Text2SQL AI Assistant

Quick Start - Sample Questions

Popular queries to get you started:

- How many customers do we have?
- Top 10 best-selling films?
- Monthly rental trends
- Which category has highest revenue?
- Customers with most rentals
- Average rental duration

Ask Your Question

Enter your question about the database:

Display customers and the total amount they've spent on rentals

Generate Query & Analyze | Clear | Show SQL | Show Analysis | Visualization: Auto-detect

AI Processing

Results & Insights

Query executed successfully!

Generated SQL Query

```
SELECT CONCAT(c.first_name, ' ', c.last_name) AS customer_name, SUM(p.amount) AS total_spent FROM customer c JOIN payment p ON c.customer_id
```

Query Validation Notes

599	2	0.04s
ROWS	COLUMNS	EXEC TIME

Data Visualization

Query Results

customer_name	total_spent
KARL SEAL	221.55
ELEANOR HUNT	216.54
CLARA SHAW	195.58
RHONDA KENNEDY	194.61
MARION SNYDER	194.61
TOMMY COLLAZO	186.62
WESLEY BULL	177.6
TIM CARY	175.61
MARCIA DEAN	175.58
ANA BRADLEY	174.66
JUNE CARROLL	173.63
DIANE COLLINS	169.65
LENA JENSEN	168.68
ARNOLD HAVENS	167.67
CURTIS IRBY	167.62
MIKE WAY	166.65
DAISY BATES	162.62
TONYA CHAPMAN	161.68
LOUIS LEONE	161.65
GORDON ALLARD	160.68

AI Insights & Analysis

Here is the analysis of the customer spending data:

1. Key Findings and Insights: The dataset provides a clear view of individual customer spending on rentals, ranging from a high of 221.55 to a low of 50.85 across 599 customers. This indicates a significant variation in customer value based on their total rental expenditure. Identifying these spending levels is fundamental for understanding customer segmentation and revenue contribution.

2. Notable Patterns or Trends: The data is presented in descending order of `total_spent`, highlighting the top-spending customers upfront. This immediately reveals a pattern where a relatively small number of customers likely contribute a disproportionately larger share of the total revenue compared to the long tail of lower-spending customers. This pattern is typical in many customer-based businesses (often related to the Pareto principle).

3. Business Implications: Understanding which customers spend the most is critical for business strategy. High-spending customers are valuable assets; retaining them through loyalty programs, exclusive offers, or personalized service can significantly impact profitability. Conversely, analyzing lower-spending customers might inform strategies for increasing their engagement or identifying segments that are less profitable. This data supports customer relationship management (CRM) efforts, targeted marketing campaigns, and customer lifetime value (CLTV) analysis.

4. Recommendations for Data Visualization:

- **Bar Chart:** A bar chart showing the top N customers by `total_spent` would effectively highlight the most valuable customers.
- **Histogram or Distribution Plot:** A histogram of the `total_spent` values would show the distribution of spending across all customers, illustrating how many customers fall into different spending brackets.
- **Pareto Chart:** A Pareto chart combining a bar chart of individual spending (or spending by decile/quintile) and a line chart of cumulative spending percentage would visually demonstrate the concentration of revenue among top customers.

5. Anomalies or Interesting Observations: The most significant observation is that the `total_spent` column is identified as an 'object' data type instead of a numerical type (like float or decimal). This is an anomaly that prevents direct mathematical operations or accurate numerical sorting/aggregation without data cleaning (casting the column to a numeric type). While the sample data appears numerically sorted, relying on 'object' types for numerical analysis is risky and should be addressed before further calculations or aggregations are performed. There are no obvious outliers in the sample data provided, but a full numerical analysis after correcting the data type would be necessary to confirm.

View Raw Data

	customer_name	total_spent
0	KARL SEAL	221.55
1	ELEANOR HUNT	216.54
2	CLARA SHAW	195.58
3	RHONDA KENNEDY	194.61
4	MARION SNYDER	194.61
5	TOMMY COLLAZO	186.62
6	WESLEY BULL	177.6
7	TIM CARY	175.61

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