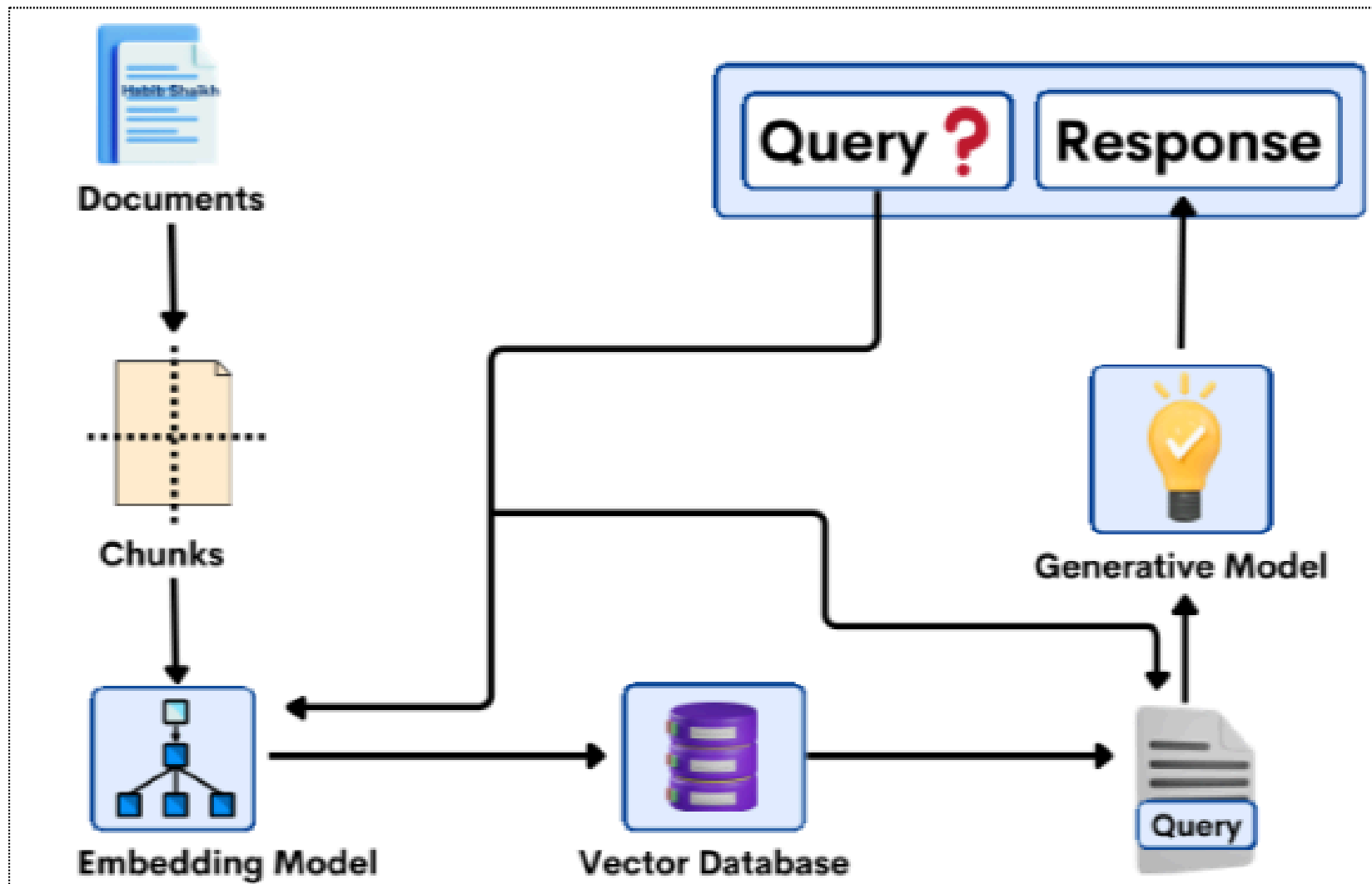