Sat 02 Apr 2022

PURPOSE: Focus is Google API, youtube in particular. This is summary of using cURL to obtain authorization code and then proceed querying youtube.

USAGE: This is a markdown, md, file. All zsh code is treated as verbatim. To run the zsh, use the neovim terminal and then the short cut ,tl.

Once something is working convert to a zsh script file. But THIS document be NEAT summary.

• ~/.Renviron for secrets * Source: https://developers.google.com/youtube/v3/guides/auth/installed-apps * zsh, '&' is special. Use single quotes around it to avoid errors.

REF: https://stackoverflow.com/questions/53357741/how-to-perform-oauth-2-0-using-the-curl-cli#53357742et CLIENT_ID=Replace_with_your_Client_ID

Youtube constants

```
auth_url=https://accounts.google.com/o/oauth2/v2/auth
token_url=https://oauth2.googleapis.com/token
base_url=https://www.googleapis.com/youtube/v3
uri_redirect=
# Per google docs, scopes are separated by whitespace
scope='https://www.googleapis.com/auth/youtube https://www.googleapis.com/auth/youtube.force
client_id=$(Rscript -e "cat(Sys.getenv('OAUTH2_ID')))")
```

Run this in neovim termina, copy+paste into browser, which asks user permission and then returns auth.code!

```
echo \
'https://accounts.google.com/o/oauth2/v2/auth?'\
'client_id='$client_id'&redirect_uri=urn:ietf:wg:oauth:2.0:oob'\
'&scope='$scope'&response_type=code'
```

We now have auth code. PURPOSE: HTTR2:: Given ONE video, return ALL Comments Authorization: Bearer [YOUR_ACCESS_TOKEN] Accept: application/json

(1APR2022)

 $\label{eq:complex} Google's example, with loop for uri_redirect https://accounts.google.com/o/oauth2/v2/auth? scope=https%3A%2F%2Fwww.googleapis.com%2Fauth%2Fyoutube.readonly& response_type=code& state=security_token%3D138r5719ru3e1%26url%3Dhttps%3A%2F%2Foauth2.example redirect_uri=http%3A//127.0.0.1%3A9004& client_id=client_id$

- Google's authorization server: https://accounts.google.com/o/oauth2/v2/auth

Request: appropriate query sent to:

GET https://www.googleapis.com/youtube/v3/commentThreads

From Explorer

 $GET\ https://youtube.googleap is.com/youtube/v3/playlists?part=snippet\%2CcontentDetails\&maxResults=5\&HTTP/1.1$

Authorization: Bearer [YOUR_ACCESS_TOKEN] Accept: application/json

same, but as Curl

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- $\verb|`https://youtube.googleapis.com/youtube/v3/playlists?part=snippet \% 2 Ccontent Details \& maxResults = 5 \& mineral matter and the sum of the$
- -header 'Authorization: Bearer [YOUR_ACCESS_TOKEN]'
- -header 'Accept: application/json'
- -compressed

From Google Playground

https://youtube.googleapis.com/youtube/v3/commentThreads?videoId=Mec9sw1cJk8&part=snippet,replies###

platform set ENDPOINT=https://accounts.google.com/o/oauth2/v2/auth

chrome %URL%

translate to cURL

 $curl ^--data \ client_id=\%CLIENT_ID\% ^--data \ client_secret=\%CLIENT_SECRET\%$

- ^ -data code=%AUTH_CODE% ^ -data redirect_uri=urn:ietf:wg:oauth:2.0:oob
- ^-data grant_type=authorization_code ^ https://www.googleapis.com/oauth2/v4/token