Eat Out to Help Out Guide (Created by Simray, 4 Aug 2020)

CONTENTS

1)	Source of data	2
,	Extracting data from the site to .csv format	
3)	Creating a personal Google Map	6
4)	Troubleshooting problems	7

1) Source of data

The data we will use is retrieved from the UK government's official website:

https://www.tax.service.gov.uk/eat-out-to-help-out/find-a-restaurant

The website allows users to input their postcode. It will return the list of restaurants participating in the Eat Out to Help Out scheme within 5 miles of the specified postcode.

In this example, we will be using the postcode "L39 4QP" for demonstration purposes.

Results obtained shows 80 restaurants within 5 miles of L39 4QP (Figure 1).

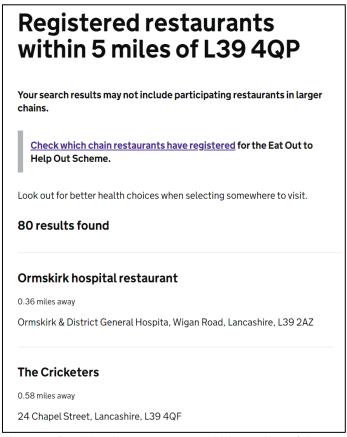


Figure 1: Participating restaurants within 5 miles of the specified postcode.

2) Extracting data from the site to .csv format

Now, we will have to use the code from the code file "EatOutToHelpOut.py" located in the repo and run it through a python platform to extract and parse the "Name" and "Address" of the participating eateries into a .csv file. All you need to do is to run it and input your postcode.

Note: You will have to do a pip install of the modules (csv, requests, html) that are required if you do not have them!

```
import requests
import html
import csv
# The script will ask you to input your post code.
print("Please enter your post code.")
print("Please note that spacing is required.")
print("E.g. 'L39 4QP'\n")
print('Enter your post code:')
postcode = input()
postcode = str(postcode)
# This is to create a .csv file in the script's directory, with the file
name being the post code specified.
f = open(postcode + '.csv', 'w', newline='')
csvwriter = csv.writer(f, delimiter=",")
f.write("Name, Address\n")
# The list of registered restaurants within 5 miles of the specified
postcode will be obtained from the government website.
postcode = postcode.split(''')
url = 'https://www.tax.service.gov.uk/eat-out-to-help-out/find-a-
restaurant/results?postcode=' + \
    postcode[0] + '+' + postcode[1]
r = requests.get(url)
r = r.text
# The script will extract the site's data to obtain the restaurant's name
and its corresponding address.
for line in r.splitlines():
    if '<h3 class="govuk-heading-m"' in line:</pre>
        y = line.split('>')[1]
        y = y.split('<')[0]
        y = html.unescape(y)
    if 'govuk-results-address govuk-body' in line:
        x = line.split('>')[1]
        x = x.split('<')[0]
        x = html.unescape(x)
        result = (y, x)
        print(result)
        csvwriter.writerow(result)
print(str(postcode[0] + ' '+postcode[1]) +
```

```
'.csv has been created on your computer. You may now import the .csv file into google maps.')

print('If your .csv file is empty, please check if there are indeed participating restaurants in your area.')

f.close()
```

After running the code, simply input the post code (Figure 2) that you would like to check the participating restaurants and a .csv file will be automatically created and saved. You will have to locate it in your computer.

```
Please enter your post code.
Please note that spacing is required.
E.g. 'L39 4QP'
Enter your post code:
```

Figure 2: Output for entering post code

I usually locate the newly-created .csv file (Figure 3) by just pressing my Windows key and searching for the document "L39 4QP.csv", before moving it to somewhere accessible.

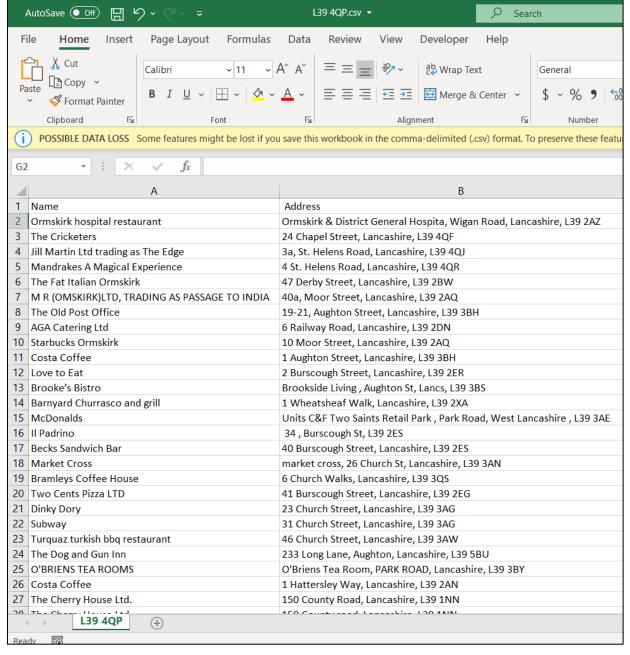


Figure 3: .csv file containing "Name" and "Address" of the participating restaurants

3) Creating a personal Google Map

- a) Go to Google Maps, select the "Menu" tab on the top left, select "Your places", go to the "MAPS" tab and select "CREATE MAP"
- b) Click on "Import", "Select a file from your device", find your .csv file and open it
- c) For "Choose columns to position your placemarks", select "Address" and click on "Continue"
- d) For "Choose a column to title your markers", select "Name" and click on "Finish". Now it will show all the places that was listed on the website (Figure 4)!

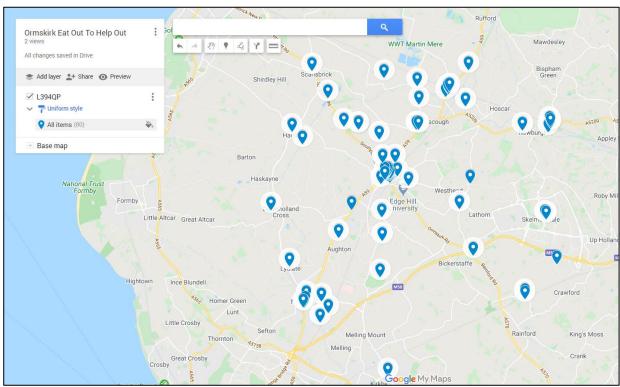


Figure 3: Visualisation of participating restaurants on Google Maps

4) Troubleshooting problems

There were a few situations where I was helping my friend load the places near them and there were some that were not loaded. This can be rectified manually and it is usually around 0-3 incidences per 100 samples.

Unfortunately, we have not found a way to link these destinations with the actual Google Maps business page. We will need to take a look at this and perhaps if someone in the community knows how to solve this issue that would be great!

For now, what we have is a code that can visualize the restaurants participating in the scheme!