

Group 7 Web API

Overview

This document outlines the functionality for a web API that allows users to search, browse, and retrieve information about television shows. The service draws from a database containing details about thousands of TV shows, and contains the following information for each TV show:

- **Basic Details:** Show title (including original titles), first air date, last air date (if applicable), number of seasons and episodes.
- **Production Information:** Networks that broadcast the show, production studios, their respective logos and countries of origin, and creators of the show.
- **Content Details:** Genre classifications, descriptive overview, current status.
- **Popularity Metrics:** TMDb popularity score, average rating, and vote count.
- **Visual Assets:** Poster images, backdrop images for show pages.
- **Cast Information:** Up to 10 primary cast members, including their names, the characters they play, and their profile images.

Core Functionality

1. Search and Discovery

By default, the service displays all TV shows in the database. This function constitutes the “browser”, where users may browse through or search for TV shows. Because the database may contain thousands of entries, results are delivered in manageable chunks instead of all at once.

Filter Results

Users can narrow down the complete list of shows using several filtering options. A search function allows users to search by title, including the original title. Additionally, filters allow users to narrow results, and multiple filters can be applied at once. The available filters are as follows:

- Genre (such as Drama, Comedy, Science Fiction, Documentary, etc.)
- Network (the broadcaster, such as HBO, Netflix, BBC, etc.)
- Status (whether shows are returning with new episodes, have ended, or have been canceled)

Results can also be sorted by title, popularity, rating, first air date, last air date, or number of episodes. These sorting options can be set to either ascending or descending order.

2. Detailed Information Retrieval

Users can retrieve all stored information for a specified show. See overview for what information is stored.

3. Random Discovery

Random Show Selection

Users can request a randomly selected show from the database, optionally filtered by genre or other criteria.

Data Format and Access

All information is delivered in JSON format, a structured text format that organizes data with labels indicating what each piece of information represents. Image resources (posters, backdrops, logos, profile pictures) are provided as web links that can be used directly in applications or websites.

Limitations

The service provides information retrieval only, it does not:

- Stream or provide access to actual show content
- Modify or update the underlying database (read-only access)
- Provide real-time updates (the database is static and does not receive updates)
- Include every TV show ever made (limited to shows present in the database)