

# Rexit - R application set up and prerequisites

The Global Terrorism dataset needs to be placed in a folder called “data” with the file name “*globalterrorismdb\_0718dist.csv*” in the project directory. The dataset is accessible here: <https://www.kaggle.com/START-UMD/gtd>.

The project was developed using RStudio (version 1.2.5019) and R version 3.6.1.

All R code is placed in a “scripts” folder, which contains the following files:

1. Runnable scripts:
  - *selfOrganisingMap.R* - builds and trains a Self Organising Map model to identify interesting correlations in the dataset
  - *neuralNetwork.R* - builds and trains a Neural Network Model to predict successful / impactful terrorist attacks
  - *generatePlots.R* - runs all plots defined in *plots.R*
2. Utility functions:
  - *plot.R* - functions that visualise different columns in the dataset
  - *preprocessingFunctions.R* - all functions needed to prepare the data for
  - *labFunctions.R* - functions taken as is or with minor modifications from the COM3018 labs, courtesy of Prof. Nick Ryman-Tubb