

lab-sql-generation-with-transformer

Introduction

The task involved generating SQL queries for the question: "What was our revenue by product in the New York region last month?" using three different prompt styles.

Methodology

Three prompts with varying levels of instruction were tested:

1. Prompt Version 1: Basic instructions focused on revenue and cost.
2. Prompt Version 2: More detailed instructions with sample questions.
3. Prompt Version 3: A business-focused approach emphasizing table joins and handling ambiguities.

Findings

1. Prompt Version 1 (Minimal Instructions):
 - Generated the correct SQL query.
 - Strengths: Simple and direct.
 - Weaknesses: Lack of examples made it less flexible for complex queries.
2. Prompt Version 2 (Detailed Instructions with Examples):
 - Also produced the correct query.
 - Strengths: Clear guidance with examples would help with more complex queries.
 - Weaknesses: No significant improvement for this simple query.
3. Prompt Version 3 (Business-Focused):
 - Similar to Version 1 but with additional instructions on table joins.
 - Strengths: Better suited for complex business scenarios.
 - Weaknesses: Overcomplicated for this simple query.

Conclusion

For straightforward questions, simpler prompts work well, but more detailed prompts are beneficial for complex queries.