Mini Project Data Analysis

Analytics Dashboard Traffic Alerts in West Java using Waze Data

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https://github.com/adrn-mm/DSLS_Mini-Project-DA_Adrian-Maulana-Muhammad

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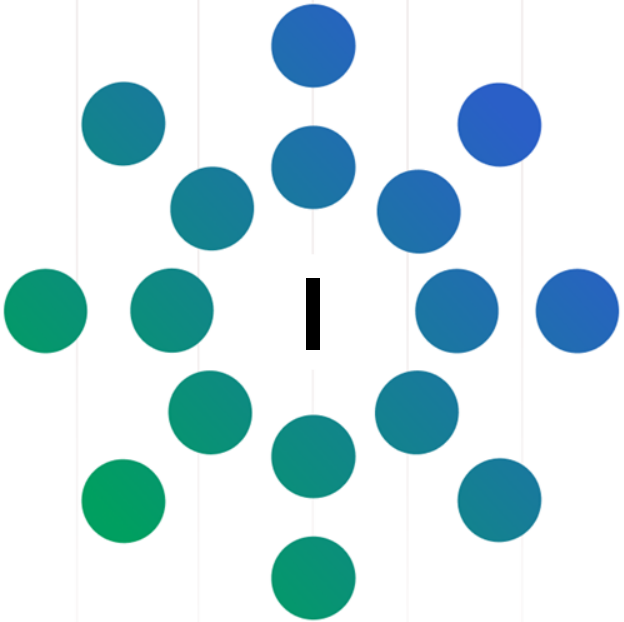
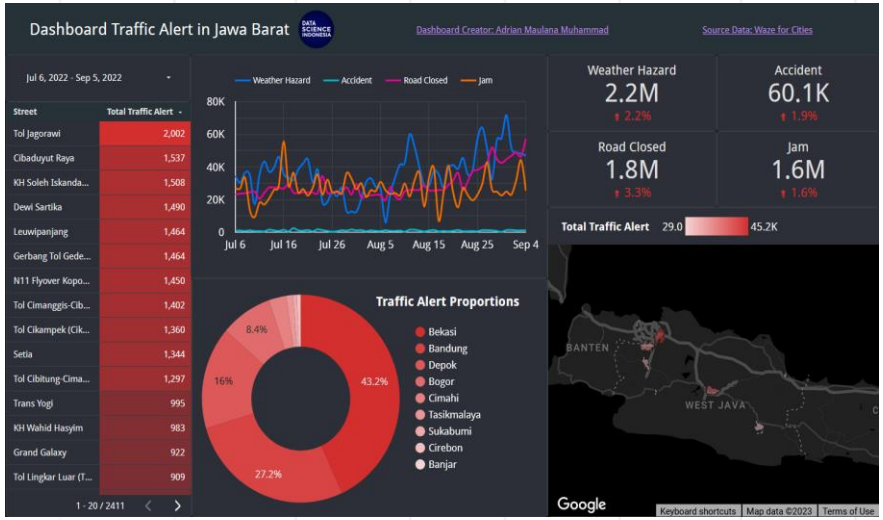


Dashboard Use Case

Dashboard Traffic Alert in West Java

This analytics dashboard provides a comprehensive overview of the distribution of traffic alerts in the city and street of West Java. It serves as a tool for the local government to effectively monitor and gain insightful analysis of their area's traffic conditions. With real-time updates and visual representation, this dashboard empowers officials to make informed decisions and take swift actions to alleviate congestion, enhance safety, and improve regional mobility.



