**COVID 19 VISUALISATION AND POLICE STOP AND SEARCH API VISUALISATION IN UK**

**Project Description**

**Covid 19 visualisation**

The file contains daily number of cases data aggregated by age into 0-59, 60 plus and individual five-year bands. 7 day rolling averages and rates are also included where the data is presented by specimen date (the date the sample was collected from the patient). All COVID-19 data processing and visualisation must be done against this file. The file itself has been sourced from https://coronavirus.data.gov.uk/details/about-data#cases-by-age and is used as part of the UK Governments own reporting.

The application visualizes COVID 19 data among different age ranges in various locations in the UK at different times in 2020.

A cloud IDE (Jupyter notebook) was used. Jupyter Notebook offers a user-friendly, interactive data science environment for a variety of programming languages that may be used as a presentation or teaching tool in addition to serving as an IDE. For individuals who are just getting started with data science, it is ideal.

Markdowns are supported by the Jupyter Notebook, enabling you to include HTML elements like images and videos. Jupyter makes it simple to see and change your code so you can make engaging presentations and visualisations. Libraries like matplotlib, seaborn and pandas were used to create interactive visualisations.

Due to voluminous nature of the COVID dataset it was difficult to create a good plot using the whole dataset hence a data frame was created to specify the range of data.

**Stop and Search**

https://data.police.uk/ is the site for open data about crime and policing in England, Wales, and Northern Ireland. A publicly available API provides detailed crime data and information about individual police forces and neighbourhood teams.

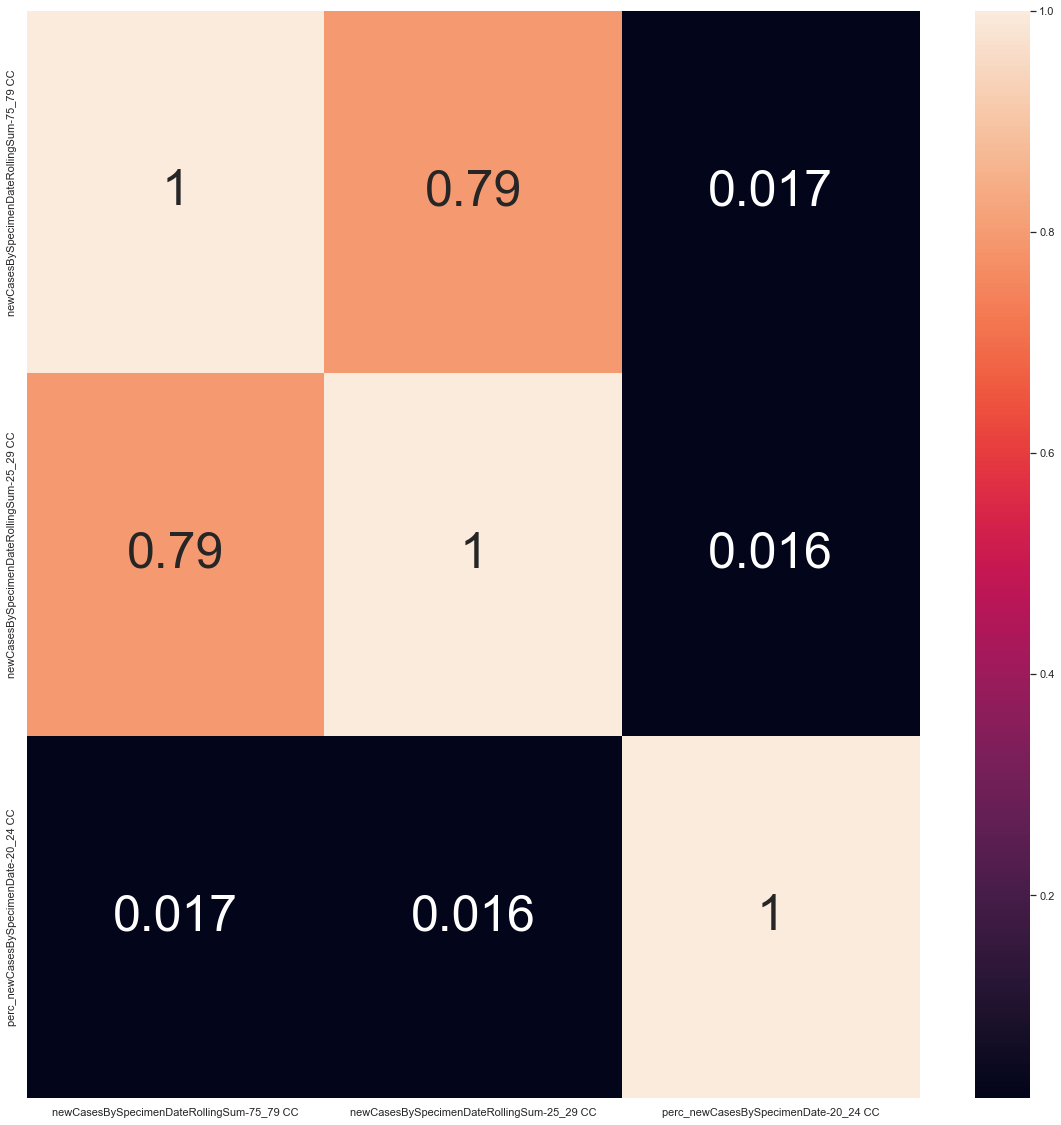
Using Python, I retrieved data from the API and processed it, and then visualise using Matplotlib. The data was requested and placed in a JSON file and then visualised. The location for the data retrieved was from the areas around the University of Liverpool. Which is very essential in keeping students safe.

