

## Configuration manual

A google drive account is required in order to run this model. You will need access to the “Colab Notebooks” folder. The link to gain access to this is shown below –

<https://drive.google.com/drive/folders/1wU15CBTpn525CQx6qnV8nAzl3ZL-GwzI?usp=sharing>

Editing access is available for anyone with this link, hence it should be treated with caution and not shared unnecessarily.

### Directory structure –

You must ensure that the attached drive is in the correct directory structure. It should read –

“My Drive”>“Colab Notebooks”>MSc\_Data\_AndCode”... etc.

### To run the code –

The code is titled “*crimeForecastsGLA.ipynb*” and has been uploaded separately.

It should be uploaded to the google drive and placed underneath the “*Colab Notebooks*” directory. E.g. - “*My Drive*” > “*Colab Notebooks*” > “*crimeForecastsGLA.ipynb*”

Open this file in a google colaboratory session.

Once this is opened, there are detailed instructions on how to run the model.

All of the code should work on any colaboratory session, provided the initial installation instructions are followed here –

- ▶ To initiate, please run the below tabs to install the required libraries.

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After these have been successfully installed. You will need to restart the run time. After restarting, move onto the next section.

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### Sections to run with caution -

You may run the entire sections for all of the code, however this is not recommended for the following sections.

#### Functions which are computationally expensive –

**“API tester and grid mapper data cleaning with crime”** – Do not run this entire section. This is as the “*API caller function to obtain information on spatial features*” is computationally expensive to run. The results of this are saved as a csv and reuploaded so it is unnecessary. If you wish to study this section, you may run each section individually EXCEPT THE “*API caller function to obtain information on spatial features*”.

**ML modelling section** – This is very computationally expensive, the results save to the “*models*” directory and can be read in if required, along with results.

#### Code which has been deprecated –

The section "Below exist models and methodologies which were attempted but not used for final code" should not be ran as it is left here for viewing at the discretion of the user only. Further information on this is described in the script.