

# PROJECT DESCRIPTION

Title: Spoiled Tomatillos

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## Problem Overview

Our client is a stealth startup that is interested in bridging the gap between Netflix/Amazon and Facebook by creating a social recommendation system for movies. The company has an in depth go to market business plan, solid funding, and backed by multiple fortune 500 companies. The company has a robust pricing model focused on selling ads, providing links to movie purchasing and movie theater sites, and selling user data. This is important to the client as they feel there is a large untapped market for a social site that recommends movies and TV shows to users and provides easy access to methods and discounts for purchasing movie tickets, downloads, or streaming services. This service could be especially helpful for helping users decide which streaming service to subscribe to based on the one that has the most movies that the system recommends to the user. The client would like to be first to market with this app, gain significant market share, and then be acquired by 2019.

Currently, the client is operating externally of any organization, though it does have multiple anonymous partners. To our knowledge the company has no other product or business model.

The system the client is looking for allows users to sign up and have access to an IMDB like database at their fingertips. Users can rate movies that they have

seen, which automatically updates the average ratings of the movies and contributes to future movie recommendations. Users will also be able to search and add friends to their friends list. Adding friends will allow for a social aspect of the site and improve the movie recommendations they will receive. What's more, users can send recommendations to their friends of movies they should plan to see together or just as a friendly recommendation.

The client is looking for a movie recommendation model that provides recommendations based on critic reviews, the average rating on the site, and based on the ratings of other people who have rated the same movies the most similar to the person receiving the recommendation.

## **Background**

This is a new project that does not have any legacy systems in place. There are probably ways to buy components of the system, but creating it from scratch will be more cost effective for our clients. We will pull data from a movie database API and allow users to either make an account or login through their Twitter or Facebook accounts.

Our target market is social media users who love movies and TV shows. We believe this is a large and growing market as streaming services become more popular and as more TV shows are created over time. Many people have resorted to solely using streaming services instead of buying cable. Thus, we can capitalize on this growth and have our project provide a social media element to streaming films. On regular movies sites now, such as IMDB and Rotten Tomatoes, users can only read about the movies that they search. However, our project will enable end users to bookmark movies for later, recommend movies to friends, and provide links/discounts to purchasing films.

## **Scope**

This main functionality of the project includes:

1. Users sign up for an account, and have at their disposal an IMDB-like system where they can search for movies and learn about their plot, cast, awards, availability at local theaters, etc.
2. Users rate these movies, which automatically forms rating-based playlists and contributes to future recommendations.
3. Users can identify friends in the system – the more they and their friends use the system, the better their movie recommendations are!
4. Once a user has friends, they can then “prod” each other with movies to see (either together, or just a friendly pointer)
5. Finally, the system produces recommendations via three algorithms: average critic rating (pulled from an external source), average rating on the site, and via User-User Collaborative Filtering

I think that setting up the movie database using an API should be relatively straight forward, however we may run into issues making sure we ensure the security of our SQL database and managing the functionality based on the users' level of clearance (i.e. administrator vs normal user) The main challenges I think we will face is creating a smooth, easy to use UI, creating smart and useful algorithms for recommending movies, and adding elements that will allow Spoiled Tomatillos to make money on this website. I believe there have been similar websites like this created that can provide us with some insights on what we want our website to look like and certain functionalities that should be included in a website like this.

At this time, we are unaware of which aspects of the product will be the most difficult to complete given the time we have. However, we have a solid group of team members with varying levels of experience in different areas of software development. We also know there are experts out there who could be able to provide us with guidance on how to iron out certain bugs that we run into. We believe the main risk of this project is the complexities of managing front-end and back-end code seamlessly so the user never experiences any bugs or error pages.