Low Level Design Document

for Movie Recommendation Website

Title: MovieBash

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1 CONTENTS

2 INTRODUCTION

2.1 SCOPE OF THE DOCUMENT

This document contains the low-level functional design for movie recommendation system. It highlights the low-level use cases in recommendation and filtration process.

2.2 INTENDED AUDIENCE

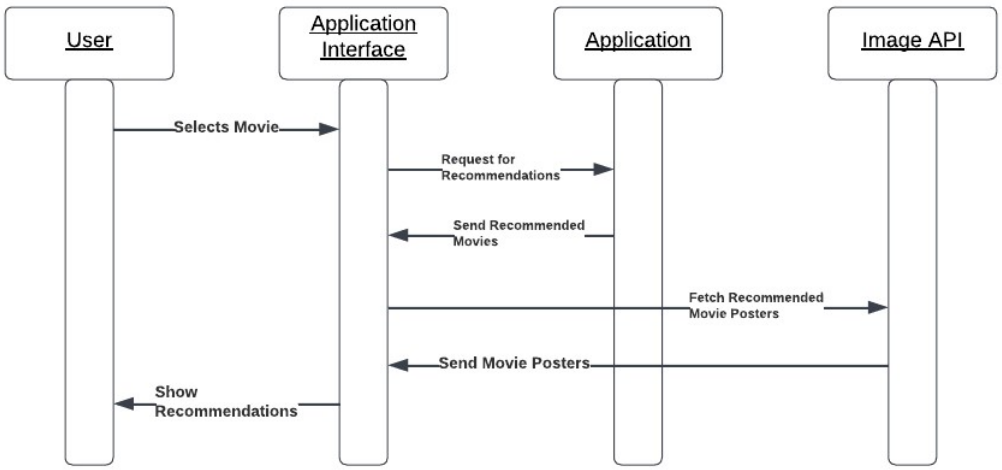
- People of all age who likes to watch movie

2.3 SYSTEM OVERVIEW

This system is designed for recommendation of movies to the customers on the basis of the movie which they select and also, they select how many movies they want to be recommended. It uses content-based filtering and takes all the parameters like cast, crew, overview, etc for judging and recommends the nearest movies.

3 LOW LEVEL SYSTEM DESIGN

3.1 SEQUENCE DIAGRAM



3.2 NAVIGATION FLOW

There is only one page in the website which contains two select option one for movies and one for how many movies have to be recommended and a button to display recommended movies.

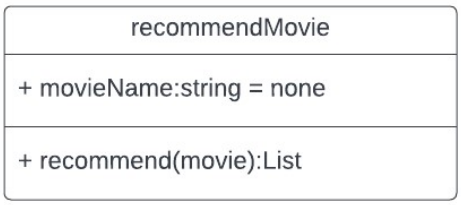
3.3 SCREEN VALIDATIONS, DEFAULTS AND ATTRIBUTES

There are no validations required for accessing the page.

Default value of movie selector is the first movie in the list.

3.4 Components Design Implementation

3.4.1 Class Diagram



3.4.2 Pseudo Code

1. First, we load the similarity matrix from the pickle file.
2. Then, we create a function that takes in a movie title as an input and returns a list of recommended movies.
3. Next, we create a DataFrame of movie titles and their corresponding indices.
4. Then, we create a Streamlit app with a title and a selectbox that allows the user to select a movie.
5. If the user clicks the recommend button, we get the index of the movie that the user has selected.
6. We then use the similarity matrix to get the indices of the number entered in the second field most similar movies.
7. Finally, we display the titles of the number of movies entered in second field most similar movies.

3.5 Configurations/Settings

1. web: sh setup.sh && streamlit run app.py
2. enableCORS = false
3. headless = true

4 Data Design

4.1 List of Key Schemas/Tables in Database

There is only one Table DataFrame in database for movie recommendation which contains movie ID, name, cast, description, genre, etc.

4.2 Details of Access Levels on Key Tables in Scope

The table is read only. User cannot modify anything in the table.

5 Unit Testing

S. No.	Input/ Test Case	Output/ Recommended Movies
1	Avatar	Mad Max Beyond Thunderdome Iron Man The 13th Warrior

		The Empire Strikes Back Suicide Squad The Wolverine Street Fighter: The Legend of Chun-Li Teenage Mutant Ninja Turtles III Prince of Persia: The Sands of Time Jupiter Ascending
2	The Dark Knight Rises	Michael Clayton Harper Dead Man Down Bless the Child Non-Stop The Client Midnight in the Garden of Good and Evil Mystic River Nighthawks Broken Horses
3	Tangled	Hoodwinked Too! Hood VS. Evil Fantasia The Princess and the Frog Rodeo Girl Fantasia 2000 The Simpsons Movie Glee: The Concert Movie The Angry Birds Movie Pooh's Heffalump Movie Hoodwinked!
4	The Avengers	Journey 2: The Mysterious Island Iron Man 3 AVP: Alien vs. Predator Raiders of the Lost Ark

		Independence Day: Resurgence Guardians of the Galaxy Serenity The Lone Ranger Jurassic World Shanghai Noon