

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: The key in the GitHub code no longer works, possible because someone uploaded the key up to GitHub, I will now only display it on learnonline.

1. Write a python program that will read in a html page from a file and prints it out again

```
f = open("../week02/carviewer2.html", "r")
html = f.read()
print (html)
```

2. Modify the script to use the html2pdf.app api with the key:
46ceed910c24ff7cce8240e89ec7b71912f6f40f2ec55fd217ce150ad
6d4f1c4. The script should print out the status code of the response

```
import requests
import json

#html = '<h1>hello world</h1>This is html'
f = open("../week02/carviewer2.html", "r")
html = f.read()
#print (html)

apiKey = '46ceed910c24ff7cce8240e89ec7b71912f6f40f2ec55fd217ce150ad6d4f1c4'
url = 'https://api.html2pdf.app/v1/generate'

data = {'html': html, 'apiKey': apiKey}
response = requests.post(url, json=data)
print (response.status_code)
```

3. Modify the program to write the binary data returned to a file .pdf

```
newFile = open("lab06.02.01.htmlaspdf.pdf", "wb")
newFile.write(response.content)
```

4. Test your code (open the pdf)

Get private data from github:

5. Use curl to check if the API key:

7aa146eafee094d3a7b1e81aa1d8fcb0eec8b910

Can be used to access github private data (This should all be on one line)

(This key gets deleted if you upload a file to GitHub that contains it, so I have put in a minus sign into it, you should remove the minus sign before using, and do not check in code that has this key in it)

Keys should be stored in environment variables

This key no longer works. See key in learnonline

If you get a 401 error, then you need to recreate the API key.

```
curl -i -H "Authorization: token  
7aa146eafee094d3a7b1e81aa1d8fcb0eec8b910  
https://api.github.com/user/repos
```

6. Write python script that will get the information from a private repository called

datarepresentationstudent/aPrivateOne

And output the result to a file

```
response = requests.get(url, auth=('token', apiKey))  
repoJSON = response.json()  
#print (response.json())  
  
file = open(filename, 'w')  
json.dump(repoJSON, file, indent=4)
```

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

If the file had got "bad credentials" written in it. Then the key you are using is invalid.

Challenge

7. Write a script to get information from your repository
8. Write a script that will make a change to the datarepresentationstudent git account