Media Recommendation Engine

Test Plan Document

Introduction

The Media Recommendation Engine will be a web-based application which will seek to offer media suggestions to consumers based on their search queries, search history, and personal profile. Implications we may encounter when testing our web application are client-server interactions, security, and consumer usability.

Verification Strategy

In order to meet the end user's real needs, we will be working closely with the feedback given by our beta testers. Having users do a survey or asking questions face-to-face to see what parts work and don't work will provide us with information we can use to improve the web application. Most of the user testing will be done using the front-end (ie. the website) since the user will not need to worry about what happens in the back-end.

Non-Functional Testing and Results

One test we would like to perform is to quantify how user-friendly our application is. Will most users, even the one who are less familiar with tech, be able to work with our application and use it to its full potential? This is something that we must test because we want our application to cover as wide range of an audience as possible. To test this, we will be demonstrating the use of our application with a range of demographics and measuring their understanding of our application.

Another test we would like to perform is to test the variety of devices in which our audience will be running our application on. What browsers and mobile browsers do we want our application to be optimized on? We must have a balance to accommodate the most amount of users while maintaining our project's feasibility and making sure not to stress our workload. To test this, we will be keeping track of our workload, schedules, and our work rates to determine which devices our application will be optimized for.

Functional Testing Strategy

Most of the testing we will do on the data being passed between the front and back ends. The most effective way to test this is with integration testing. By sending valid and invalid sets of data between the two ends, we can see where gaps in our code base are. We will need to perform integration tests when a component from the web page requires something that is stored in our server's database. Generally, this type of merge will occur once a week, or

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whenever the front has completed the UI and the back has implemented all the necessary database calls.

We plan on tracking our bugs using GitHub's issue tracker. Using this will allow us to prioritize bugs on our to fix list. We will also be able to assign people to certain bugs to fix, allowing for efficient bug fixing sessions.

Adequacy Criterion

Our adequacy criteria for the front-end testing will be based on the use cases we described in our Requirements and Vision document. Most of our use cases are divided into single actions such as searching for media titles, changing an account setting, or viewing media suggestions. Because these actions are fairly straightforward, we will test them based on whether or not they follow the behaviour as described in our use cases. This will cover the basic functionalities of our web app on the user end.

Our back-end components may require more involved testing to determine any related to handling data. This will cover the functionality of our server

Test Cases and Results

Test #	Requirement Purpose	Action / Input	Expected Result	Actual Result	P/F	Notes
1	Account Creation	Create a new account on our web application	As long as the email and username are not already used, the account will be successfully created			
2	Logging in	Input your email / username and password	As long as the account exists and the username and password are correct, the user should be logged in and redirected to the dashboard			
3	Logging out	Click the "Logout" button	The user will be successfully logged out of their account.			
4	Liking a movie	Click the like button	As long as the user is logged onto their account, the movie will be added to their profile			

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			for better recommendations.			