A central media hub for all the things *you* love

CS 40700 - Senior Design Project

PRODUCT BACKLOG

Team 6

Utkarsh Agarwal *uagarwal@purdue.edu*
Shivangi Chand *chands@purdue.edu*
Amol Moses Jha *jha8@purdue.edu*
Pooja Tewari *tewarip@purdue.edu*

PROBLEM STATEMENT

Online content is easily accessible today by millions of people worldwide. Streaming companies have made vast troves of media available at people's fingertips. This rapid proliferation of online content has paradoxically created another problem for people - indecisiveness. It can be hard to decide what content to consume in a world with increasingly short attention spans and tighter schedules. Furthermore, it can be a very tedious process to login and search for various different platforms in order to find something that fits. Mine aims to solve this problem by aggregating popular online content stores in order to present the user with the most relevant media available online - all in a single location. A user can simply specify a search term and obtain relevant results - aggregated neatly by category so that they can easily pick and choose what they want.

BACKGROUND INFORMATION

Problem

In today's increasingly interconnected and busy world, we are provided with a myriad of options for online entertainment - all available instantly for us to stream at any time. The online content provider landscape however, is fractured - there are many multiple providers for different categories of online media. This fragmented landscape causes users to hop on to multiple providers to search for content that they might enjoy - leading to a tedious, indecisive process on every platform, just to pick something according to their preferences.

Domain

Since our project mainly consists of a web application, the problem domain mainly consists of topics related to web application programming - including, but not limited to server-client architecture, databases, Representational State Transfer (REST) protocols using HTTP, API integrations, state management, event handling, among many other assorted skills needed for web application programming.

Audience

The audience for our application is huge - any user online who aims to stream media content can utilise our service, and save time in trying to decide what media to consume.

Similar Platforms

There are similar which aim to aggregate and suggest some domains of online content - mainly IMDb and TV Time come to mind which aim to aggregate and present users with relevant suggestions. Of course, every media content provider does have search functionality to present users with results about media available - Netflix, Hulu, Spotify, Amazon, Youtube and many others come to mind - but it is localized to that specific platform only.

Limitations

Other platforms have localized search results - resulting in a tiresome experience where a user goes through multiple platforms, before settling in to enjoy their preferred choice. Mine aims to solve this exact problem by providing a unified place for users to search all forms of online media content, and choose what they want the most. It ends up acting as a one-stop-shop for searching their online media content needs - whether it be a search for a particular genre or mood, or a specific title itself.

REQUIREMENTS

Functional Requirements

1. As a user, I should be able to view the application's main landing page before logging in.
2. As a user, I should be able to create an account.
3. As a user, I should be able to delete my account.
4. As a user, I should be able to verify my email when I create an account.
5. As a user, I should be able to login into my account.
6. As a user, I should be able to logout of my account.
7. As a user, logging out of my account should return me to the website's main landing page.
8. As a user, I should have an option to login using my Google account.
9. As a user, I should have an option to login using my Facebook account.
10. As a user, I should be able to view my profile page.
11. As a user, I should be able to change aspects about my profile - including my name, password, email, category preferences and number of previous searches - when on my profile page.
12. As a user, I should be able to reset my password in case I cannot remeber my password.
13. As a user, after logging in, I should be able to view the front page - which would serve as the central page for displaying the search bar, the search results and my various preferred categories for displaying the search results in.
14. As a user, I should be able to store my profile picture.
15. As a user, I should be able to update my profile picture.
16. As a user, I should be able to delete my profile picture.
17. As a user, I should be able to specify one or multiple search terms in the search bar when searching for online media.
18. As a user, I should be able to obtain relevant search results back, neatly organized into categories.
19. As a user, I should be able to specify the ranking of content categories returned on the search results page.
20. As a user, I should be able to remove categories which I don't find meaningful to me.
21. As a user, I should be able to connect my accounts of online video content providers to the application.
22. As a user, I should be able to get search results for video content.
23. As a user, I should be able to connect my accounts of online movie services providers to the application.
24. As a user, I should be able to get search results for movies.

25. As a user, I should be able to connect my accounts of online TV content providers to the application.
26. As a user, I should be able to get search results for TV series.
27. As a user, I should be able to connect accounts of online audio content providers to the application.
28. As a user, I should be able to get search results for audio content.
29. As a user, I should be able to connect accounts of written content providers to the website.
30. As a user, I should be able to get search results for written content.
31. As a user, I should be able to connect accounts of events data providers to the website.
32. As a user, I should be able to get search results for events near me.
33. As a user, I should be able to browse my previous search terms.
34. As a user, I should be able to see other trending searches.
35. As a user, I should be able to see my most frequent searches.
36. As a user, I would like to connect to developers in order to provide meaningful feedback.
37. As a developer, I would want the project to be very well tested, with great coverage ensured by a healthy mix of unit, integration, regression and functional tests.
38. If time permits, as a user, I should be able to get ratings for online content in the search results to better aid me in making a decision.
39. If time permits, as a user, I should be able to see snippets of my previous searches.
40. If time permits, as a user, I should be able to see snippets of my most frequent searches.
41. If time permits, as a user, I should be able to see snippets of trending searches.

Non-Functional Requirements

Response Time

Application must be highly responsive not only on traditional computing devices like desktops, but also on mobile computing devices like smartphones and tablets. Any interaction with the application must feel graceful and elegant.

Security

Application must aim to implement client-server model with emphasis on endpoint security to prevent malicious attackers from accessing user data. Clients-side validation should be accompanied with server-side validation to ensure data security.

Usability

Website must be user-friendly and aim to improve user-experience through iterative design.

Scalability

Application must be scalable for use by all the stakeholders for this project including other students at Purdue. The application should be designed in such a way that the performance can be easily increased by improving hardware infrastructure.

Modularity

Code must be modularized in a way that adding new functionalities and reusing of older functionalities is effortless.