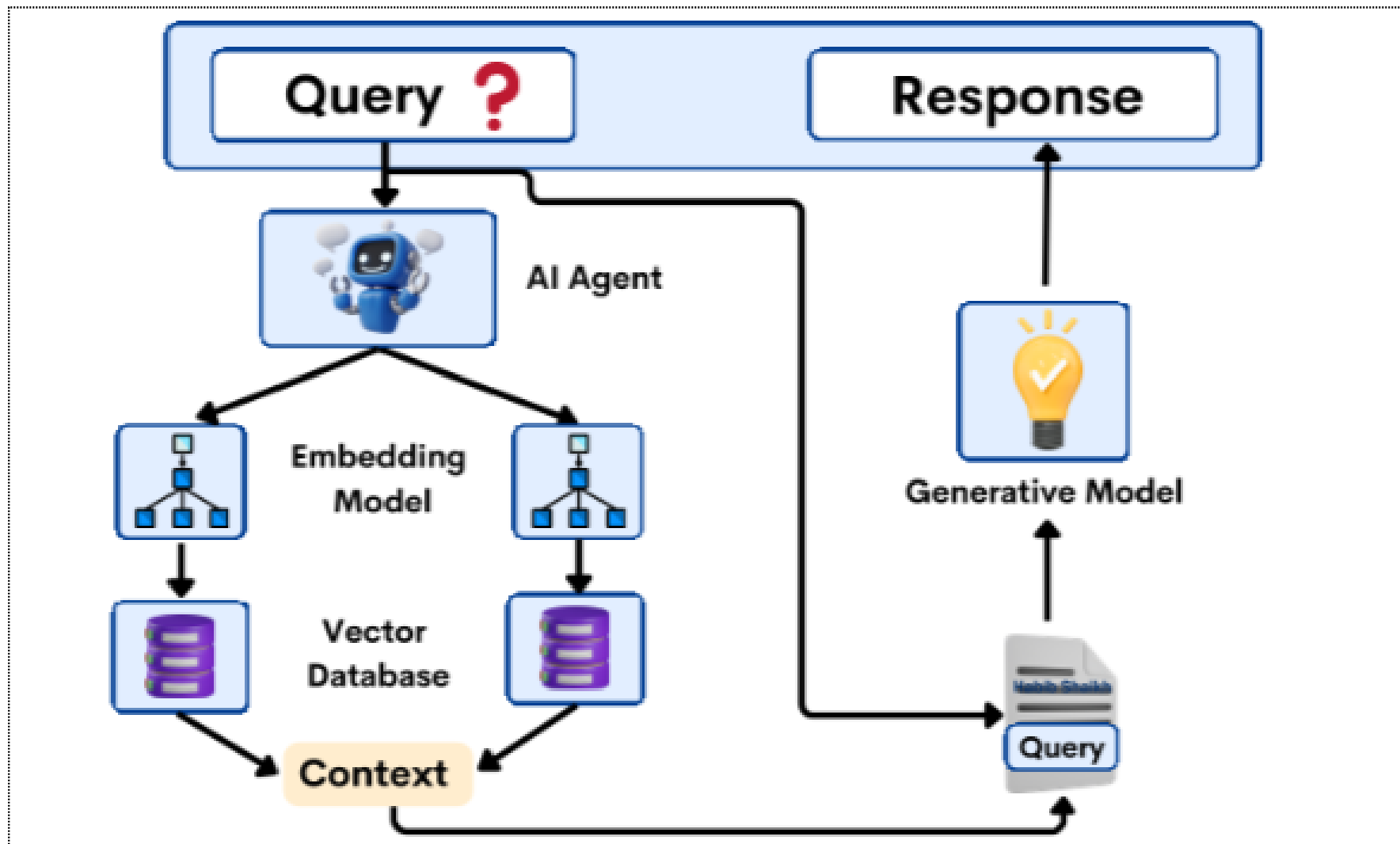# TYPES OF RAG

