Code

import os from dotenv import load dotenv from googleapiclient.discovery import build # Load environment variables load dotenv() # Your YouTube API key API KEY = 'AlzaSyDwDHj9r2g8MS0JcuQ8XjSEmKA5HS2xrWQ' # Replace with your actual API key # Create a YouTube API client youtube = build('youtube', 'v3', developerKey=API KEY) def search playlists(artist name): # Search for playlists by the artist request = youtube.search().list(part='snippet', q=f"{artist_name} album", type='playlist', maxResults=50 # Adjust as needed) response = request.execute() return response.get('items', []) def get_playlist_details(playlist_id): # Get playlist item details request = youtube.playlistItems().list(part='snippet', playlistId=playlist id, maxResults=50 # Adjust as needed) response = request.execute() return response.get('items', []) def get video statistics(video id): # Get video statistics request = youtube.videos().list(part='statistics', id=video id) response = request.execute() # Check if the response has items and return statistics if 'items' in response and len(response|'items']) > 0: return response['items'][0].get('statistics', {}) return {} def analyze artist(artist name): playlists = search_playlists(artist_name) total_views = 0 estimated_revenue = 0.0 for playlist in playlists: playlist id = playlist['id']['playlistId'] print(f"Processing Playlist: {playlist['snippet']['title']} (ID: {playlist id})") playlist items = get playlist details(playlist id) for item in playlist items: video id = item['snippet']['resourceId']['videoId'] stats = get video statistics(video id) views = int(stats.get('viewCount', 0)) total views += views # Estimate revenue based on views estimated revenue += views * 0.002 # Replace with your revenue per view print(f"\nTotal Views for {artist_name}: {total_views}") print(f"Estimated Total Revenue for {artist_name}: \${estimated revenue:.2f}\n") def main(): artists = ["Common", "Kendrick Lamar", "J. Cole", "Drake", "Nas", "Lil Wayne", "Cardi B", "Megan Thee Stallion", "Travis Scott", "Snoop Dogg" | for artist in artists: analyze_artist(artist) if __name__ == "__main__": main()