

Assignment2

Python Script



September 24, 2022

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COIT11241

# Reference

<https://github.com/Dark-Horse69/CyberSecurity1.git>

Question1

Using Bing Map API

import urllib.request

get\_url = urllib.request.urlopen('http://dev.virtualearth.net/REST/v1/Locations?countryRegion=Australia&adminDistrict=QLD&locality=Runcorn&postalCode=4113&addressLine=Beechel&key=AklX82YXHHg\_1qruaAqch-j7YEWp4Tm8xeHTYyMAtzrG5E7g\_yBKhaZ9ZP8zAQ2I')

url\_filter = (get\_url.read())

crosspoint = print(url\_filter[1025:1049])

This is not that reusable

I struggled with like Jamie said this binary nonsense for ages. If I did not watch the lecture I would never have found this.

url\_filterDecode = url\_filter.decode('utf-8')

import re

>>> re.search(r'coordinates":[\(.\*?)],"calculationMethod', url\_filterDecode).group(1) (Does not work for some reason

re.search(r'coordinates":[\(.\*?)],"calculationMethod', url\_filterDecode) This gives me no output

result = re.search(r'coordinates":[\(.\*?)],"calculationMethod', url\_filterDecode)

>>> print(result)

None

Tried that just to be sure.

start = url\_filterDecode.find("coordinates":[") + len("coordinates":[")

I keep getting syntax errors because of the :

So thus for the sake of carrying on I will use the following but its not what I wanted to do.

crossPoint = print(url\_filterDecode[1024:1048])

import webbrowser

webbrowser.open(‘<http://dev.virtualearth.net/REST/v1/Imagery/Map/Road/-(crossPoint)/15?mapSize=500,500&key=AklX82YXHHg_1qruaAqch-j7YEWp4Tm8xeHTYyMAtzrG5E7g_yBKhaZ9ZP8zAQ2I>’)

Error,

Tried to subsititude the coordinates as well.

crossPoint1 = <http://dev.virtualearth.net/REST/v1/Imagery/Map/Road/('crossPoint')/15?mapSize=500,500&key=AklX82YXHHg_1qruaAqch-j7YEWp4Tm8xeHTYyMAtzrG5E7g_yBKhaZ9ZP8zAQ2I>

crossPoint1 = " [http://dev.virtualearth.net/REST/v1/Imagery/Map/Road/",(crossPoint),"/15?mapSize=500,500&key=AklX82YXHHg\_1qruaAqch-j7YEWp4Tm8xeHTYyMAtzrG5E7g\_yBKhaZ9ZP8zAQ2I](http://dev.virtualearth.net/REST/v1/Imagery/Map/Road/%22,(crossPoint),%22/15?mapSize=500,500&key=AklX82YXHHg_1qruaAqch-j7YEWp4Tm8xeHTYyMAtzrG5E7g_yBKhaZ9ZP8zAQ2I)"

Output

webbrowser.open('crossPoint1')

Python 3.10.4 (main, Mar 24 2022, 13:07:27) [GCC 11.2.0] on linux

Type "help", "copyright", "credits" or "license" for more information.

>>> import urllib.request

>>> get\_url = urllib.request.urlopen('http://dev.virtualearth.net/REST/v1/Locations?countryRegion=Australia&adminDistrict=QLD&locality=Runcorn&postalCode=4113&addressLine=Beechel&key=AklX82YXHHg\_1qruaAqch-j7YEWp4Tm8xeHTYyMAtzrG5E7g\_yBKhaZ9ZP8zAQ2I')

>>> url\_filter = (get\_url.read())

>>> url\_filterDecode = url\_filter.decode('utf-8')

>>> import re

>>> crossPoint = print(url\_filterDecode[1024:1048])

-27.60951581,153.0693167

>>> import webbrowser

>>> crossPoint1 = http://dev.virtualearth.net/REST/v1/Imagery/Map/Road/('crossPoint')/15?mapSize=500,500&key=AklX82YXHHg\_1qruaAqch-j7YEWp4Tm8xeHTYyMAtzrG5E7g\_yBKhaZ9ZP8zAQ2I

File "<stdin>", line 1

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^

SyntaxError: invalid syntax

>>> crossPoint1 = http://dev.virtualearth.net/REST/v1/Imagery/Map/Road/,(crossPoint),/15?mapSize=500,500&key=AklX82YXHHg\_1qruaAqch-j7YEWp4Tm8xeHTYyMAtzrG5E7g\_yBKhaZ9ZP8zAQ2I

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SyntaxError: invalid syntax

>>> coordinates = (url\_filter[1025:1049])

>>> crossPoint1 = "http://dev.virtualearth.net/REST/v1/Imagery/Map/Road/",(crossPoint),"/15?mapSize=500,500&key=AklX82YXHHg\_1qruaAqch-j7YEWp4Tm8xeHTYyMAtzrG5E7g\_yBKhaZ9ZP8zAQ2I"

>>> webbrowser.open('crossPoint1')

True

>>>

# Output

Question 2

Import nmap

Ps = nmap.PortScanner()

Results = ps.scan(‘localhost’, ‘21’)

FTPResult = Results[‘Scan’][127.0.0.1’][‘TCP’][21][‘VERSION’][‘STATUS’]

Print(FTPResult)

If version

Opening a txt file

FTP\_Detail = open("FTPout.txt","a")

Writing to FTPout

FTP\_Detail = open("FTPout.txt","a")

FTP\_Detail.write(FTPResults)

|  |
| --- |
| import filecmp    f1 = "/Home/Vagrant/FTPout.txt"  f2 = "/Home/Vagrant/FTPoutbase.txt"    ftpcomp = filecmp.cmp(f1, f2)  print(result)  ftpcomp = filecmp.cmp(f1, f2, shallow=False)  print(result)  -sV should say what version so assume [version] will give this. |

Question 3

Import nmap

Ps = nmap.PortScanner()

Results = ps.scan(‘localhost’, ‘80’, ‘443’)

httpResult = Results[‘Scan’][127.0.0.1’][‘TCP’][80][443][‘VERSION’][‘STATUS’]

Print(httpResult)

HTTP\_Detail = open("httpOut.txt","a")

Writing to httpOut

HTTP\_Detail = open("httpOut.txt","a")

HTTP\_Detail.write(HTTPResults)

|  |
| --- |
| import filecmp    f1 = "/Home/Vagrant/httpOut.txt"  f2 = "/Home/Vagrant/httpOutbase.txt"    httpcomp = filecmp.cmp(f1, f2)  print(result)  httpcomp = filecmp.cmp(f1, f2, shallow=False)  print(result)  -sV should say what version so assume [version] will give this. |

url =’http://authenticationtest.com’

payload={‘email’: ‘simpleForm@authenticationtest.com’, ‘password’ : ‘pa$$w0rd’, ‘submit’: ‘Log in’}

session = request.Session()

login = url+ ‘/login/?mode=simpleFormAuth’

response = imsession.post(login,data=payload)