

# **Intermediate Project: "Netflix Content Recommendation System and Predictive Analysis"**

## **Main Goal:**

Build an intelligent content analysis system that can understand Netflix's catalog patterns, predict content characteristics, and recommend similar titles to users based on their preferences.

This project will include:

## **Main Modules:**

1. **Advanced Exploratory Data Analysis (EDA)**
  - Temporal trend analysis by genre
  - Movie/series duration patterns
  - Text mining on descriptions
  - Correlations between variables
2. **Natural Language Processing (NLP)**
  - Keyword extraction from descriptions
  - Sentiment analysis on titles
  - Content similarity clustering
  - Word clouds by category
3. **Simple Recommendation System**
  - Content-based similarity recommendations
  - Filtering by features (genre, country, rating)
  - Similarity matrix using TF-IDF
4. **Predictive Analysis**
  - Predict content type (Movie/TV Show) based on features
  - Rating classification
  - Advanced feature engineering
5. **Interactive Visualizations**
  - Interactive dashboard with Plotly
  - Actor/director network analysis
  - Heatmaps of production by country/year

## **Skills you'll practice:**

- Advanced data cleaning
- Feature engineering
- NLP and text processing
- Machine Learning (classification)
- Interactive visualizations
- Handling categorical and temporal data