Data Representation

Lab 06.02: API Keys

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In this lab we are going to use Python access APIs that need a key

We are using the APIs as described by:

* <https://html2pdf.app/>
* <https://developer.github.com/v3/guides/>

NOTE: You will have to get your own key from GitHub and html2pdf (you will need to register for that)

# Create a pdf.

1. Go to html2pdf.com and create an account for yourself and copy the api key.

(if you are really lazy use my key)

1. Look at their documentation.
2. Write a script that will convert the Wikipedia website into a pdf.

import requests

import urllib.parse

targetUrl = "https://en.wikipedia.org"

apiKey = “XXXXXXXXXXXXXXXXXXXXXXXXX”

#api = "XXXXXXXX"

apiurl = 'https://api.html2pdf.app/v1/generate'

params = {'url': targetUrl,'apiKey': apiKey}

parsedparams = urllib.parse.urlencode(params)

requestUrl = apiurl +"?" + parsedparams

response = requests.get(requestUrl)

print (response.status\_code)

result =response.content

with open("document.pdf", "wb") as handler:

    handler.write(result)

1. you should probably put the api into a config file

config = {

    "htmltopdfkey":"eAs3mWn7R59gxZ6kSYysYdpTUsivY7Am74aSN36pOHdMMyTu3XDpdSOtaAySz3qF"

}

1. And modify the code.

from config import config as cfg

targetUrl = "https://en.wikipedia.org"

apiKey = cfg["htmltopdfkey"]

## Get private data from GitHub:

1. Create a new repository on your GitHub account called ‘aprivateone’, make it a private repository
2. Get your own API key for your GitHub account. (See lectures) it should look something like

 Github\_XXXXXXXaa146eafee094d3a7cb0eec8b910

NOTE: you key will cease to work if you put it into a file that is uploaded to GitHub (this is for security reasons)

Replace this with your key

1. Use curl to check that it works

curl -i -H "Authorization: token  githubXXXXXXX0 https://api.github.com/user/repos

1. Write python script that will get the information from the private repository you created

url = 'https://api.github.com/repos/your-username/aprivateone'

And output the result to a file

You will need to make a variable called apiKey that contains the key

Read the key from your config.py file

response = requests.get(url, auth=('token',apiKey))

repoJSON = response.json()

#print (response.json())

with open(filename, 'w') as fp:

json.dump(repoJSON, fp, indent=4)

If the file had got “bad credentials” written in it. Then the key you are using is invalid. (you may have accidently pushed it in a file to GitHub.

1. Add the line config.py to your .gitignore file so that the config.py is not pushed up to your repository

# my configuration files

config.py

## Challenge

1. Write a script to get more information from your repository.
2. Write a script that will make a change to your repository.