# **Crimes Dummy Project**

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## Chapter 1

## Indices and tables

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Main

dummy\_project\_main.main()

## Main program of Crime Data Analysis

This function execute a descriptive analysis of the crimes data set and provides insight about and it can support de decision process related to surveillance schedule

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#### **Auxiliar Functions**

```
Check NaNs
    Check if the input dataframe contains NaN values and fill with 0
    Parameters
                   • dataframe - Data Frame if input data
                   • logger – logger to record exception
    Returns
               output dataframe with 0 values in NaN values
dummy_project_utils.get_frequencies ( df, column, logger )
    Get frequencies
    Obtain some distribution of frequency to known how is distributed the incidences
    Parameters
                   • df - Data frame
                   • column - Column to obtain the distribution of frequency of occurrence
                   • logger – logger to record exception
    Returns
               dataframe with the crimes frequencies
dummy_project_utils.load_data ( path, logger )
    Load input data
    Load the crimes input data
                   • path (str) - path of the csv file to upload
    Parameters
                   • logger – logger to record exception
                dataframe with the data
    Returns
dummy_project_utils.plot_barplot ( df, var_x, var_y, path, logger )
    Plot Barplot
    Plot a barplot to compare the incidence of crimes according to characteristics
    Parameters
                   • df – Dataframe to plot
                   • var_x – x-axis variable
                   • var_y - y-axis variable
                   • path – path where it is saved plot in png format
                   • logger – logger to record exception
dummy_project_utils.plot_scatterplot ( df, var_x, var_y, scale, path, logger )
    Plot scatter
```

dummy\_project\_utils.check\_nan ( dataframe, logger )

plot with the coordinates of the crimes

#### **Parameters**

- **df** Dataframe to plot
- **var\_x** x-axis variable
- **var\_y** y-axis variable
- scale scale of the point
- path path where it is saved plot in png format

#### dummy\_project\_utils.set\_up\_logger(path)

#### Set up logger

Configure the logger to record all the envents in the execution of the code

#### **Parameters**

- path (str) path where to store logs example: 'logslog\_file\_name'
- logger logger to record exception

**Returns** logger logger

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