Data Link: Nigerian Traffic Crashes (2020-2024)

The dataset contains information on road traffic crashes in Nigeria from 2020 to 2024. It includes the following columns:

1. **Quarter** - The quarter of the year when crashes were reported.
2. **State** - The state in Nigeria where crashes occurred.
3. **Total_Crashes** - Total number of crashes reported.
4. **Num_Injured** - Number of individuals injured.
5. **Num_Killed** - Number of fatalities.
6. **Total_Vehicles_Involved** - Total vehicles involved in the crashes.
7. **SPV, DAD, PWR, FTQ** - Different contributing factors or vehicle types (meanings need further clarification).
8. **Other_Factors** - Additional unspecified contributing factors.

Project Problem Statement

Project Title: Exploratory Data Analysis of Nigerian Road Traffic Crashes (2020-2024)

Objective: Analyze and identify trends, patterns, and key insights related to road traffic crashes in Nigeria from 2020 to 2024. Your objective is to uncover trends by quarter and state, assess the impact of crashes, and identify potential high-risk areas or contributing factors.

In recent years, road traffic crashes have become a significant public safety issue in Nigeria, impacting thousands of lives. The Nigerian Federal Road Safety Commission (FRSC) has collected detailed crash data from 2020 to 2024, hoping to use this information to design effective policies, implement safety improvements, and raise public awareness. However, the FRSC lacks a clear understanding of trends, high-risk areas, and the critical factors contributing to crashes.

As data analysts, your team has been tasked by the FRSC with conducting an exploratory analysis of this crash data. You aim to help them identify patterns over time and understand factors contributing to severe injuries and fatalities. The FRSC is particularly interested in insights about the following:

1. **State-by-State Risk Assessment**: Determining which states have the highest number of crashes and fatalities, and examining if certain areas consistently show high crash frequencies.

2. **Trend Analysis by Quarter and Year**: Observe crashes, injuries, and fatalities trends across different quarters and years to understand seasonal or temporal peaks.
3. **Impact of Crash Factors**: Exploring which factors (like vehicle involvement, driver conditions, or external conditions) might lead to more severe outcomes, such as higher injury or fatality rates.

What to Submit:

1. **Notebook: with your codes and information**
2. **Presentation: Complete EDA Detail.**