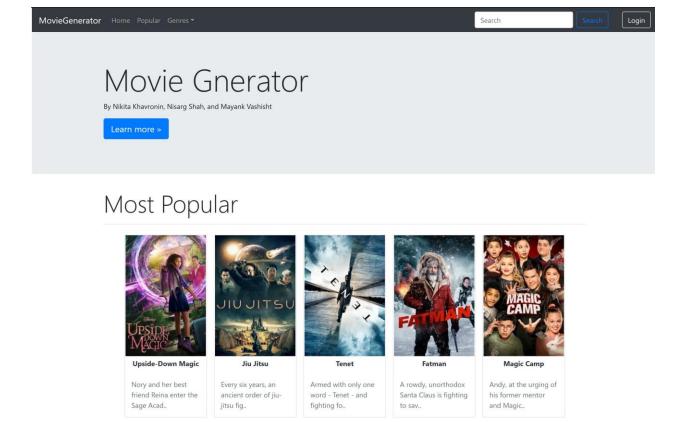


Figure 4. The Home Page

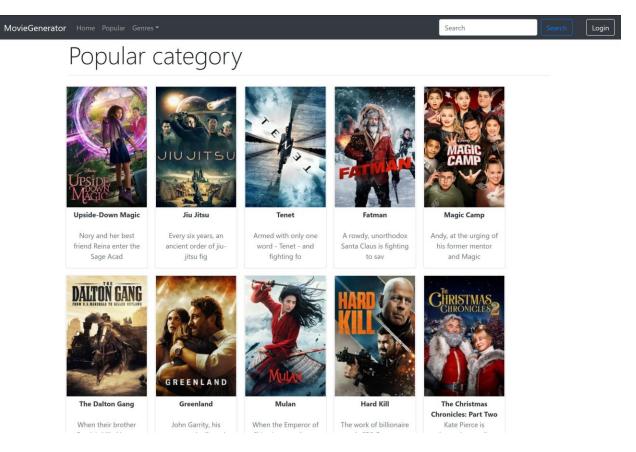


Figure 5. The Highest Rated

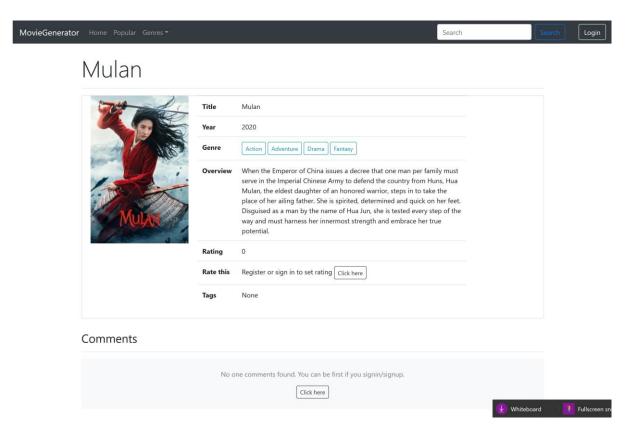


Figure 6. A Specific Movie.

As shown in figures 4, 5, and 6, all the promised deliverables as per the moderate MVP are now live. The typo in the home page has since been corrected as well haha. The home page has a link to our GitHub (the Learn More button), as well as search, login/register, genres, and some movies. The popular tab contains the highest rated movies on the website. The genres pop-down menu contains all the major genres that the user will need to navigate through the movies. As our sample movie in figure 6 shows, we have all the information that a user might want plus the ability to rate and comment on the movie. And the movie database is dynamic with more than 500 pages worth of movies which we are sourcing from an API.

Reflections

As a team we feel like we have worked really hard on this project and we feel like we are at a good place regarding this project. We have learned that we can work really well together

considering we were on the back foot even in the beginning with Nikita not being in Canada for the first few landmarks. We believe we are a bunch of resourceful team mate who have done the parts we assigned ourselves at the start of the class. We also learned that Nikita is a great team leader and he did a fantastic job of just keeping everyone honest and on our toes. Mayank is the documentation specialist and he can communicate really well with lay people. Nisarg is brilliant at coding and he was always able to be glue the code as well as the team together. At the end we would like to thank Dr. Tim Maciag for giving us this opportunity to showcase our skills and teaching us the importance of documentation, collaboration, and the human side of programming.