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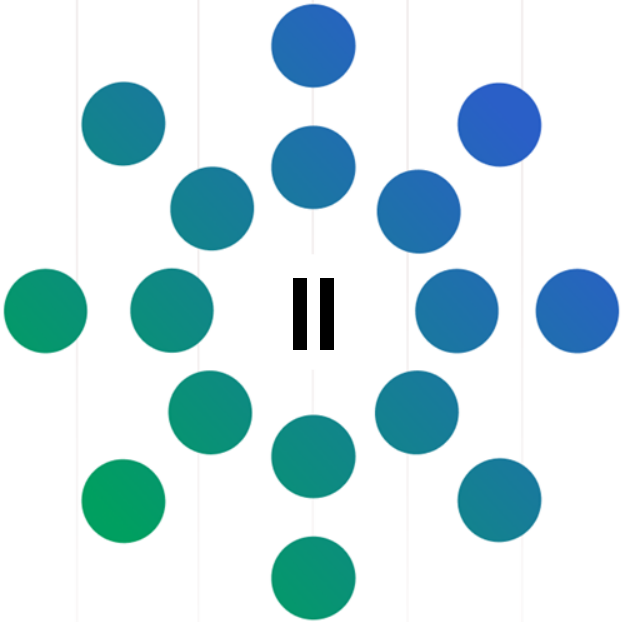
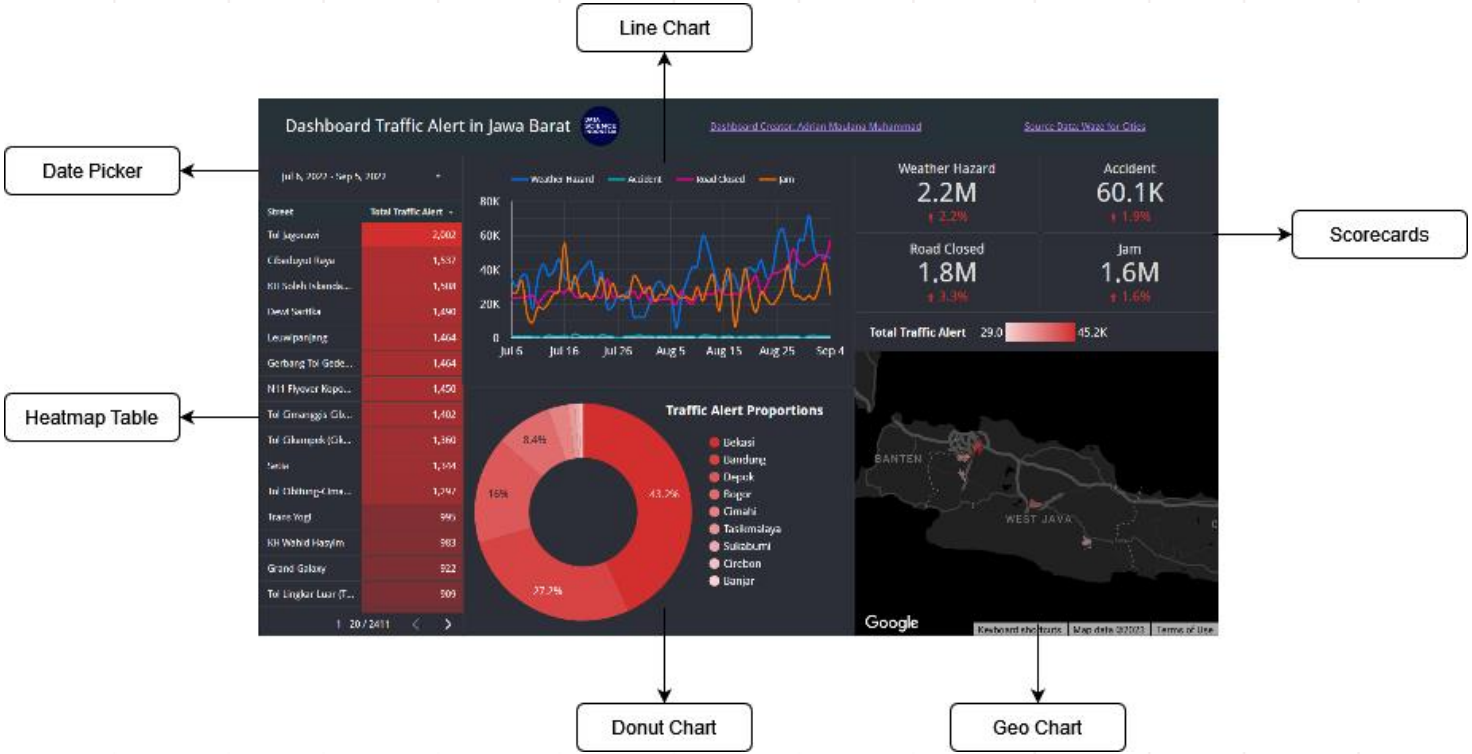


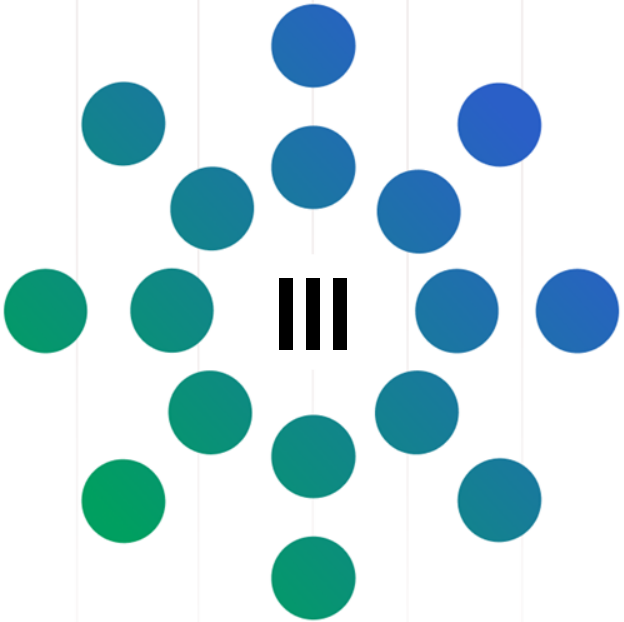
Dashboard Components

Overall Components



Components Reasoning

Component	Reasoning
Date Picker	This component can be used interactively by the user to determine time intervals on the data.
Heatmap Table	This component displays the total traffic alert records sequence for each street, starting from the highest value. The color red is chosen to indicate that an increase in value is undesirable, with brighter shades of red on the component indicating higher values.
Donut Chart	This component displays the proportion of traffic alert records for each city. The reason for the chosen color scheme is the same as the previous explanation.
Geo Chart	This component visualizes the previous proportions in a Geo Map format, allowing users to view the distribution based on the map's conditions.
Scorecards	This component is designed to show the status and progress of each metric.
Line Chart	This component is used to indicate the changes in values of each metric over time, with each metric having a different color to clearly depict the changes.



Summaries & Recommendations from Dashboard

Summaries & Recommendations

- According to the analytics dashboard, it has been identified that the Jagorawi Toll Road has the highest number of total traffic alerts during the specified date range. This information can be used to investigate the causes of the high alert rate.
- Based on the analytics dashboard, it has been determined that the city with the highest proportion of traffic alerts during the specified date range is Bekasi. This finding provides valuable insights into identifying the underlying causes of the high alert rate.
- The analytics dashboard results have revealed that the top three status types of traffic alerts with the highest frequency during the specified date range are Weather Hazard, Road Closed, and Jam. In contrast, an Accident is the most minor reported status type of traffic alert. This information provides critical insights into the traffic issues frequently occurring in the area.

IV References

- https://medium.com/data-science-school/google-data-studio-in-10-minutes-step-by-step-guide-867a2bf920f1

Thank You!