



Natural Language Interface for Data Access and Transformation Platform

Services: **Analytics and decision support**



Context

Accessing and transforming data within a CRM environment required technical knowledge of SQL and underlying schemas, creating a bottleneck for business users and limiting flexibility in data exploration. As a result, routine data requests often depended on technical teams, slowing down decision-making and iteration.

Solution

Developed a command-line-based integration layer that enables natural language interaction with underlying CRM data. A language model was used to interpret user intent and translate it into executable SQL queries and data transformation logic (e.g., joins, filters, aggregations, dataframe operations). The solution was designed as a modular component, allowing it to be integrated into an existing CRM interface by a partner team, effectively embedding natural language capabilities into existing workflows.

Impact

Enabled non-technical users to access and manipulate data through natural language within their existing environment, reducing reliance on technical teams and improving turnaround time for data-driven tasks. This lowered the barrier to data access while preserving existing infrastructure and governance processes.