



## TV Show Rating Platform Based on Age Group and Interests

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### Introduction

#### What is the platform?

This platform is a personalized TV show rating and recommendation system designed to deliver tailored recommendations for users.

## **Purpose of the platform:**

- To provide TV show ratings that are specific to users' age groups and interests, moving beyond generic, one-size-fits-all rating systems.
  - To ensure that recommendations are accurate, relevant, and enjoyable for each individual user.
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## **Purpose of the Database**

### **Central Repository:**

The database acts as the backbone of the platform, performing several key roles:

- Stores user profiles, including demographic details (age, name, email) and individual interests.
- Maintains an extensive catalog of TV shows with detailed metadata such as genre, release year, and streaming availability.
- Records user interactions, including ratings and reviews, for all TV shows.

### **Facilitating Personalization:**

- By collecting and analyzing ratings across different age groups and interests, the database helps create meaningful, personalized recommendations.
  - Provides a foundation for filtering and displaying user-specific ratings that reflect individual preferences.
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## **Key Functionalities Supported by the Database**

### **1. User Enrollment and Demographics:**

- Captures essential user data: name, email, age, and selected interests.
- Automatically assigns users to one of four predefined age groups:
  - Under 18
  - 18–30
  - 31–50
  - 51+
- Tracks users' multiple interests (e.g., drama, sci-fi, documentaries).

### **2. TV Show Catalog Management:**

- Stores detailed information for each TV show, such as:
  - Title
  - Genre(s)
  - Release year
  - Number of episodes
  - Streaming platforms (e.g., Netflix, Hulu, Disney+).
- Associates each TV show with one or more genres or interests.

### **3. Ratings and Reviews System:**

- Allows users to rate TV shows on a 1-to-10 scale.

- Provides an option for users to leave written reviews.
  - Manages the complex many-to-many relationship between users and TV shows via a dedicated "Rating" entity.
4. **Personalized Viewing of Ratings:**
- Enables users to filter and view ratings based on:
    - Specific age groups (e.g., "What are people 18–30 saying about this show?").
    - Selected interests (e.g., "Top-rated documentaries among users who enjoy science and history.").
  - Supports advanced queries that generate insights into how different demographics perceive various shows.
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## Entities and Relationships

### Entities:

- **User:** Represents individuals using the platform, with their demographic and interest data.
- **AgeGroup:** Categorizes users into predefined age brackets.
- **Interest:** Represents user-selected genres or topics of interest.
- **TVShow:** Stores detailed information for each TV show available on the platform.
- **Rating:** Captures user ratings (1–10) and optional reviews for TV shows.

### Relationships:

- **User–AgeGroup:** Each user belongs to one and only one age group.
  - **User–Interest:** Users can have multiple interests, creating a many-to-many relationship.
  - **TVShow–Interest:** Each TV show can belong to multiple genres or interest categories.
  - **User–TVShow (via Rating):** Users can rate multiple TV shows, and each TV show can receive ratings from multiple users.
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## Intended Use of the Database

1. **Personalized Recommendations:**
  - The database enables personalized TV show suggestions by analyzing user ratings within specific age groups and interests.
  - Recommendations align more closely with users' tastes compared to generic algorithms.
2. **Improved Content Discovery:**
  - Users can explore new TV shows based on their preferences, interests, or demographic insights.
  - Facilitates better discovery of hidden gems or niche content.
3. **Community Engagement:**

- By showcasing reviews and ratings from like-minded individuals, the platform fosters a sense of community.
  - Users feel connected through shared preferences and interests.
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## **Benefits Over Traditional Systems**

### **1. Avoids Generic Recommendations:**

- Traditional platforms often provide aggregate ratings that do not reflect individual tastes.
- By incorporating age and interest data, the platform offers more nuanced and tailored ratings.

### **2. Enhanced Accuracy:**

- Users receive recommendations that are backed by data from people in similar age groups or with similar interests.
  - This makes the recommendations feel more personal and relevant.
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## **Conclusion**

### **Core Component:**

The database is the cornerstone of the platform, enabling it to collect, store, and analyze critical user and TV show data.

### **Achieving the Platform's Mission:**

Through its personalized approach, the platform creates a more engaging and customized experience for its users.

### **Addressing Challenges:**

By focusing on age-specific and interest-specific insights, the platform solves the problem of generic, impersonal recommendations. It bridges the gap between users and the shows they are most likely to enjoy, ensuring satisfaction and long-term engagement.