

# **TAMIZHAN SKILLS**

## **PROJECT:**

Netflix User Behavior Analysis

## **PROBLEM STATEMENT:**

Streaming services want to understand what content users prefer.

## **OBJECTIVE:**

Analyze dataset of Netflix viewing habits to identify genre and viewing trends.

## **REQUIREMENTS:**

- Dataset: show titles, genres, user viewing history
- Analyze top genres, watch hours per user
- Visualize binge behavior and ratings vs genres

## STEP 1: Data Loading & Initial Inspection

- The dataset NETFLIX.csv is loaded using pandas.
- Basic inspection is performed:
  - Display of first 5 rows
  - Summary info using df.info()
  - Count of missing values
- Key variables include: **Title, Genre, User ID, Watch Hours, Rating**

## STEP 2: Data Cleaning & Preprocessing

- Conversion of Watch Hours to numeric format with coercion of errors.
- Handling missing values using fillna or filtering.
- Creation of additional columns if needed, like:
  - Viewing History per user (if added)
  - Derived stats like total watch hours or binge status

## STEP 3: Top Genres Analysis

- Grouping the dataset by Genre and summing the Watch Hours
- Sorting to extract **Top 10 genres**
- Optional count of shows per genre

## STEP 4: Watch Hours per User Analysis

- Aggregation by User ID to calculate total watch hours
- Sorting to find **Top binge watchers**
- Histogram or distribution plot of watch hours

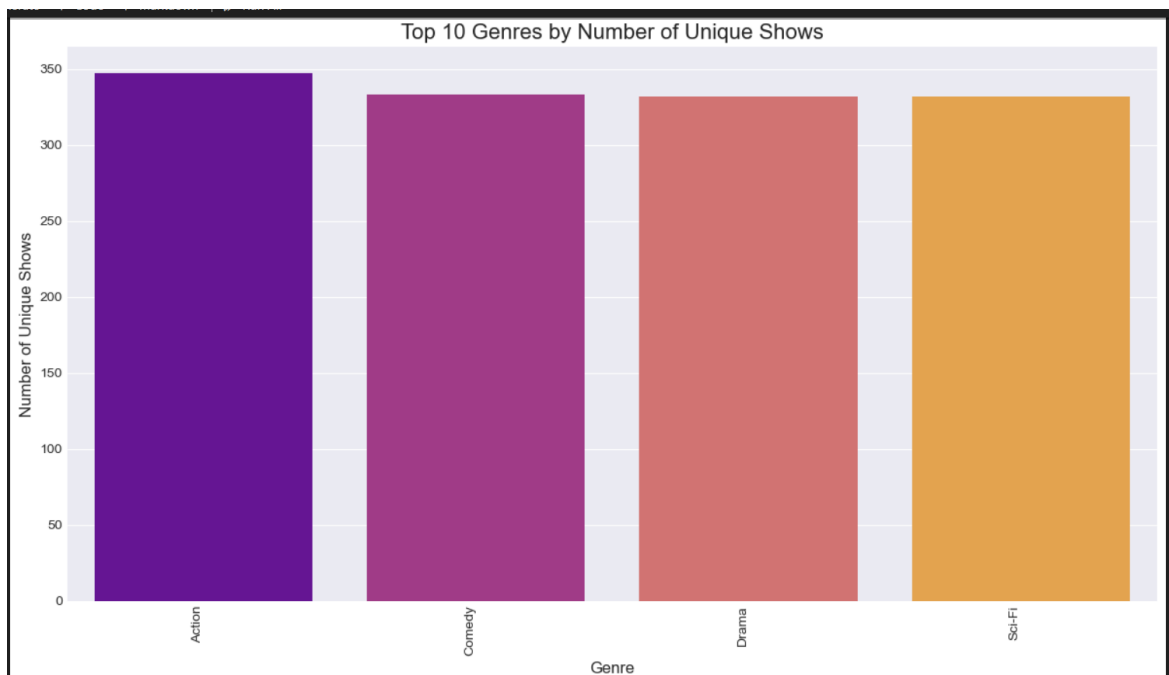
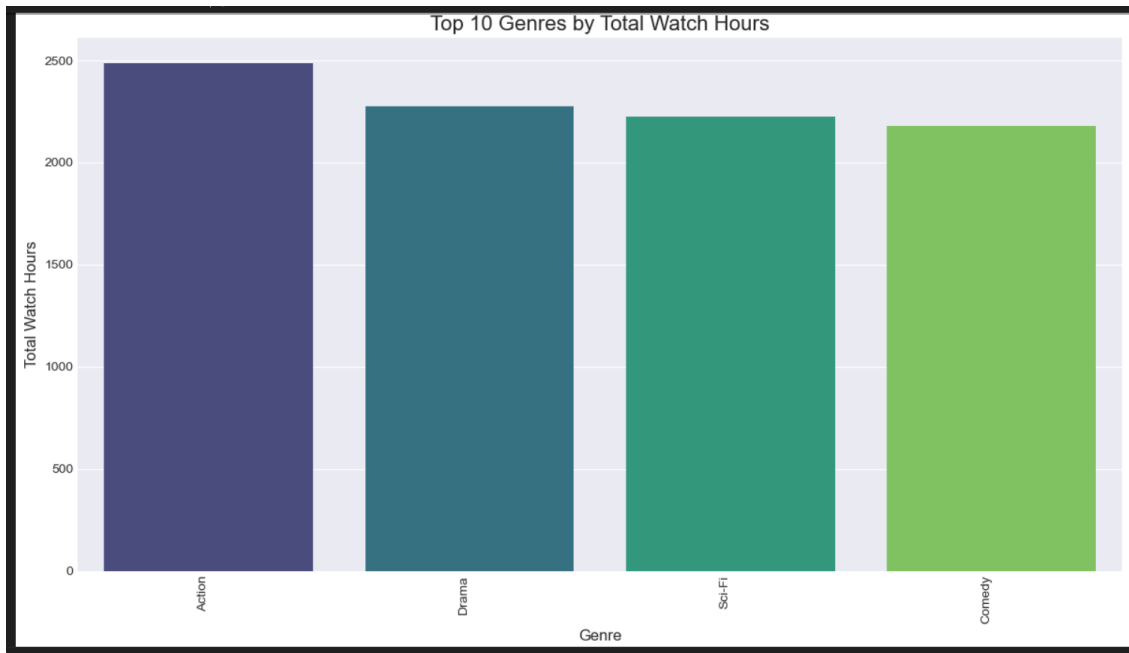
## STEP 5: Binge-Watching Behavior