Karn Singh

NAIVE RAG

Key Advantages:

- Utilizes only simple vector similarity search for retrieval.
- Lacks contextual awareness or relevance scoring—can return off-topic results.
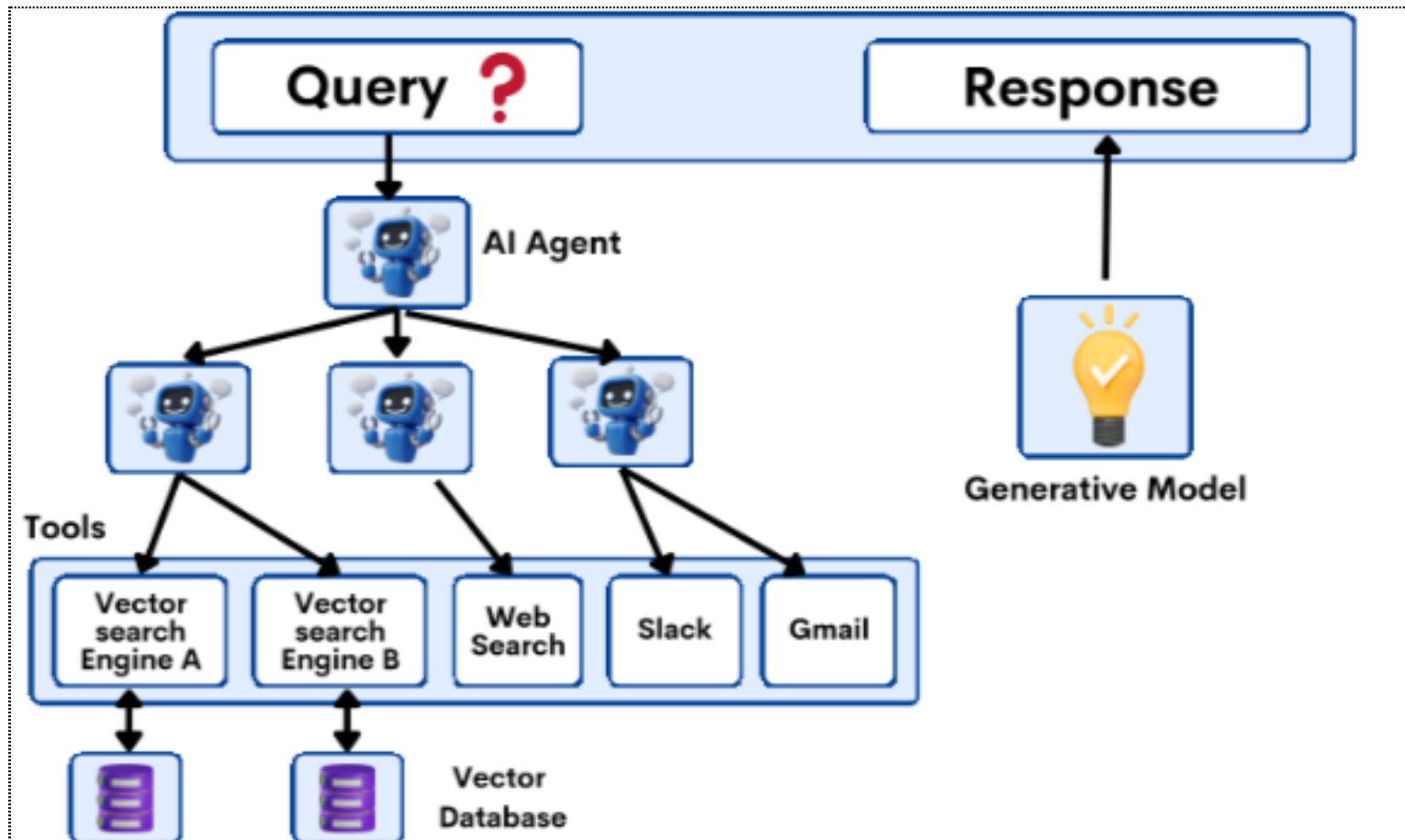- No dynamic content updates or advanced filtering mechanisms.

