

YouTube Data Extraction Report

Steps to Create the API Key

1. Create a Google Cloud Project:

- Visit the [Google Cloud Console] (<https://console.cloud.google.com/>).
- Click 'New Project,' enter the name, and click 'Create'.

2. Enable the YouTube Data API v3:

- In 'APIs & Services' > 'Library,' search for and enable 'YouTube Data API v3'.

3. Create Credentials:

- Go to 'APIs & Services' > 'Credentials,' click 'Create Credentials,' and select 'API Key'.
- Copy and securely store the generated API key.

Chosen YouTube Channel

Channel: HUM TV

Reason: HUM TV is a leading Pakistani entertainment channel with significant global following, offering rich data for analysis.

Data Extracted

1. Channel Statistics:

- Title: HUM TV
- Description: Premier entertainment channel with quality dramas.
- View Count: 34,055,994,522
- Subscriber Count: 40,200,000
- Video Count: 145,746

2. Video Statistics:

- Data includes video IDs, titles, descriptions, view counts, like counts, dislike counts, comment counts, durations, and tags.

Issues Encountered and Resolutions

1. Issue: Difficulty in retrieving video statistics.

- **Resolution:** Added debug prints and verified each step, ensuring correct data fetching.

2. Issue: API quota limits reached.

- **Resolution:** Handled API rate limits and optimized API calls.

Insights Gained

- **High Engagement:** HUM TV has substantial viewership and strong subscriber loyalty.
- **Diverse Content:** Over 145,746 videos indicate varied content appealing to different demographics.
- **Popular Content:** Analysis of view counts and likes helps identify popular content types.