

Movie Recommendation System

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Introduction

- Have you ever wasted time trying to watch a movie without knowing what to watch?
- Do you feel confused and hesitant when facing many movies?
- Do you want to share your favorite movies with friends immediately?

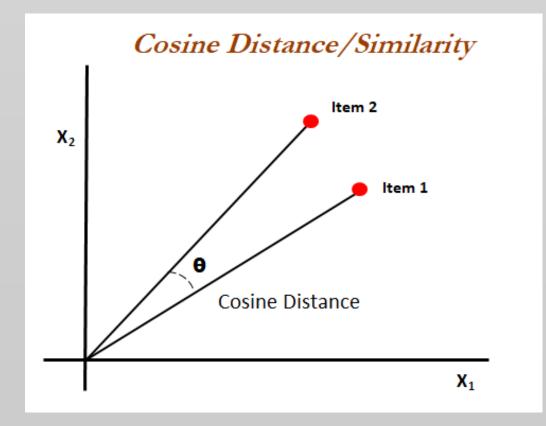
Business need and the opportunity

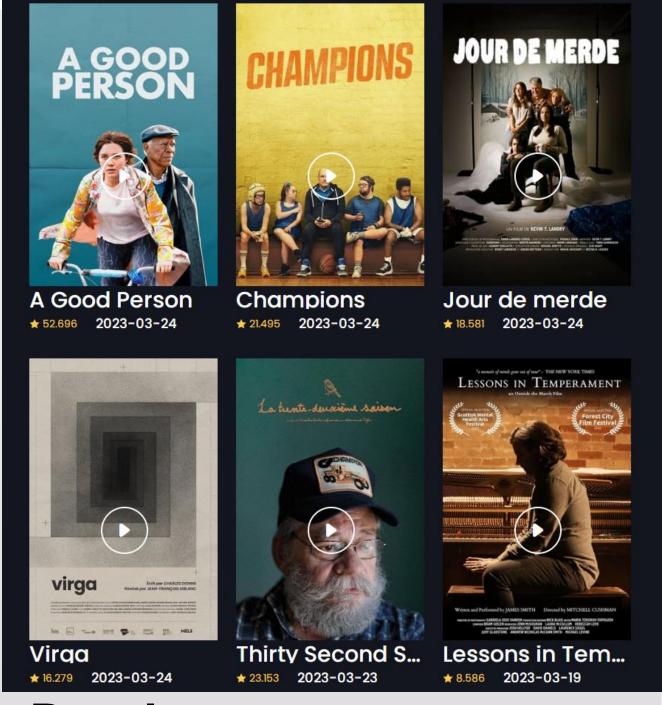
A movie Recommendation System

People always waste too much time selecting movies, our system can recommend movies for our users according to their viewing history or search history. Users can also recommend their favorite movie to their friends. Our wish is that our users are all over the world, so they can even recommend some movies from different countries.

Methodology Investigation & Implementation Details

Cosine similarity is a metric used to measure how similar the documents are irrespective of their size. Mathematically, it measures the cosine of the angle between two vectors projected in a multi-dimensional space. The cosine similarity is advantageous because even if the two similar documents are far apart by the Euclidean distance (due to the size of the document), chances are they may still be oriented closer together. The smaller the angle, higher the cosine similarity.





Result

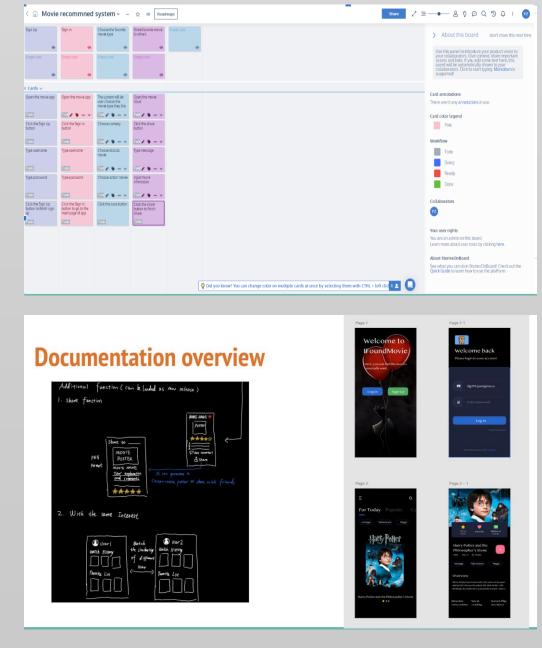
Our system lets users get recommended movies and even know which platform the movie can display. Users can also share their minds to others. What 'smore, they can also know which movie will be playing in theaters.

The Language we used



Progress Steps

- 1. Define the problem and brainstorm possible solutions
- 2. Research Ideas / Explore Possibilities for our Engineering Design Project
- 3. Establish Criteria and Constraints and select an approach
- 4. Develop a design proposal, Complete documents such as business case, project requirements, RACI chart, and risk analysis.
- 5. Develop the low-fi design and high-fi design
- 6. Front end development, including the design of user interfaces and interactive interfaces
- 7. Backend development, including Al algorithm debugging, background running, cloud service deployment, and other parts
- 8. Accept customer feedback and make modifications to the system, as well as final testing.
- 9. Final documentation and completion of the report



For **future improvement**, we found some seemingly simple and easy to implement problems that did not achieve the expected results in our actual development. We have also discussed this related issue in our previous MVP, and have also received suggestions from users and viewers on this aspect. We hope to solve this problem in future research and learning. In addition, we did not focus on the difference from other similar products on the market when we first proposed the theme, which is also a part that needs to be paid attention.