

```
# INSTALL REQUIRED PACKAGES
# requests and pandas are python libraries, to install via pip, Python's package manager
# requests is for making HTTP requests (like fetching web pages)
# pandas is for working with structured data (tables, CSVs, etc)
# quiet makes the output cleaner
# each of the import lines imports a Python module or library

!pip install --quiet requests pandas

import requests
import re
import json
import pandas as pd

# RECEIVE VIDEO LINKS AND GIVE THEM NAMES
# add more as needed

videos = [
("Irish Trans Pride Parade", "https://www.youtube.com/watch?v=kf58rHXyWJk"),
("Malta Travel", "https://www.youtube.com/watch?v=Ys0V4wx0WsY"),
("Swedish Trans Experience", "https://www.youtube.com/watch?v=k6NYnGpBJbs"),
("Irish Young LGBs", "https://www.youtube.com/watch?v=gMRpVek5KD8"),
("MCC Brussels", "https://www.youtube.com/watch?v=t_6lYfTOJkQ"),
("Irish News Government", "https://www.youtube.com/watch?v=FLWyrbwLgnM"),
("Irish TV Safety", "https://www.youtube.com/watch?v=mNpxpVgwXuQ"),
("Euronews Report", "https://www.youtube.com/watch?v=1mNJasO4694"),
("DW Report Berlin", "https://www.youtube.com/watch?v=xPpe3jrPGE8"),
("DW Report Pope", "https://www.youtube.com/watch?v=KdCJXf3ctnE"),
("DW Report UK", "https://www.youtube.com/watch?v=ta0H-ESCinw"),
]

# LABEL REQUEST TO SERVER WITH HEADERS
# this tells the web server what kind of device/browser is making the request
```

```
# websites use this to customize responses or block bots

headers = {
    "User-Agent": "Mozilla/5.0 (Windows NT 10.0; Win64; x64)"
}

# EXTRACT PUBLISH DATE AND VIEW COUNT
# this loops over our list of videos, making requests to each of their URLs
# it extracts JSON data from the HTML to get publish date and view count
# it then stores the results under headings we provide

results = []

for video_name, video_url in videos:
    print(f"Processing: {video_name} ({video_url})")
    # this lets us see what video the script is currently working on

    try:
        response = requests.get(video_url, headers=headers)
        # this makes HTTP GET requests to the video pages

        html = response.text
        # this gets the full HTML contents as text

        match = re.search(r'var ytInitialPlayerResponse = (.*?)';', html)
        if not match:
            match = re.search(r'ytInitialPlayerResponse\s*=\s*(.*?)';', html)
        # ytInitialPlayerResponse is a JavaScript variable containing the video metadata

        if match:
            data_json = match.group(1)
            data = json.loads(data_json)
```

```

video_details = data.get("videoDetails", {})
publish_date = data.get("microformat", {}).get("playerMicroformatRenderer", {}).get("publishDate",
None)

view_count = video_details.get("viewCount", None)
# this extracts the data we want and converts it into a Python dictionary so it can be worked with

# Then format view counts as integers
try:
    view_count = int(view_count)
except:
    view_count = None

# Then store results
results.append({
    "video_name": video_name,
    "video_url": video_url,
    "publish_date": publish_date or "Not found",
    "view_count": view_count if view_count is not None else "Not found"
})
else:
    print("Could not extract JSON data from this video.")
    results.append({
        "video_name": video_name,
        "video_url": video_url,
        "publish_date": "Error",
        "view_count": "Error"
    })

except Exception as e:
    print(f"Error processing video: {e}")
    results.append({
        "video_name": video_name,
        "video_url": video_url,

```

```
        "publish_date": "Error",
        "view_count": "Error"
    })

# SAVE TO CSV
df = pd.DataFrame(results)
csv_filename = "video_metadata.csv"
df.to_csv(csv_filename, index=False)

print(f"\nSaved metadata for {len(df)} videos to {csv_filename}")

# DOWNLOAD CSV FROM GOOGLE COLAB
try:
    from google.colab import files
    files.download(csv_filename)
except ImportError:
    pass # Not in Colab
```