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1/8/24

# Building Accident Roads Dashboard:

## REQUIREMENT:

Clients wants to create a Road Accident Dashboard for year 2021 and 2022 so that they can have insight on the below requirement:

### PRIMARY KPI:

- Total Casualties taken place after the accident.
- Total Casualties & percentage of total with respect to accident severity and maximum casualties by type of vehicle.

### SECONDARY KPI:

- Total Casualties with respect to vehicle type.
- Monthly trend showing comparison of casualties for current Year and Previous Year.
- Maximum casualties by Road Type.
- Distribution of total casualties by Road surface.
- Relation between casualties by Area/ Location & by Day/Night.
- Relation between casualties and weather conditions.
- The three police forces with the highest number of accidents have reported them.
- The three police forces with the lowest number of accidents have reported them.
- The range of time that has occurred the most number of accidents.

### STAKEHOLDERS:

- Ministry of transport
- Road Transport Department

- Police Force
- Emergency Service Department
- Road Safety Crops
- Transport Operators
- Traffic Management Agencies
- Public
- Media

## METEDATA:

- File Extension- .xlsx
- No of Rows 3.07 k
- No of Fields 21

## *Changelog:*

1- One duplicate value are found

2- column 3 {Junction_Control}: I made 93 replacements from “Auto traffic sigl” to” Auto traffic signal”.

3- The column 6 {Accident_Severity}: I made 49 replacements from “Fetal” to “Fatal”.

4- We have 3 blanks in the column {Carriageway_Hazards}

5- We have 317 blanks in the column {Road_Surface_Conditions}

6- We have 1534 blanks in the column {Road_Type}

7- We have 17 blanks in the column {Time}

8- We have 6057 blanks in the column {Weather_Conditions}

9- For the Road_Type I will insert the blanks depending on Speed_Limit , therefor I will to count the most road type frequent at a particular speed limit

10- For the Weather_Condition & Road_Surface_Condition they followed the same algorithm, I would make a formula depending the general weather condition during each season taking into consideration the data From UK.

11- I inserted a new column named {Month_of_Year} and I used the function TEXT to extract the month as a text format Jan, Feb, etc.

12- Info from google: The months you are most likely to see snow in London are **December, January, and February**, which are the coldest months of the year. **Autumn (September - November)** Autumn is usually London's rainiest season, so be prepared for wet weather!. Fog is one of the most common weather

conditions in the UK, particularly throughout **autumn and winter. Spring (March, April and May) is a time for sudden rain showers, blossoming trees and flowering plants. Summer (June, July and August) is the UK's warmest season, with long sunny days, occasional thunderstorms and, in some years, heatwaves.**

13- In weather conditions column I would replace "**Other**" to "**Changeable**". Also I fill out the blanks in here using go to special (CTRL+G) with text **Fine no winds**.

14- In Road_Surface_Conditions column I applied the following formula after using (go to special): =IF(OR(C82581 = "Dec", C82581 = "Jan", C82581 ="Feb"), "Wet or damp", "Dry") then press CTRL + Enter

15- In Road_type I applied the following formula after using (go to special): =IF(R5973 = "70", "Dual carriageway", "single carriageway") then press CTRL + Enter

16- I removed 3 rows from the dataset have blanks at the column **Carriageway_Hazards,** I also removed 17 rows from the dataset have blanks at the column **Time**

17- I have inserted a new column named **Rounding_Time** to round time to the nearest hour by applying the following formula: =MROUND (T2, “1:00”)