

Team: Manuel Segimón, Joel Akerman

### **Proposal 1: Weather impact on local businesses**

The "Weather Impact on Local Businesses" project aims to analyze and visualize the correlation between weather conditions and the revenue of local businesses. Users could create profiles to input their local businesses or favorite spots, and the application would utilize weather data from NOAA and business revenue or traffic data from Yelp's API. By correlating these datasets, the application could provide insights into how different weather conditions, such as temperature, precipitation, or snow, affect consumer behavior and business performance in various regions. Additionally, it could offer forecasts on how upcoming weather conditions might impact local businesses.

### **Proposal 2: Personalized Movie Recommendation System**

Develop an innovative movie recommendation system that goes beyond generic suggestions and offers users a genuinely personalized cinematic experience. This sophisticated application harnesses the power of user data, real-time weather conditions, and the extensive movie database provided by the Rotten Tomatoes API to deliver tailored movie recommendations. The system gains deep insights into their cinematic preferences by analyzing a user's viewing history, including genres, actors, and ratings. These insights form the foundation for curating a list of movie recommendations that align with the user's tastes.

What sets this recommendation system apart is its integration with real-time weather data. Understanding that weather can significantly influence one's movie-watching mood, the application factors in the user's current weather conditions. For instance, on a rainy day, the system might suggest cozy indoor movies; on a sunny day, it could recommend outdoor adventure films. This weather-based customization adds an extra layer of personalization to the recommendations, ensuring that users receive movie suggestions ideally suited to the atmosphere and mood of the moment.

Integrating with the Rotten Tomatoes API enriches the recommendation engine with a wealth of movie reviews and insights, enhancing the system's ability to provide informed suggestions. By comparing the user's movie preferences with Rotten Tomatoes' vast movie database, the application identifies similar movies and considers critical and audience reviews. This ensures that users receive recommendations that not only align with their tastes but also are likely to be enjoyable.

In summary, this movie recommendation system is designed to revolutionize how users discover and enjoy movies. It seamlessly combines user preferences, real-time weather data, and the extensive Rotten Tomatoes movie database to offer tailored and

thoughtful movie recommendations that elevate the movie-watching experience. Whether users are in the mood for a cozy night in or an outdoor cinematic adventure, this application ensures they always find the perfect movie to enjoy.