Applied Data Science 1

Barcelona Accidents 2017

Assignment 1

The open data set used is Barcelona Accidents in 2017. In this data it shows recorded accidents reported to the local police in the city of Barcelona. These include information such as injuries by severity, the vehicles involved, the date, and the location of the accident.

Understanding data, discovering patterns and anomalies, and checking assumptions to evaluate its quality it can be done through visualizations and summary statistics.

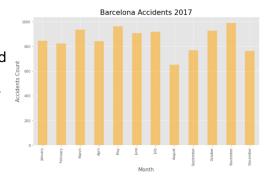
The Data set contains 15 Columns and 10339 rows.

	Id	District Name	Neighborhood Name	Street	Weekday	Month	Day	Hour	Part of the day	Mild injuries	Serious injuries	Victims	Vehicles involved	Longitude	Latitude
0	2017S008429	Unknown	Unknown	Número 27	Friday	October	13	8	Morning	2	0	2	2	2.125624	41.340045
1	2017S007316	Unknown	Unknown	Número 3 Zona Franca / Número 50 Zona Franca	Friday	September	1	13	Morning	2	0	2	2	2.120452	41.339426
2	2017S010210	Unknown	Unknown	Litoral (Besòs)	Friday	December	8	21	Afternoon	5	0	5	2	2.167356	41.360885
3	2017S006364	Unknown	Unknown	Número 3 Zona Franca	Friday	July	21	2	Night	1	0	1	2	2.124529	41.337668
4	2017S004615	Sant	el Camp de	Las Navas de	Thursday	May	25	14	Afternoon	1	0	1	3	2.185272	41.416365

1.

An operation involves splitting an object by applying a required functions and combining the results. Sequencing the month and calculating the number of accidents a visual plot is made.

A bar chart allows easy interpretation. November month has Recorded the maximum accidents and August has the least.

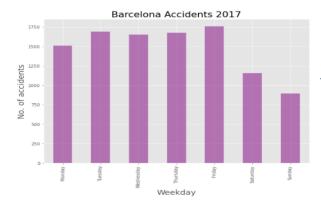


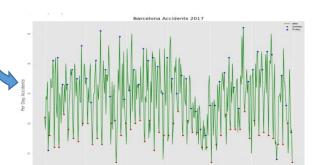
2.

The distribution of car accident based on months, a bar plot can be also used again to assess the distribution of car accidents based on weekday.

3.

Plot here, stats the number of accidents each day in the year 2017, with those occurring on Fridays being more than those on Sundays.

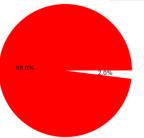




4.

Scatter visual recorded the number of vehicles Involved during part of the day in 2017. Morning and afternoon hours has the most vehicles in the involvement of the accidents.

The majority of victims in car accidents suffered mild injuries in Barcelona, but 2% suffered Serious injuries.



Barcelona Serious/Mild Injuries 2017

Night

Morning

Atternoon

Part of the day

A 2D Barcelona Map displaying the locations, street names where a car accident involved victims with serious injuries can be seen.

5.



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