

AI-Powered Movie Recommendation System

**Internship - Low Level Design**

Create a machine learning model to predict the sentiment of movie reviews and recommend films to users based on their preferences.

### MASTERS OF COMPUTER APPLICATION

## AIML

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**Introduction**

**Scope of the document**

This paper covers the low-level system design, sequence diagrams, navigation flow, component design implementation, configurations/settings, interfaces to other components, and significant comments for the AI-Powered Movie Recommendation System. It offers a thorough rundown of the technical implementation details and system operation.

**Intended audience**  
The developers, system architects, and other stakeholders involved in the creation and implementation of the AI-Powered Movie Recommendation System are the target audience for this document. As a reference manual, it helps project stakeholders collaborate and communicate by outlining the system's functionality, design, and implementation specifics.

**System overview**  
The AI-Powered Movie Recommendation System analyzes movie reviews and provides users with customized recommendations by using machine learning and natural language processing techniques. It consists of user interface, sentiment analysis, recommendation engine, and external component integration modules. Input from users is processed, pertinent movie data is retrieved, sentiment analysis is done, and recommendations based on personal interests are produced.

**Low Level System Design**

**Sequence Diagram**

**Navigation Flow**  
The AI-Powered Movie Recommendation System's navigation flow describes the screens, actions, and user interactions that users will experience as they navigate the program. It guarantees a smooth and simple user experience by specifying the menu structure, navigation paths, and user interface layout.

**Defaults and Attributes**

The AI-Powered Movie Recommendation System's default setups, settings, and attributes are outlined under its defaults and attributes. They specify the system's starting configuration options, system parameters, and default user preferences. It is possible to modify these settings and properties to suit particular user needs and preferences.

**Components Design Implementation**

The implementation details of each system component, such as data models, algorithms, and integration points, are described in detail in the components design implementation. In order to guarantee the interoperability and scalability of the overall system architecture, it explains how each component interacts with other modules and external systems.

**Configurations/Settings**

The AI-Powered Movie Recommendation System's configurable parameters and options are defined via configurations and settings, which are accessible to both administrators and users. Users can customize the system to meet their needs and tastes by adjusting the administrative settings, system configurations, and user preferences.

**Interfaces to other components**

The AI-Powered Movie Recommendation System's interfaces to other components define the points of integration and communication protocols with other systems or services. They specify the interchange, processing, and synchronization of data among many components, guaranteeing smooth interoperability and data consistency.

**Key notes:**

Important factors, limitations, or presumptions that affected the creation and execution of the AI-Powered Movie Recommendation System are highlighted in the key points. They assist stakeholders in making defensible decisions at every stage of the project by offering advice on system needs, constraints, and best practices.

**Reference:**

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