

# Proposal

**“HomeView” - Uniting streaming services on one site**

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## **Unite**

Christian Lam (017662032)

Daniel Monge (018191106)

Eric Truong (018149311) (Team Leader)

Erina Lara (018182630)

Michael Lamera (018487727)

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## Overview

Our team is proposing HomeView, a web application that aims to provide an easier browsing experience among users' American streaming services. As a web application, it will be accessible on all Windows and Mac operating systems. As a web application, users would access all features of the app without downloading excess software on their devices. Our team is aiming to solve a browsing and convenience problem. Subscribers of multiple American streaming services experience difficulty in trying to find a specific title to watch or to experience something new. As cited by Wonder (research company), the average Netflix user spends around 20.75 minutes of their day, or 126 hours of their year, spent searching for titles to watch.<sup>1</sup> Moreover, searching for new movies or shows involves logging in to each platform individually, and dealing with separate browsing catalogs. In addition, although American streaming services already offer a free way for users to view their catalog, users are able to view each of their subscription's catalog collectively on our site, rather than taking more time to view each individually. Our product will serve as an organized, customized database and comfortable American streaming service navigator. The vision of HomeView is to provide clients with an effortless stream searching experience while also unifying all different American streaming services.

## Target Audience

HomeView is intended for any age or demographic who is subscribed to two or more American streaming services. This web application offers the user a convenient approach to finding shows and movies across multiple American streaming services into one site.

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<sup>1</sup> M., W., & B., M. (2016, August 22). *How much time is wasted worldwide on people looking for movies to watch on Netflix (annually)?* Wonder. Retrieved September 16, 2021, from <https://askwonder.com/research/time-wasted-worldwide-people-looking-movies-watch-netflix-annually-9l4sd364g>.

# Features

## 1. Central Media Library

- Unites all media (films and television shows) libraries of all American streaming services (Netflix, Hulu, Disney Plus, IMDB, HBO Max, Paramount TV, and Peacock) that a user is subscribed to into one browsing experience
- Data of a streaming service's list of films and television shows will be fetched using the Netflix, Hulu, and other specific streaming service APIs
- Information regarding films and television shows (year, actors, actresses, description) will be fetched through a data dump from the IMDB datasets
- User's customized database will be refreshed and updated weekly by administrators at 12:00AM on Mondays in order to present up-to-date media recommendations and updates
  - Users can register a new account by using a verified email, first name, last name, and password
    - There is no age limit to be registered for an account
  - Users may delete their registered account permanently if requested
  - If an account is created with an already-used email, we will state that the email is already used, and that the user will have to either use a new email for a new account, select a Forgot Password link
- Recommendations will be generated by finding titles with similar genre filter tags that the user frequents
  - User's top 5 most viewed genres will be created based on a tagging system
    - Marking a certain genre each time the user opens the specific film's or television show's external URL directs them to the film and television show, thus recommending films and television shows based on the highest tag genre count
- Films and television shows will each have their own separated, individual section
  - Will be sorted alphabetically
  - Users can view films and television shows through different categories (i.e. Trending films/television shows, Genre)
    - Each category will be sorted in alphabetical order
    - Each film or television show displayed will display an image of their respective promotional poster, title, released year (under the title), and rating (under the year)
  - Each film and show will have their own unlimited set of genre tags
    - Genre tags for a film or show will be pulled from the IMDB dataset

## 2. Playlists

- Can contain an unlimited amount of films and/or television shows

- Will display the updated date (or creation date if not updated) in MM:DD:YY format and the total count of films and/or shows
- Users will be able control their playlist sharing and privacy according one of the following privacy modes:
  - Public: Appears on the public playlist database (which will be displayed on a user's profile)
    - URLs will be self-generated and anyone with the URL can view the playlist
    - Public playlists on a user's profile will be sorted by latest updated date (if there are no updates on a playlist, then the creation date will be used)
  - Private: Only the user can view this playlist
  - Unlisted: Playlist will not appear on the public playlist database ( not shown on the user's profile), but users with the URL can view the playlist
- Users can be added to a playlist by having the owner add the contributor's account email as a fellow contributor on the playlist's Edit settings
  - The owner can choose whether they want the contributor to only be able to view or modify the playlist by selecting what the contributor's permissions will be (at the time of adding the contributor)
- Playlists will permanently remain on a user's account until user decides to delete them
  - Users will be able to permanently delete a playlist if they desire to
- Users that follow a shared playlist can receive email updates when someone updates, adds, or removes from the playlist
  - Users can opt-out of receiving email updates for playlists

### **3. Blacklist**

- Users can prevent films or shows that are of a certain genre (mainstream genres: comedy, action, horror, etc.) or contain certain actors and actresses, ones listed on IMDB, from ever popping up throughout their site
  - Can select up to no limit of how many genres and actors/actresses
- Users are able to blacklist as many actors, actresses, and or genres as they would like
- Will be developed through a defiltering tag that users can click on under the Blacklist section when searching for films/shows

### **4. Ratings and Reviews**

- Users will be able to create a rating that is based on a 1 to 5 gold star rating, with 1 being the lowest score and 5 being the highest

