

## Query Execution Layer

- Run the structured query against **Azure AI Search / Database**.
  - **Process:**
    - SQL query executed → retrieves relevant rows
    - Semantic search query executed → retrieves relevant documents or records based on meaning, not just keywords
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1. **Frontend / Web App** – user types or speaks a query → sends to backend API
  2. **Backend / Function App** – receives query → calls GPT-4 API
  3. **GPT-4 (Azure OpenAI Service)** – processes the query:
    - Understands **intent**
    - Recognizes **entities**
    - Handles **context and synonyms**
    - Generates a **structured SQL / OData / Semantic Search query**
  4. **Database / Azure AI Search** – executes the query → returns results to backend → frontend

So, GPT-4 is **integrated in the backend** as a **service/API call**, not directly in the frontend or database.

[User Query - Frontend]



[Backend / Function App] → Calls GPT-4 API



[GPT-4] → Extracts Intent & Entities → Generates SQL / Semantic Query



[Azure AI Search / Cosmos DB / SQL] → Executes Query



[Backend] → Formats Results



[Frontend] → Displays Results to User