AGENTIC RAG (ROUTER)

Key Advantages:

- Smart routing of queries based on type and domain.
- More accurate retrieval by selecting the right data source dynamically.
- Enables real-time decisions between internal knowledge bases and external content (e.g., web data).
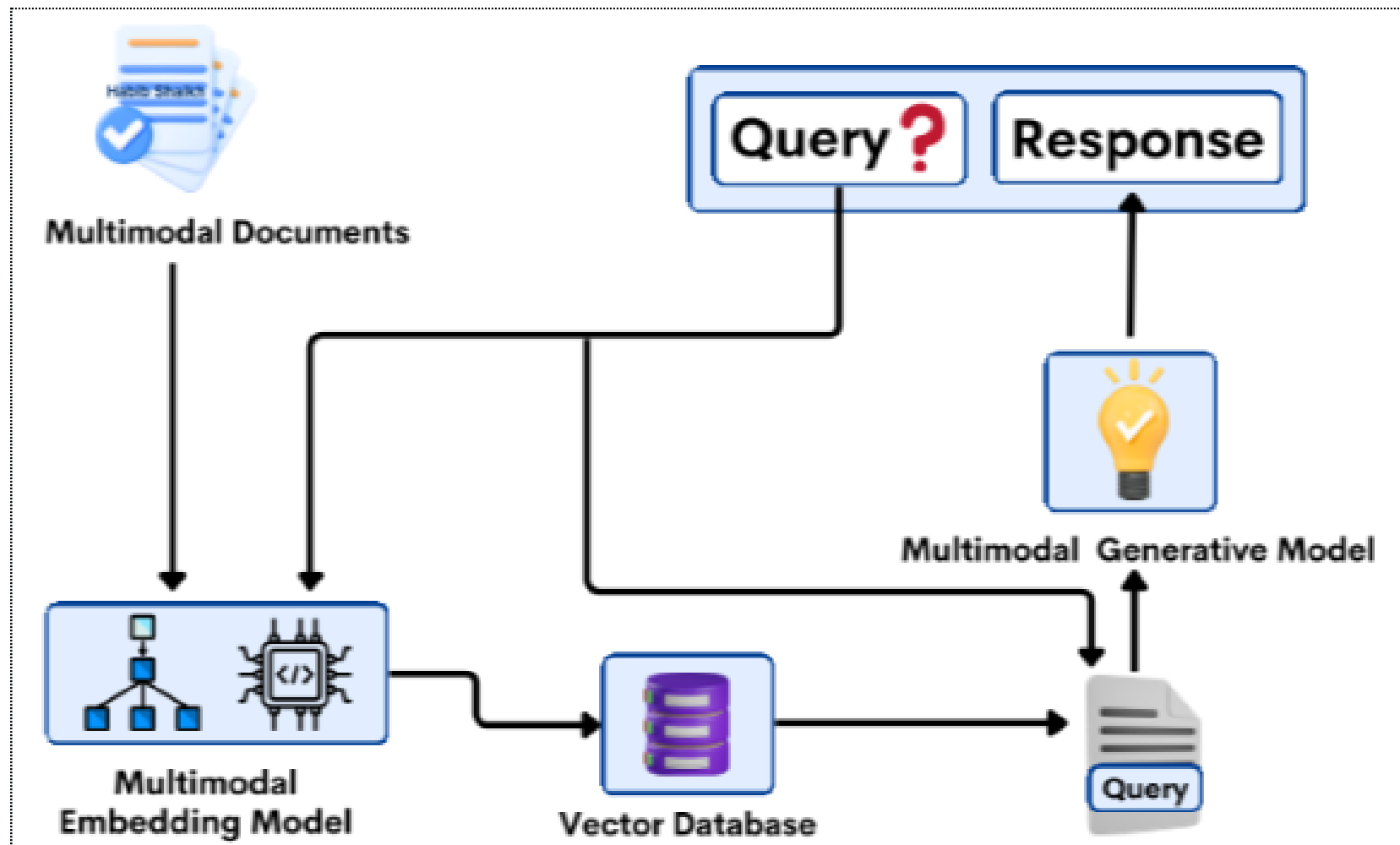
AGENTIC RAG (MULTI-AGENT)

Key Advantages:

