## Your First Al Agent

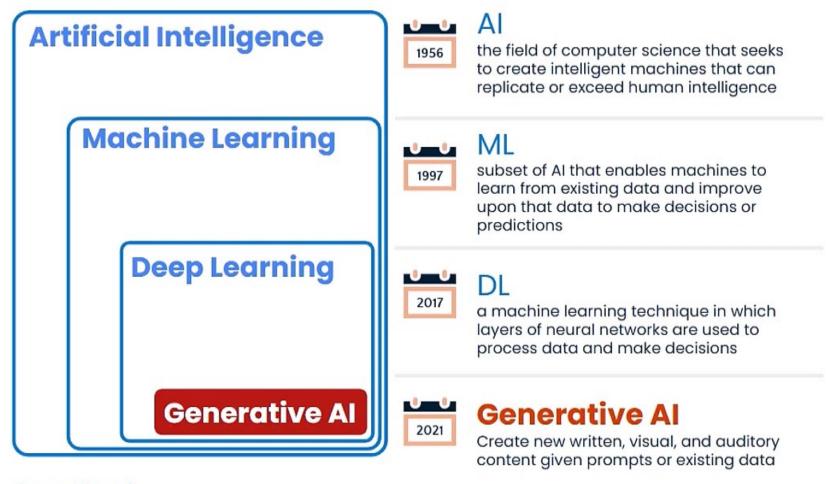








#### The Road to Generative Al



Source: Microsoft





#### **Key Differentiators**

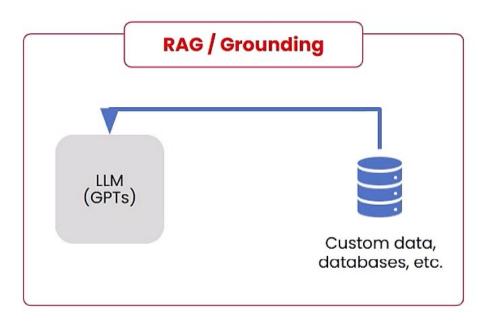
Foundation models with multiple skills in one single model Capacity to ingest and generate different data formats (e.g. text, image, video)

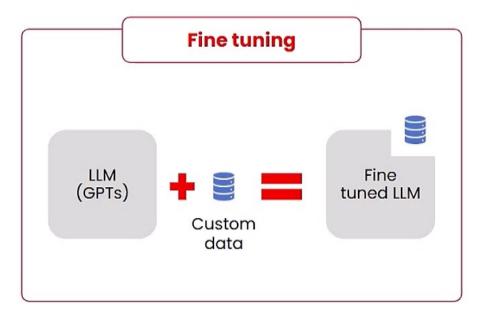
Ability to use
natural
language
instead of
programming
code