- The system will support half-increments, and round the final rating to one tenth
  - To give half a star, a user can click a star twice
  - To give a full star, they can click the star once
  - To fight against bots posting fraudulent reviews and to maintain the integrity of our rating system, users will have to register (and sign in on untrusted devices) with captcha verification
- Captcha verification will require users to enter the specific code given, correctly, based on the generated code image
- If desired, a user can redo/change the rating they previously gave by reselecting the stars again
- Users create a review by selecting Write a Review on the media's page, and then clicking Submit
  - If a user would like to modify or edit their review and rating, they can freely do so by overwriting their previous review
  - Users can choose to delete their review if requested
  - If a review contains a spoiler, there will be an option for users (at the time of writing a review) to mark the review as Contains Spoilers
- Reviews will be ordered by most recent first (on top), with older reviews following under
- Ratings and Reviews will each be stored in their own respective database

## **5. ActWiki**

- ActWiki will utilize a search bar so users can easily search up the actor's profile
- Users will be able to view all the shows and films an actor or actress has appeared in, by clicking on the actor's profile under the ActWiki subsection on our page
  - Information about the actors and actresses like age, height, and date of birth will be shown
  - Actor/Actress information data will be fetched through the IMDB dataset
- Will contain as many actors and actresses as there are films and shows, in their own database

## **6. News Section**

- Updates users about any upcoming, soon to be removed, and changing titles on supported streaming platforms
  - Users will be updated by email notification on a weekly basis at 11:00AM on Mondays
    - Users can opt-out of receiving email updates for news articles

- Administrators will be the ones uploading articles weekly on Mondays at 12:00AM
  - Articles will be ordered by age (latest first, oldest last)
    - Article age is determined by the posted date
    - Most recent articles will be shown at the top of the News section page, with older articles following below it
  - Will be uploaded as a HTML page
- News section will be updated weekly on Mondays at 12:00AM
  - For example, each Monday, an article about new upcoming or departing series of the week will be published

# Application Restrictions

- Homeview will support the current stable browser version of Google Chrome (Chrome 93.0.4577.82)
  - Regarding Google Chrome updates, administrators will periodically check for Chrome updates weekly every Monday, at 12:00AM
  - After checking for updates, administrators will ensure, adjust, and test that our product will support the new version
  - If a new version is released during development, administrators will first ensure that the product is able to satisfy our requirements according to the browser version we were able to support, and then we will test it against the new version to see if it works efficiently, if not we will make changes to the product accordingly
- Central Media Library
  - One email can only be used for one account
  - User must be registered with and logged in to the site in order to compile and access their database
  - Can only be accessed through active, verified users (through a verification email)
- Playlists
  - The names of the playlist cannot exceed more than 50 characters
  - A user cannot create more than 20 playlists
- Blacklist
  - Blacklisting actors and genres will only be supported if the corresponding actor or genre appears in the IMDB database
    - Blacklisting more than one actor and/genre will show films and shows without either of the blacklisted actors/genres
- Ratings and Reviews
  - User reviews cannot exceed more than 2500 characters
  - Users will only be able to write one review and rating per television show or film
  - Reviews are permanent for each film/television show and cannot be deleted unless a user chooses to delete it
- ActWiki
  - Actors will only be supported if the corresponding actors appears in the IMDB database
- News
  - Articles cannot exceed more than 50,000 characters
  - News section will contain up to 1 month of articles
  - All articles aged beyond 1 month will be deleted automatically (through the system)



## Our Competition

Our competitors are American streaming services such as Netflix, Hulu, Disney Plus, IMDB, HBO Max, Paramount TV, and Peacock. In order to compete with our service they would have to combine their services into one which would result in them losing profit. If all services were to collaborate together to form one streaming service, the chances would be fairly unlikely due to each competitor having their own different subscription price and options. In other words, since each streaming service has different pricing values and various subscription memberships, such as Hulu+ and Disney + Premium, the likelihood of combining all streaming services together would cause a loss of revenue for each service. Netflix specializes in advertisement-free streaming, however, Hulu features advertisements for subscribed users, and advertisement-free streaming for premium users. Additionally, each service also wants to produce their own shows and movies, for example Netflix and Amazon Prime have their exclusive titles. It would be difficult to combine all streaming services into one service, due to the conflicting features of each service. "HomeView" will be combining all the catalogs into one place so the consumer can browse the catalogs of each service they are subscribed to. This would reduce the amount of time the consumer would be using to search for a certain title, and lets them stay updated on any changes made to the catalog.

## Expansion

In the near future, we plan to expand the scope of HomeView. We have three key installments that could help provide a more convenient browsing experience and a wider targeted audience for our project. One key installment we plan to develop would be implementing seasonal categories for holidays. For example, February would feature a category for Top Romance Media, whereas December would feature a category for Top Christmas/Winter Media. With seasonal categories, it would also enable an easier browsing experience. A third expansion point we aim to develop would be the implementation of an upvoting feature on public playlists. By displaying the top upvoted playlists as a new section in our project, users can view the most liked playlists by other users, to see what other media is popular, even if it is not in their main field of interest. Our final idea for expansion would be to expand our support towards foreign streaming services, such as CrunchyRoll and Viki. By having a wider selection of streaming services, users can find foreign, similar media (not displayed in American streaming services) in our Media library.