## A04: Creating a Personal Movie Catalog and Recommendation Plan

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## Categorization:

- Genre: Movies will be categorized into various genres such as Action, Adventure, Comedy, Drama, Horror, Sci-Fi, etc.
- Release Year: Movies will be grouped based on their release year to facilitate historical exploration or to find recent releases.
- Director: Grouping movies by director can help users find more films by their favorite directors or explore the work of different directors.
- User Rating: Users can create their own custom lists such as "Favorites,"
   "Watched," or "To Watch" to organize their collection.

Designing the Catalog Interface:

User Interface (UI) Concept:

The catalog interface will have a clean and intuitive design. It will feature a search bar prominently displayed at the top for users to search for specific movies. Below that, there will be filter options allowing users to filter movies by genre, release year, director, or user rating. Each movie entry will display its title, genre, short description, director, and thumbnail image. Users can click on a movie to see more detailed information.(Netflix)

When clicked on the movie: It includes title, movie length, detailed description of the movie, the trailers and set of videos for the movie, the cast of the movie. Their awards and achievements, other recommendations based on the movie you clicked.

User Interaction:

- Adding New Movies: Users can add new movies to their catalog manually by entering the movie's information (will run through verifications) or by importing data from online databases like IMDb.
- Searching: Users can search for specific titles using the search bar. If not correct, show an approx. of what you want.
- Updating Information: Users can update movie information by selecting the movie and editing its details directly within the interface.

## Creating a Recommendation Plan:

### Recommendation Criteria:

- Genre Preference: Recommend movies based on genres the user frequently watches.
- Director Preference: Suggest movies by directors the user has shown interest in.
- Similar Movies: Recommend movies similar to those the user has rated highly or watched recently.
- Preference from movie: while going through the movie page, a recommended strip of movies will be provided.

# Personalization Aspect:

- Recently Watched: Take into account movies the user has recently watched to avoid recommending duplicates.
- User Mood: Allow users to indicate their mood, and recommend movies accordingly. (Winoto) For example, suggest feel-good movies for users feeling down or suspenseful movies for users feeling adventurous.

# Feedback and Improvement Mechanism:

#### Feedback Collection:

- Thumbs Up/Down: Users can provide feedback on recommended movies by giving them a thumbs up or thumbs down.
- Star Rating: Users can rate movies they've watched on a scale of 1 to 5 stars.

## Improvement Plan:

 Machine Learning: Utilize machine learning algorithms to analyze user feedback and improve future recommendations. (Perzynska and Edwards)

- User Profiles: Keep track of changes in user preferences over time by maintaining user profiles and adjusting recommendations accordingly.
- Recommendations: Using better AI based recommendations that will result in accurate and quick suggestions. (GPTflix, WatchNow AI)

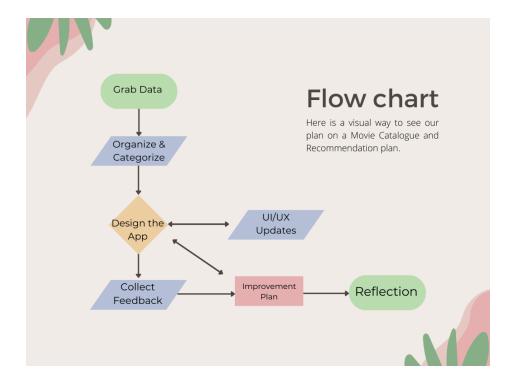
### Reporting:

### Documentation:

- Overview: Our movie catalog provides users with a user-friendly interface to organize their movie collection and discover new films. The recommendation system enhances the movie-watching experience by suggesting personalized recommendations based on user preferences and viewing history.
- Recommendation Criteria: We use a combination of genre preference, director preference, and similarity to previous choices to recommend movies to users.
   Personalization aspects include considering the user's mood and recent viewing history.
- Feedback Mechanism: Users can provide feedback on recommended movies using thumbs up/down or star ratings. This feedback is used to continuously improve the recommendation algorithm and adapt to changes in user preferences over time.

### Reflection:

Our movie catalog and recommendation system aim to enhance the movie-watching experience by providing users with a personalized and intuitive platform for discovering and organizing their movie collection. By leveraging user feedback and employing machine learning techniques, we strive to continually improve the accuracy and relevance of our recommendations, ultimately making movie-watching more enjoyable and fulfilling for our users.



# Works Cited

- "Documentation." *IMDb Developer*, https://developer.imdb.com/documentation. Accessed 12 February 2024.
- Netflix. "Netflix's recommendation algorithm." *Netflix Research*, 2022, https://research.netflix.com/research-area/recommendations. Accessed 12 February 2024.
- Perzynska, Kasia, and Kinga Edwards. "Use Al To Make Customer Feedback Analytics More Actionable." *Survicate*, 26 October 2023,
  - https://survicate.com/customer-feedback/ai-in-marketing/. Accessed 12 February 2024.
- Winoto, Pinata. "The role of user mood in movie recommendations." *sciencedirect*, 19 May 2023, https://www.sciencedirect.com/science/article/abs/pii/S0957417410001569.

  Accessed 12 February 2024.