Introduction

In the United Kingdom, people like to cycle a lot. This is true despite the often-gloomy weather. Growing environmental consciousness throughout the world and healthy lifestyle motivate people to cycle even more. It is therefore very important for the Government to provide safety on the roads for cyclists, pedestrians, and vehicle drivers. While permanent road signs for safety are installed throughout the country, I would like to see if it makes sense to install temporary road signs for cyclists in dangerous months and locations. In order to understand whether there is a need for such measures, I would like to identify such accident-prone locations and dangerous months. This should be possible by looking at the data that the Government has made available for the public to peruse.

Data

Department of Transportation in the UK made a report called “Reported fatal personal injury road accident and casualty data: GB 2006-2008” publicly available on data.gov.uk. The csv file provides details of each individual reported fatal personal injury road accidents in Great Britain for 2006 to 2008. The file also includes latitude and longitude of the locations where the accidents took place. I am particularly interested in the following columns:

1. Month\_of\_Accident
2. Longitude
3. Latitude
4. Pedal\_Cycles
5. Total\_Number\_of\_Accidents

The 1st Column will help me with seasonality of Pedal Cycle accidents (4), i.e. it will show if cyclists are more likely to get involved in accidents in particular months. The 2nd and 3rd Columns will help me identify hotspots for such accidents. I will make every attempt to visualize this data on the UK map and see if there is an opportunity for clustering.

Methodology

Results

Discussion

Conclusion