Project Proposal

Project Title

Netflix Global Availability Catalog

Project Summary

During the pandemic, media services like Netflix, Disney+, and Amazon Prime Video replaced movie theaters and took people's homes based on convenience and a variety of entertainment content. We found that while Netflix might offer a title, it isn't always available in our country. To solve this problem, we looked to VPN services, but found that Netflix does not advertise regional movie availability. Moreover, current unofficial services that list the countries a title is available in are limited by UIs are not user-friendly. Their information is sometimes outdated or inaccurate. Thus, we decided to make '*Netflix Global Availability Catalog'* for a more satisfactory experience for users.

Our goal is that users can search for a Netflix title and they will be able to view the countries where the title is available and information about the movie. When the user selects a title, we query the catalog table to read data about the title. Users would also be able to select a country to display all applicable titles. Another function is tracking past user searches to recommend movies based on tags like actors, director, genre etc. We will get the data by scraping Netflix title catalogs on the internet.

Description

Netflix's movie availability varies wildly between countries. Not finding a movie can be quite frustrating, and many people have taken to VPNs to unlock the potential of Netflix's global catalog. However, Netflix does not advertise regional movie availability. This application intends to provide users with accurate regional availability data, allowing them to unlock the potential of Netflix's global catalog. The application will track past user searches to recommend movies based on tags like actor, director, genre etc.

Usefulness

There are some websites that provide global catalog details, however, their UI is quite clunky and dated. A majority of these websites have inaccurate data, and none of them offer any movie recommendations. The usefulness of the application is based on its ability to expand the Netflix experience for users while offering suggestions and availability of other movies. This ensures that a user will either find the movie they're looking for, or find a suitable alternative.

Our Data (Realness)

We will get the data by scraping Netflix title catalogs on the internet. For each title, we will store the name, a short description, cast, the rating, a link to an image and the list of countries it can be accessed from in a catalog table. When the user searches for and selects a title, we will store the cast (actor, director, etc.), genre and ratings of that title into a search history table.

Functionality

Users can search for a Netflix title and will be able to view the countries in which that title is available and information about the movie. When the user selects a title, we query the catalog table to read data about the title. Users would also be able to select a country to display all applicable titles.

When a user searches for a movie, the search is recorded using an insert into the searches table. On the homepage of the web application, we will display a list of recommendations created by querying the searches table.

The simple features would include displaying an image and information about the title. Our complex feature would be identifying which countries each title is available in.

Creative Component

As a creative component, we could recommend a list of highly rated movies based on the past searches based on cast and genre. We would identify common actors, directors or genres between the past searches and recommend titles that best match the requirements.

Project Work Distribution

For this project we expect the work to be roughly divided between three key areas: Backend, Frontend, and Features. Below is a guide of our currently determined subtasks and the group members who have elected to be responsible for each.

1. Backend
    a. *Creation of database/tables:* Jin, Jeremiah
    b. *Web Scraping/Populating database:* Abhi, Apramey
2. Frontend
    a. *Displaying data about titles:* Jin, Jeremiah
3. Features
    a. *Search History:* Abhi

b. *Recommendations:* Apramey

As we move forward and unexpected needs arise, our team will assign tasks in an equal way that also utilizes team member's skills/experience most effectively. Additionally, project-wide decisions like choice of specific database, design, and technical frameworks will be discussed by the entire team.

UI Mockup