MovieMeister.AI

'MovieMeister.AI' is a movie streaming service/application which helps users discover and watch movies. MovieMeister.AI is designed to provide users with a personalized movie experience. The app contains a search bar for the users to search for their favorite movies and watch them in the app. It also contains AI based recommendations to suggest new movies and generate watchlists based on the movies a particular user prefers. The app recommends movies to the user based on search history, likes and dislikes, and also what's trending in their geographic region. It also keeps track of the movies they have watched. The app also has an option to send notifications to the user about upcoming movie release dates.

The main user needs that MovieMeister.AI is intended to address are:

1. To find relevant and personalized movie recommendations.
2. To keep track of movies watched and organize a watchlist.
3. To receive notifications about new releases, upcoming movie events and special screenings.

Design of Three Features

Personalized Recommendation System : An AI-powered recommendation system that suggests movies based on the user's preferences and movie watching history. The recommendation system should be able to present the user with recommendations and then allow them to provide feedback, such as rating movies or indicating a preference for certain genres, to refine the recommendations over time.

- **Principle used:** Employing dialog to resolve key uncertainties(If a system is uncertain about a user's intentions, it should be able to engage in an efficient dialog with the user, considering the costs of potentially bothering a user needlessly).
  How it is used: We would like to know the movie preferences of the user by providing them a like or dislike button to provide good recommendations. If the user prefers not to provide the inputs about their favorite movie, then the app recommends movies based on the location and what's trending, until the app has enough data to tailor good recommendations. The system employs a dialog approach to address key uncertainties and improves its recommendations over time through feedback from the user, such as rating movies or indicating a preferred genre.

- **Principle used:** Continuing to learn by observing(Automated services should be endowed with the ability to continue to become better at working with users by continuing to learn about a user's goals and needs)
  How it is used: The AI algorithms in the background track the user's preferences and continuously adjust the recommendations accordingly. The system initially provides recommendations based on location and trending movies. If the user does not provide any preferences, it continuously learns and adjusts its suggestions based on the user's actions.

Movie Organizer : A feature that allows users to keep track of the movies they have watched and create a watchlist. The watchlist should be persistent and available across devices to provide seamless access to the user's movie preferences.

- **Principle used:** Maintaining working memory of recent interactions(Systems should maintain a memory of recent interactions with users and provide mechanisms that allow users to make efficient and natural references to objects and services included in "shared" short-term experiences)
  How it is used: The task of tracking which movies the users have watched is automated based on the recent interactions of the user with the application.

- **Principle used:** Scoping precision of service to match uncertainty, variation in goals(We can enhance the value of automation by giving agents the ability to gracefully degrade the precision of service to match current uncertainty. A preference for "doing less" but doing it correctly under uncertainty can provide users with a valuable advance towards a solution and minimize the need for costly undoing or backtracking)
  How it is used: AI system should be better not suggest movies randomly to add to watchlist. It is better to suggest a few but good movies to users based on watch history and add them to the watchlist if they agree. There is a tradeoff between "doing less" vs "doing inaccurately" here. The system prioritizes the precision of its suggestions over quantity to minimize the need for undoing or backtracking.

Movie Event Notifications : A feature that sends notifications to the user about new releases, upcoming movie events, and special screenings in their area.

- **Principle used:** Considering the status of a user's attention in the timing of services(The nature and timing of automated services and alerts can be a critical factor in the costs and benefits of actions. Agents should employ models of the attention of users and consider the costs and benefits of deferring action to a time when action will be less distracting)
  How it is used: The system takes into account the user's attention status and sends notifications at times when they are less likely to be distracting, such as off-work hours, and allows the user to customize the timing and frequency of the notifications.

- **Principle used:** Providing mechanisms for efficient agent-user collaboration to refine results(We should design agents with the assumption that users may often wish to complete or refine an analysis provided by an agent)
  How it is used: The notifications should be presented in a way that allows the user to give feedback whether the notifications data is actually helping them or not and to improve future alerts.