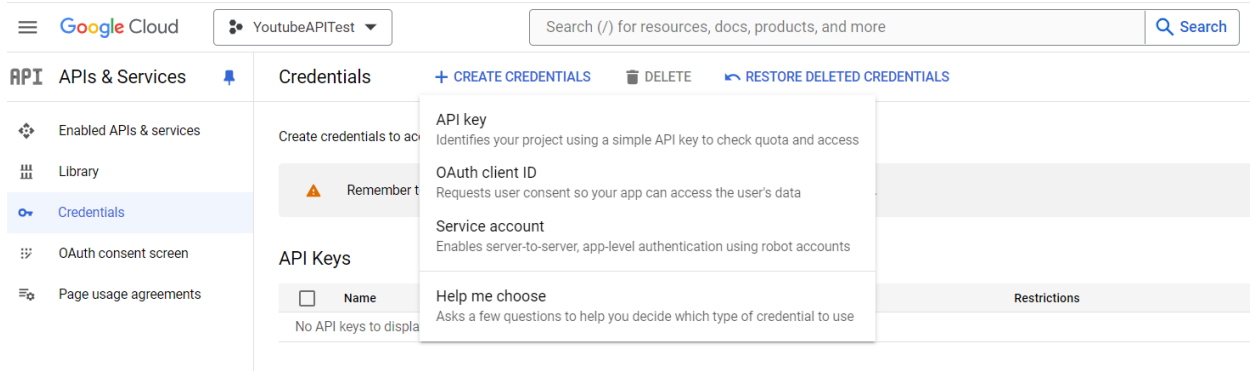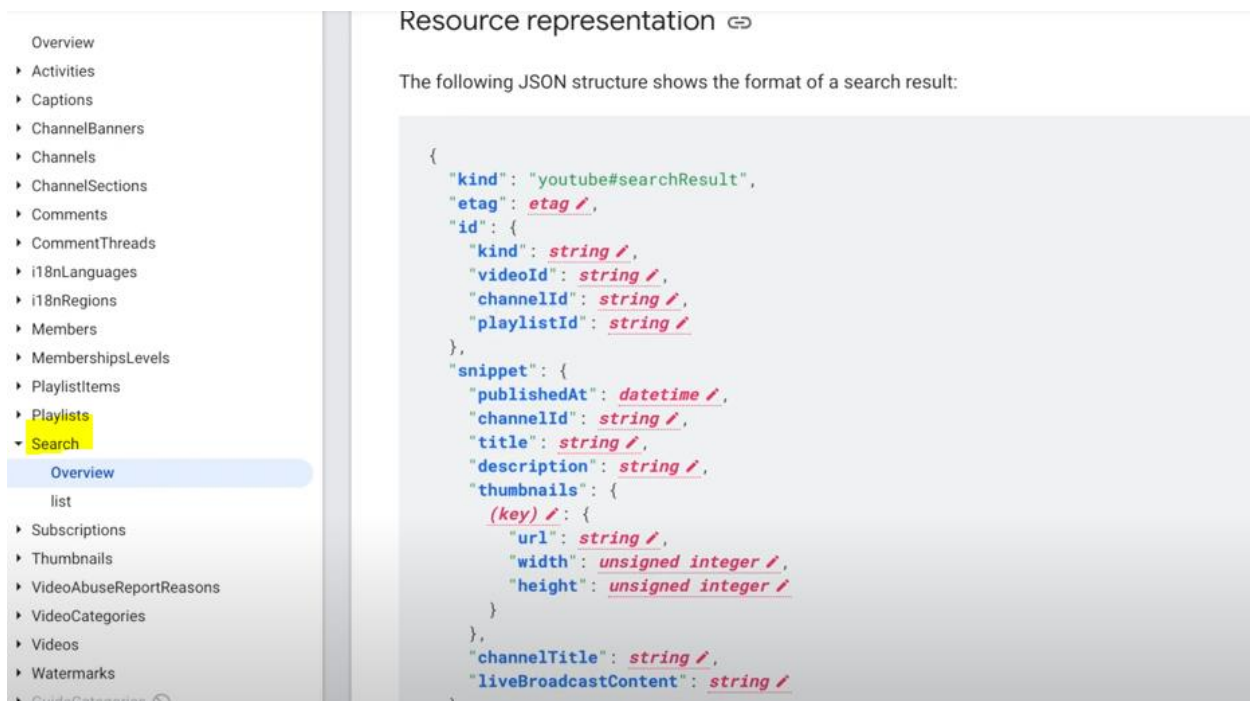# YouTube API: What is Possible?