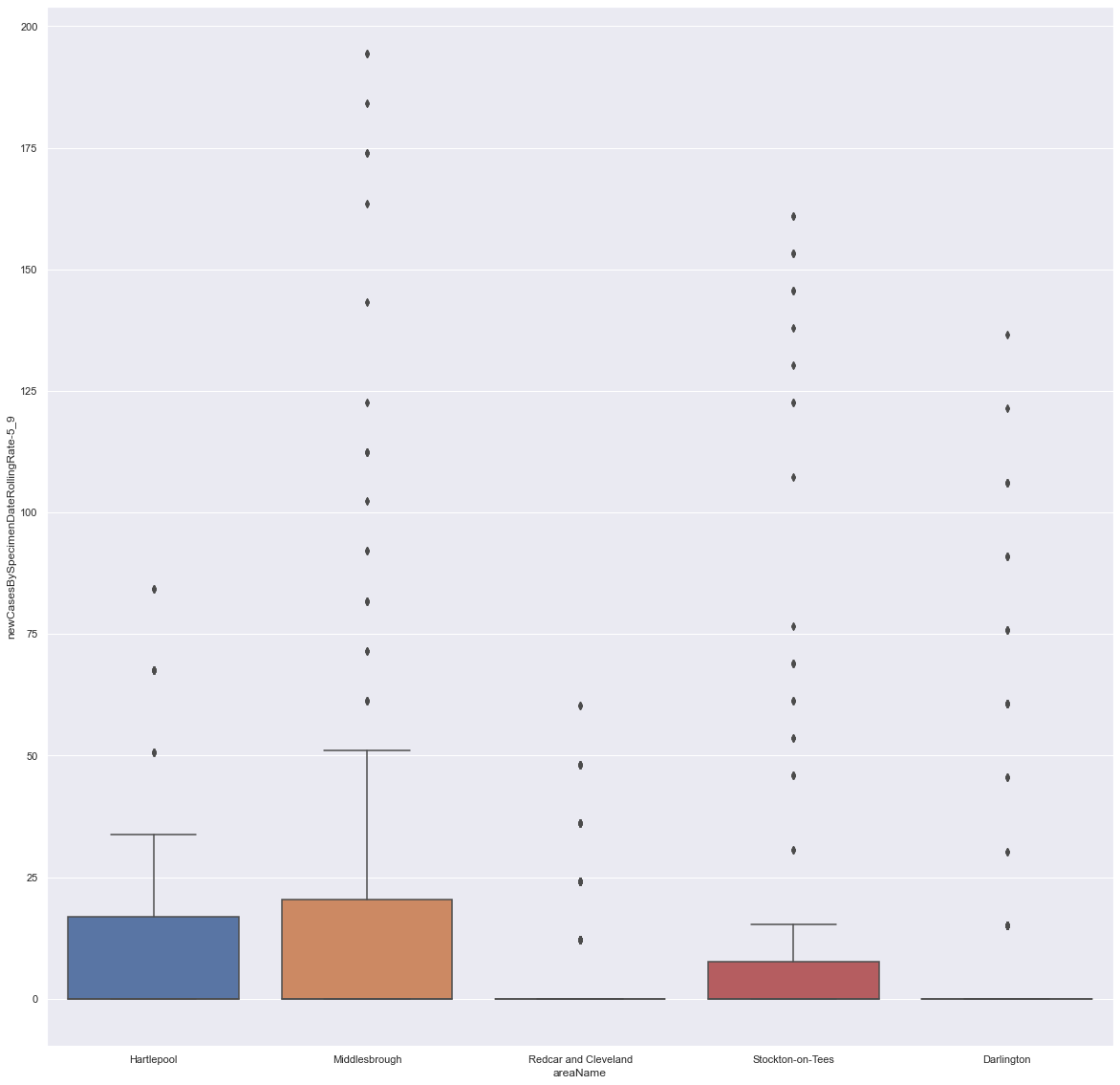
### How to Use the Project

**COVID 19**

The project seeks to incorporate Data processing and visualisation by creating data frames

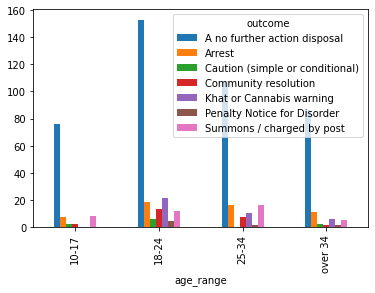
The project can be used to visualise a whole lot of information for the end user.