#### Ways to "customize" LLMs





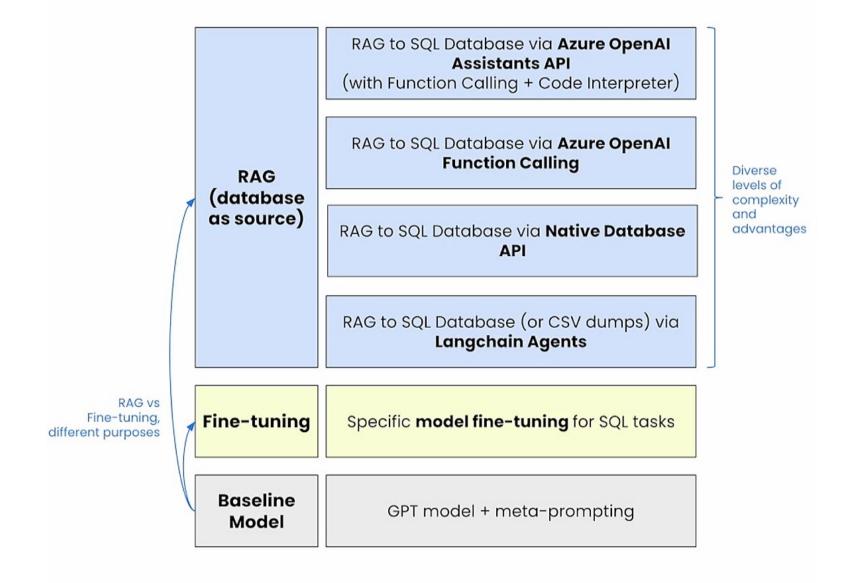
Interacting with a CSV Data





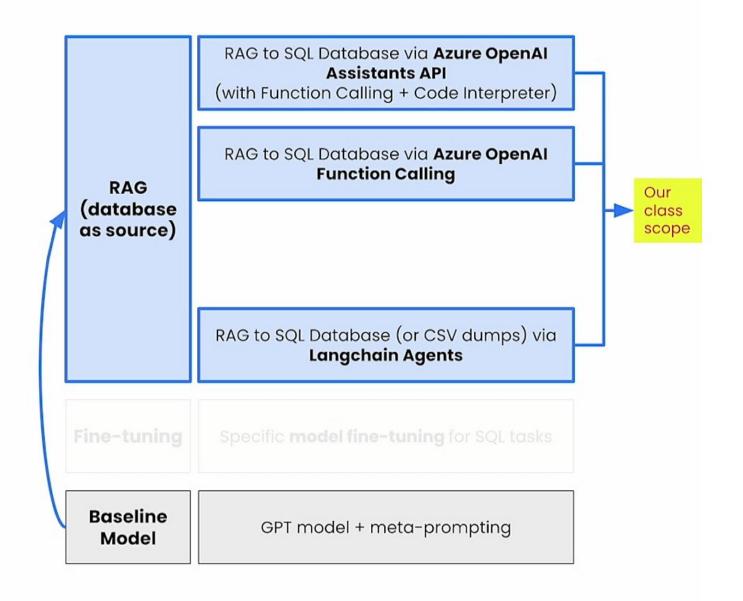


#### Alternative Options for Al Database Agents



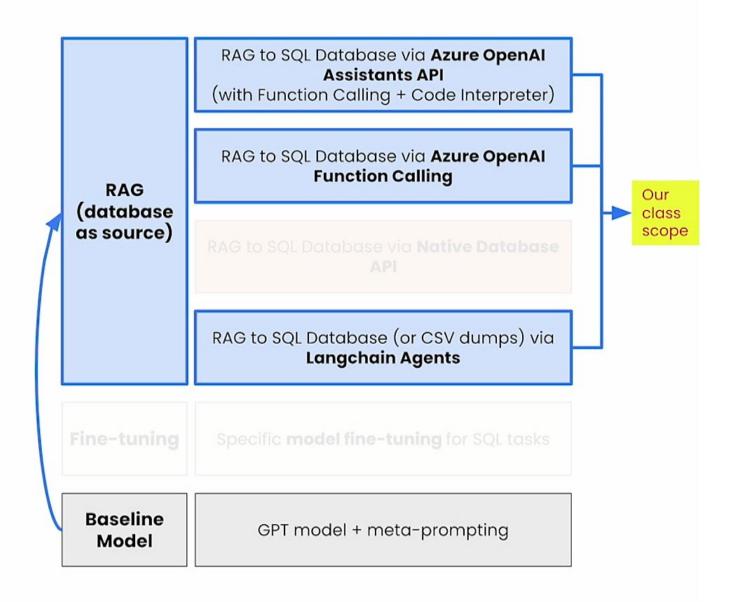


#### Alternative Options for Al Database Agents





#### Alternative Options for Al Database Agents



## Connecting to a SQL Database

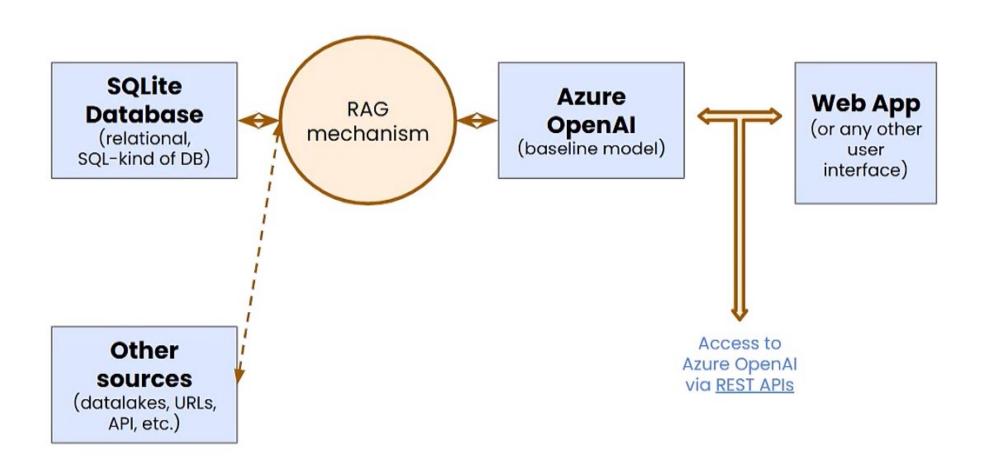








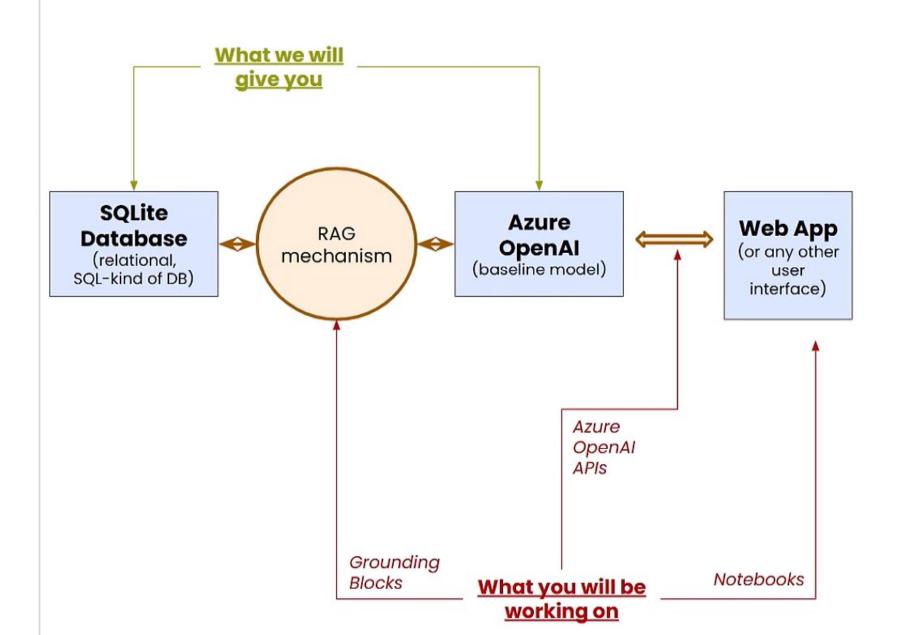
### Al Agent with SQL Database







#### Al Agent with SQL Database





## **Function Calling**

- Provides specific instructions for finding information.
- Prioritizes queries for precise results and desired format.
- Adds control and encapsulates queries for better structure and predictability.

# Leveraging Assistants API for SQL Databases







## **Assistants API**

- Maintains conversation context dynamically.
- Stateful, keeping track of interactions, useful for scenarios like e-commerce.
- Supports function calling.





## Code Interpreter

- Enables the Assistance API to handle and modify Python code iteratively.
- Useful for complex tasks, adjusting code until it succeeds.
- Functions as an environment within your current environment for autonomous code modification.