ASSIGNMENT BRIEF: DATA ANALYST INTERN

🚀 ABOUT ALT MOBILITY

At Alt Mobility, we're making electric vehicle (EV) leasing more accessible to drivers by providing affordable financing solutions. We're also a full-stack EV leasing and asset management company, currently managing a fleet of 20,000 electric vehicles. Having secured $16M in Series A funding from prominent investors like Shell Ventures, Eurazeo, and EV2 Ventures, we are experiencing rapid growth!

We are seeking a Data Analyst Intern to extract actionable insights from our data, develop insightful dashboards, and visualize key information. Your work will directly contribute to improving our fleet operations as we scale across India. This assignment is designed to assess your technical skills and analytical capabilities.

🚀 PROBLEM SPACE

Datasets:

- File 1: payments.csv (Payment data)

- File 2: customer_orders.csv (Order data)

Tasks:

Use SQL queries to address the following:

1. **Order and Sales Analysis:**

   - Analyze order status and sales data to provide insights into order fulfillment and revenue trends. Identify key metrics and trends related to order status and sales.

2. **Customer Analysis:**

   - Explore customer ordering behavior to identify patterns such as repeat ordering, customer segmentation, and trends over time.

3. **Payment Status Analysis:**

   - Investigate payment status data to identify any potential issues or trends related to payment success and failure.

4. **Order Details Report:**

   - Create a comprehensive report that provides a detailed overview of order information, payment details, and key metrics.

VISUALIZATION TASK

5. **Customer Retention Analysis:**

    o Visualize customer retention by showing how many customers from a specific cohort made repeat purchases in subsequent months.

    o Use a suitable BI visualization tool to present your findings.

    o Clearly explain how the visualization tracks customer retention.

🚀 **DELIVERABLES:**

1. **SQL Queries:**

    o A GitHub repository containing your SQL queries.

    o A README file within the repository that explains your approach, including.

2. **Visualizations:**

    o Visualizations (charts or graphs) created for Task 5.

    o Clear labels and titles for all visualizations.

    o Images for the same.

3. **Summary of Findings:** A concise summary (1-2 pages) of your key findings, including:

    o Key insights from the SQL queries.

    o Observations from the customer retention analysis.

    o Any recommendations for Alt Mobility based on your analysis.

🚀 **EVALUATION CRITERIA:**

- **Correctness of Analysis:** Accuracy of SQL queries and visualizations.

- **Data Handling Skills:** Demonstrated ability to handle and clean data (if necessary).

- **Visualization Effectiveness:** Clarity, accuracy, and insights derived from the visualizations.

- **Code Quality:** Clarity, efficiency, and readability of SQL code.

- **Documentation:** Completeness and clarity of the README file and summary of findings.

📅 **SUBMISSION DEADLINE:**

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