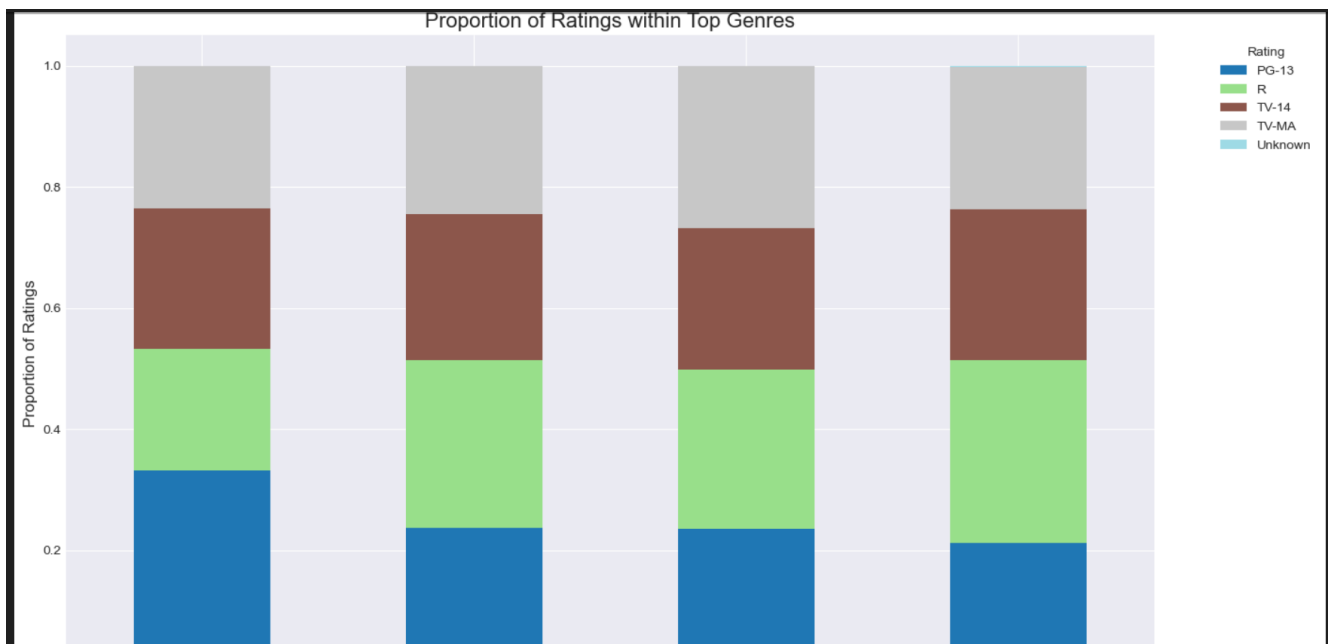
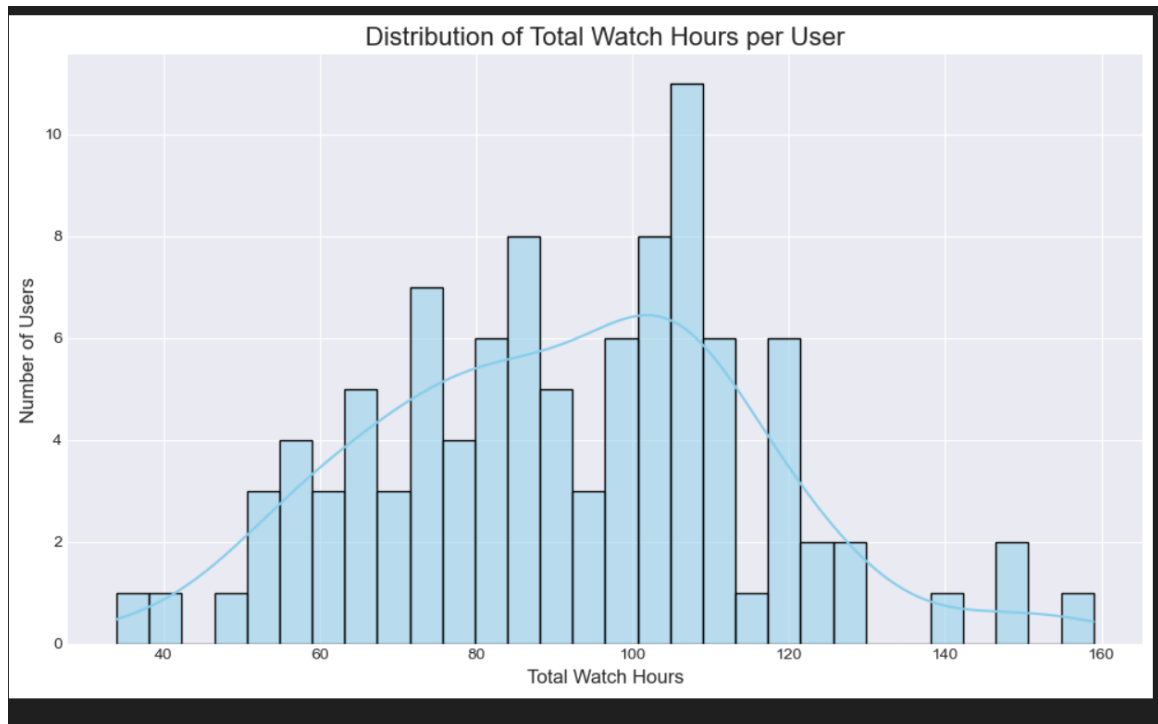
- Definition of a **binge threshold** (e.g., 8+ hours/session)
- Identification of users who crossed the threshold
- Count of binge-watch events and genres most associated with bingeing

## STEP 6: Rating vs Genre Analysis

- Grouping ratings within each genre
- Creating a **stacked bar chart** to visualize rating distribution per genre

## STEP 7: Visualizations





## **STEP 8: Behavioral Insights & Suggestions**

- Users tend to watch significantly more in specific genres (likely Action, Drama, etc.)
- Some users show consistent binge-watching behavior, especially in limited series
- Higher-rated genres could be promoted more often
- Suggestions:

Push notifications based on binge patterns

Recommend similar genres with high engagement

Optimize homepage content based on user rating preferences

### **EXPECTED OUTPUT:**

Behavioral insights that could guide content suggestions.