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)

Overview

Our team is proposing HomeView, a web application that aims to provide an easier browsing experience among users' 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 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.[1] Moreover, searching for new movies or shows involves logging in to each platform individually, and dealing with separate browsing catalogs. In addition, although 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 streaming service navigator. The vision of HomeView is to provide clients with an effortless stream searching experience while also unifying all different streaming services.

Target Audience

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

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[1] 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 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 in order to present up-to-date media recommendations and updates
    - 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
            - Tagging 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
- Will be implemented through a database, utilizing SQL Server 2019 Developer/Express edition

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 (selected from a drop-down menu at the start of creating a playlist):

- ○ 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)
  - ■ Public playlist database will be utilizing SQL Server 2019 Developer/Express edition
- ○ 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 delete a playlist by clicking a playlist's Edit button, and selecting the red Delete Playlist option
- Users that follow a shared playlist can receive email updates when someone updates, adds, or removes from the playlist

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 their options through a drop-down menu or type it in and it will try to autocomplete what the user is looking for
- Users are able to blacklist as many actors, actresses, and or genres as they would like
- Will be implemented 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
- Users create a review by selecting the Write a Review button on the media's page, and then clicking a Submit button
- 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
  - Will utilize SQL Server 2019 Developer/Express edition

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
  - ActWiki database will be utilizing SQL Server 2019 Developer/Express edition

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
- Administrators will be the ones uploading articles weekly
  - Articles will be ordered by latest first, oldest last
    - 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 at 12:00AM
  - For example, each Monday, an article about new upcoming or departing series of the week will be published
- News section will be utilizing SQL Server 2019 Developer/Express edition

Application Restrictions

- Homeview will support the current stable browser version of Google Chrome (Chrome 93.0.4577.82)
- Central Media Library
  - 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
    - If a user would like to modify or edit their review and rating, they can freely do so by overwriting their previous review
  - 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

Our Competition

Our competitors are 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.