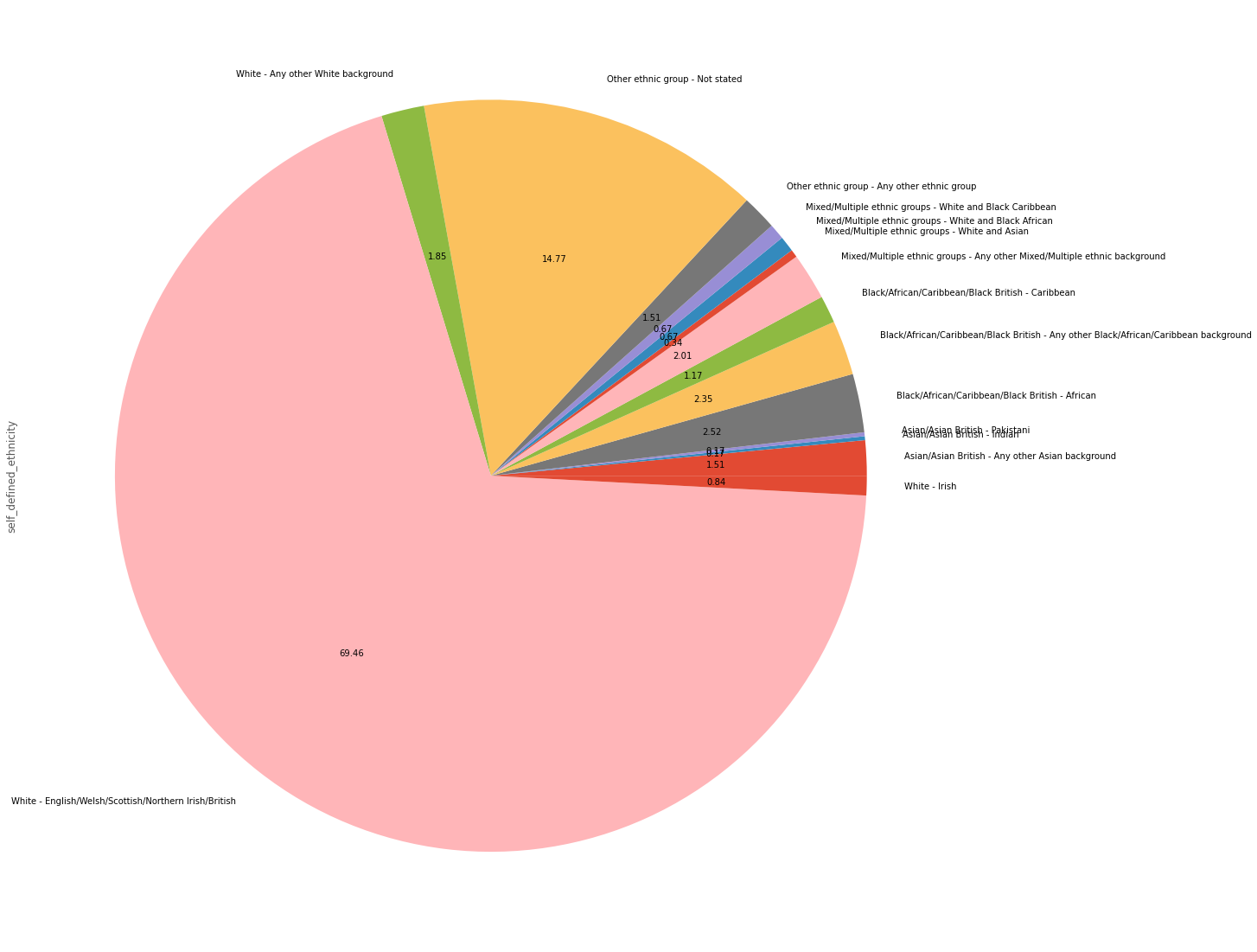




**Police Stop and Search**

The data is requested from the API and placed in a JSON file for easy analysis, pre-processing and visualisation.





The codes for the above projects can be found in my Github repository.

# [**https://github.com/SedemJ/Jude-Agboka-Python-assessment**](https://github.com/SedemJ/Jude-Agboka-Python-assessment)

### Include Tests

### To make sure the program runs smoothly unittest was incorporated using doctring test at the end of the code to ensure the codes run smoothly.

### import doctest

### doctest.testmod(verbose=True)

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customarily used for software interchange.

b) Convey the object code in, or embodied in, a physical product

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written offer, valid for at least three years and valid for as

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copy of the Corresponding Source for all the software in the

product that is covered by this License, on a durable physical

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conveying of source, or (2) access to copy the

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e) Convey the object code using peer-to-peer transmission, provided

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A separable portion of the object code, whose source code is excluded

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17. Interpretation of Sections 15 and 16.

If the disclaimer of warranty and limitation of liability provided

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How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest

possible use to the public, the best way to achieve this is to make it

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To do so, attach the following notices to the program. It is safest

to attach them to the start of each source file to most effectively

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the "copyright" line and a pointer to where the full notice is found.

<one line to give the program's name and a brief idea of what it does.>

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Also add information on how to contact you by electronic and paper mail.

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