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### **Kompensasi**

Scraping data demografi viewer/komentar youtube menggunakan API (akun developer).

### **Source Code**

```
from googleapiclient.discovery import build
import requests
import json
from datetime import datetime
import urllib.request

URL = "https://www.googleapis.com/youtube/v3/commentThreads"
API_KEY = "AIzaSyDS33GM81iifJIxSbvKNvkXWQkj7LpS6r4"
VIDEO_ID = "Qy9JkVBlWBI"

URL_CHANNEL= "https://www.googleapis.com/youtube/v3/channels"

# channel youtube
url_channel =
f"https://www.googleapis.com/youtube/v3/videos?part=snippet&id={VIDEO_ID}&key={API_KEY}"

json_url = urllib.request.urlopen(url_channel)
data = json.loads(json_url.read())

video_desc = []

desc_video = data["items"][0]["snippet"]["description"]
judul_video = data["items"][0]["snippet"]["title"]
video_published_at = data["items"][0]["snippet"]["publishedAt"]

video_desc.append(
    {
        "Judul_Video": judul_video,
        "Deskripsi": desc_video,
        "Published_at": video_published_at
    }
)
```

```

# comment youtube
response =
requests.get(f"{URL}?key={API_KEY}&videoId={VIDEO_ID}&part=snippet")
response_json = response.json()

youtube = build('youtube', 'v3', developerKey = API_KEY)

comments = []
while True:
    for item in response_json["items"]:
        author =
item["snippet"]["topLevelComment"]["snippet"]["authorDisplayName"]
        content =
item["snippet"]["topLevelComment"]["snippet"]["textOriginal"]
        published_at =
item["snippet"]["topLevelComment"]["snippet"]["publishedAt"]
        likes =
item["snippet"]["topLevelComment"]["snippet"]["likeCount"]
        totalReply = item["snippet"]["totalReplyCount"]
        video_id = item["snippet"]["videoId"]

        comments.append({
            "author": author,
            "comment": content,
            "published_at": published_at,
            "likes": likes,
            "reply_comment": totalReply,
            "id_video": video_id
        })

    print(f"collecting from: {author}")

    if totalReply > 0 :
        parent = item["snippet"]["topLevelComment"]["id"]
        data2 = youtube.comments().list(part='snippet',
maxResults='100', parentId=parent, textFormat='plainText').execute()

        for i in data2["items"]:
            name = i["snippet"]["authorDisplayName"]
            comment = i["snippet"]["textDisplay"]
            published_at = i["snippet"]['publishedAt']
            likes = i["snippet"]['likeCount']

```

```

        comments.append(
            {
                "author": name,
                "comment": comment,
                "published_at": published_at,
                "likes": likes,
                "id_video": video_id
            }
        )

    if "nextPageToken" in response_json:
        page_token = response_json["nextPageToken"]
        response =
requests.get(f"{URL}?key={API_KEY}&videoId={VIDEO_ID}&part=snippet&page
Token={page_token}")
        response_json = response.json()
    else:
        break

with open('hasilScraping.json', 'w') as f :
    json.dump(comments, f)

with open('InformasiVideo.json', 'w') as f :
    json.dump(video_desc, f)

print(f"\n\n\ncomments:\n{comments}")
print(f"count comment: {len(comments)}")

print("finished.")

```

## Output Hasil Scraping (file JSON)

- Hasil scraping komentar dari suatu video youtube

```
1  [
2    {
3      "author": "Windah Basudara",
4      "comment": "Akhirnya aku menemukan asset File The Yummer guys! link videonya disini: https://youtu.be/K9OvhpyGBB4",
5      "published_at": "2022-12-26T03:56:23Z",
6      "likes": 82,
7      "reply_comment": 14,
8      "id_video": "4bhFLX4DS04"
9    },
10   {
11     "author": "Farhan",
12     "comment": "Siap bang",
13     "published_at": "2022-12-26T06:11:00Z",
14     "likes": 0,
15     "id_video": "4bhFLX4DS04"
16   },
17   {
18     "author": "uya wibowo",
19     "comment": "Masut nya kucingnya di letakan bawah kaleng",
20     "published_at": "2022-12-26T05:56:08Z",
21     "likes": 0,
22     "id_video": "4bhFLX4DS04"
23   },
24   {
25     "author": "Lorenzo Jorge \u0022 2 tahun yang lalu",
26     "comment": "@Lucky Fernando \ud83d\ude02. Dasar anak tidak kenal tuhanya sendiri",
27     "published_at": "2022-12-26T05:12:48Z",
28     "likes": 0,
29     "id_video": "4bhFLX4DS04"
30   },
31   {
32     "author": "Lgyy",
33     "comment": "Oh no kripi",
34     "published_at": "2022-12-26T05:11:45Z",
35     "likes": 0,
36     "id_video": "4bhFLX4DS04"
37   },
38 ]
```

- Hasil scraping informasi video youtube

```
1  {
2    "Judul_Video": "SPONGEBOB INGIN MEMBAHAGIAKAN SEMUA ORANG! TAPI KOK.... SpongeBob Saves the Day",
3    "Deskripsi": "Video yang menjelaskan The Yummer SI CELANA KOTAK: https://www.youtube.com/watch?v=1WmsKH7QrI&t=367s\nTidak usah donasi |
4    "Published_at": "2022-12-25T06:21:22Z"
5  }
```