**Road Accident Dashboard Project**

**Overview:**

This project focuses on building an interactive **Road Accident Analysis Dashboard** using a real-world dataset.  
The aim is to **analyze accident patterns** based on different factors like weather conditions, road types, driver experience, vehicle movement, and more.  
The dashboard provides **quick insights** for better decision-making and public safety awareness.

**Features:**

* **Visualizations**:
  + Type of Collision by Weather Condition
  + Cause of Accident by Road Surface Type
  + Sum of Accident Severity by Driving Experience
  + Sum of Accident Severity by Vehicle Movement
  + Types of Junctions Involved
* **Interactive Filters**:
  + Filter by **Age Band of Drivers**
  + Filter by **Driving Experience**
* **Aggregated Metrics**:
  + Accident counts
  + Severity sums
* **User-friendly Layout**:
  + Easy-to-read graphs and charts
  + Organized data presentation

**Outcome:**

* Created a **clear and interactive dashboard** for accident analysis.
* Helped to **identify major causes** of accidents based on environmental and human factors.
* Made it easier for users to **understand accident trends** at a glance.

**Technologies Used:**

* **Power BI:** For data visualization and dashboard creation.
* **DAX:** For advanced calculations and metrics.
* **Excel:** For Data Cleaning.

**Future Enhancements:**

* Add **real-time data updates** if connected to an online source.
* Integrate **machine learning** to predict accident probabilities.
* Improve the dashboard with **geographical maps** showing accident hotspots.
* Add **an email alert system** for critical accident pattern detections.