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

# 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.