YouTube Data API v3 provides access to YouTube data, such as videos, playlists, and channels. Need to go to the Google Developer console, login, select a project, and enable the API. Then go to credentials:

Max results for any request to the API is defaulted to 5

At the left side of the page, there is a list of all the entities (named Resources) you can retrieve using the API. In the Overview sections of each we can find information on what the resources are about and the list of their available methods. The options below the Overview section are the supported methods of each resource.

The list method will allow you to retrieve data of a given resource. Parameters subsection includes the required and optional parameters to execute queries. Response subsection shows you the dictionary of properties the query responses will include.

All queries have the same structure and only a few parameters will change depending on the resource you are requesting for and the method to be executed. When you select a method for any resource from the resource list, a section titled Try this API will be displayed at the right side of the page and examples of code for different languages will be provided.

Despite documentation existing, there doesn't seem to be a way to access dislikes. Google has removed the possibility to access dislikes count from December 2021. However, a browser extension to get the data exists: Return YouTube Dislike

What type of requests you can make:

- Search: contains information about one or more YouTube video, channel, or playlist that matches the search parameters specified in an API request.
  - Github documentation
  - Relevant endpoints for each search result:

Video name, id	Channel name, id	Published at	Thumbnail info	Video description

- Video: contains information about a YouTube video such as statistics
  - Relevant endpoints:

Video name, id	Channel name, id	Published at	Thumbnail info	Video description
Tags associated with the video	If video was a live broadcast	Language of title / description	Language of the audio	Duration of video
If the video contains licensed content	Countries where the video is restricted or blocked	View count	Like count	Favorite count
Comment count	Topic details	Wikipedia links to categories of topics in video	Where the video was recorded (geolocation)	

- Comments: contains information about a single YouTube comment. A comment resource can represent a comment about either a video or a channel. In addition, the comment could be a top-level comment or a reply to a top-level comment.
  - Relevant endpoints:

Comment id	Author display name	Author profile image url	Author channel url	Author channel id
Text content	Like count	Parent comment id	Date published	Updated time

  - Can also pull comment threads and get this information for each comment in the thread

- Channel info: information about a given YouTube channel
    - Relevant endpoints:

Channel id	Channel title	Created at	Channel url	Channel description
Language of channel text	Country channel associated with	Channel view count	Subscriber count	Video count
Topic details associated with channel	Wikipedia urls associated with topics			

- Video categories: identifies a category that has been or could be associated with uploaded videos.
    - Relevant endpoints:

Category id	Channel id of the channel that created the category	Title of category

- Captions: not as comprehensive as transcripts but can be retrieved
    - Relevant endpoints:

when captions were uploaded, caption ID	language	Content (the track) * need video ID and caption ID

It is also possible to retrieve chat messages from live streaming videos through the YouTube Live Streaming API which is also part of the YT API v3. Important: you only can get messages from ongoing live videos, it is impossible to retrieve the chat history from ended live streams. See more on LiveChatMessages resources. To store the results in a csv see the YouTube's Live chat extractor.

Quota costs: good news is most get requests seem to only cost one point (see the full quota costs here: Quota calculator).

Default access to the YouTube API is 10,000 points per day. There doesn't seem to be a way to track how many points you have left in each day though, unlike X

The best way to get the maximum quota is to register the twelve projects allowed in Google Cloud Platform, activate the API in every single one and generate twelve API keys. In this way, 120,000 credits

per day will be available. If this is still not enough, it is possible to make an extension request even if apparently Google takes too long to reply.