Data Representation

Lab 06.03: using a package

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In this lab we are going to use the package PyGitHub to interact with GitHub

It is easier than making all our own requests;

Install using

Pip install PyGithub

Documentation on this package:

* <https://pygithub.readthedocs.io/en/latest/introduction.html>

For examples

* <https://pygithub.readthedocs.io/en/latest/examples.html>

Remove this minus sign

Full reference

* <https://pygithub.readthedocs.io/en/latest/reference.html>

the key that we are using is

 7aa146eafee094d3a7b1e81aa1d8fcb0eec8b91-0

I put the minus sign in because as a security measure GitHub removes access for the key if it is uploaded to GitHub

Please make sure you do not push a file with this key to the repository, because GitHub will disable it for security reasons.

1. install pyGithub

pip install PyGithub

1. Write a python script called lab06.03.01-githubbymodule.py
2. Test that your pyGithub works

Remove this minus sign

from github import Github

# remove the minus sign from the key

g = Github("7aa146eafee094d3a7b1e81aa1d8fcb0eec8b91-0")

for repo in g.get\_user().get\_repos():

    print(repo.name)

1. Modify the program to get the clone url of the repository aPrivateOne

g = Github("7aa146eafee094d3a7b1e81aa1d8fcb0eec8b91-0")

repo = g.get\_repo("datarepresentationstudent/aPrivateOne")

print(repo.clone\_url)

1. Modify this to get the download url of the file in this repository called test.txt

fileInfo = repo.get\_contents("test.txt")

urlOfFile = fileInfo.download\_url

print (urlOfFile)

1. I would comment out the print statements once you are happy the program is working
2. Use the download\_url to make a http request to the file can output the contents of the file (TEXT contents).

response = requests.get(urlOfFile)

contentOfFile = response.text

print (contentOfFile)

1. Append the text more stuff (with a newline character) to the contents of the file.

newContents = contentOfFile + " more stuff \n"

print (newContents)

1. Update the contents of the file on git up by using the function

**update\_file(path, message, content, sha, branch=NotSet, committer=NotSet, author=NotSet)**

gitHubResponse=repo.update\_file(fileInfo.path,"updated by prog",newContents,fileInfo.sha)

print (gitHubResponse)