- Uses a team of agents to improve retrieval quality and coverage.
- Task-based specialization ensures improved relevance, ranking, and generation.
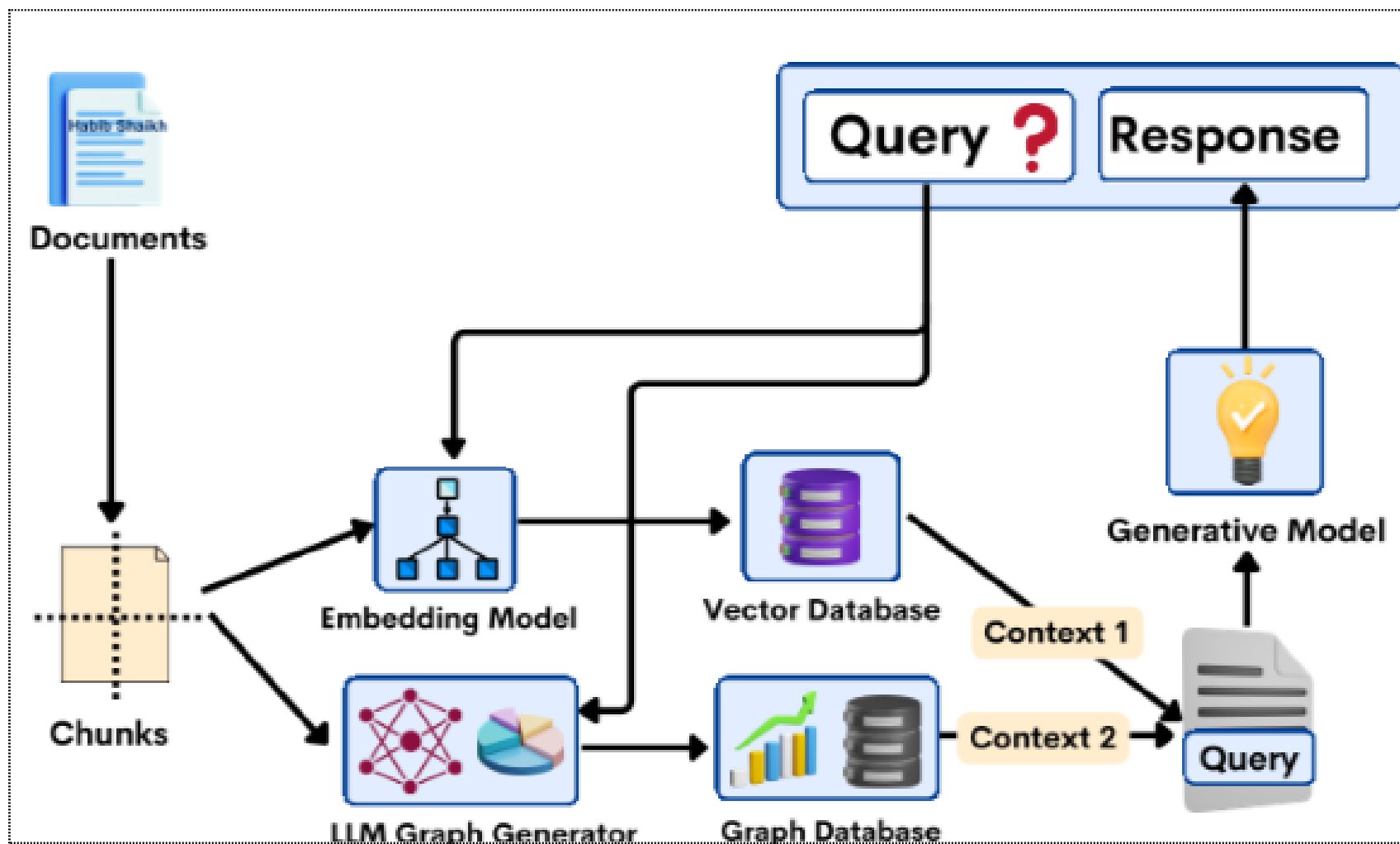- Can access diverse tools and platforms for holistic context.

MULTIMODAL RAG

Key Advantages:

- Capable of understanding and combining different data types for more accurate and meaningful answers.
- Supports richer context generation than unimodal systems.
- Enables advanced use cases that require integrating diverse information formats.
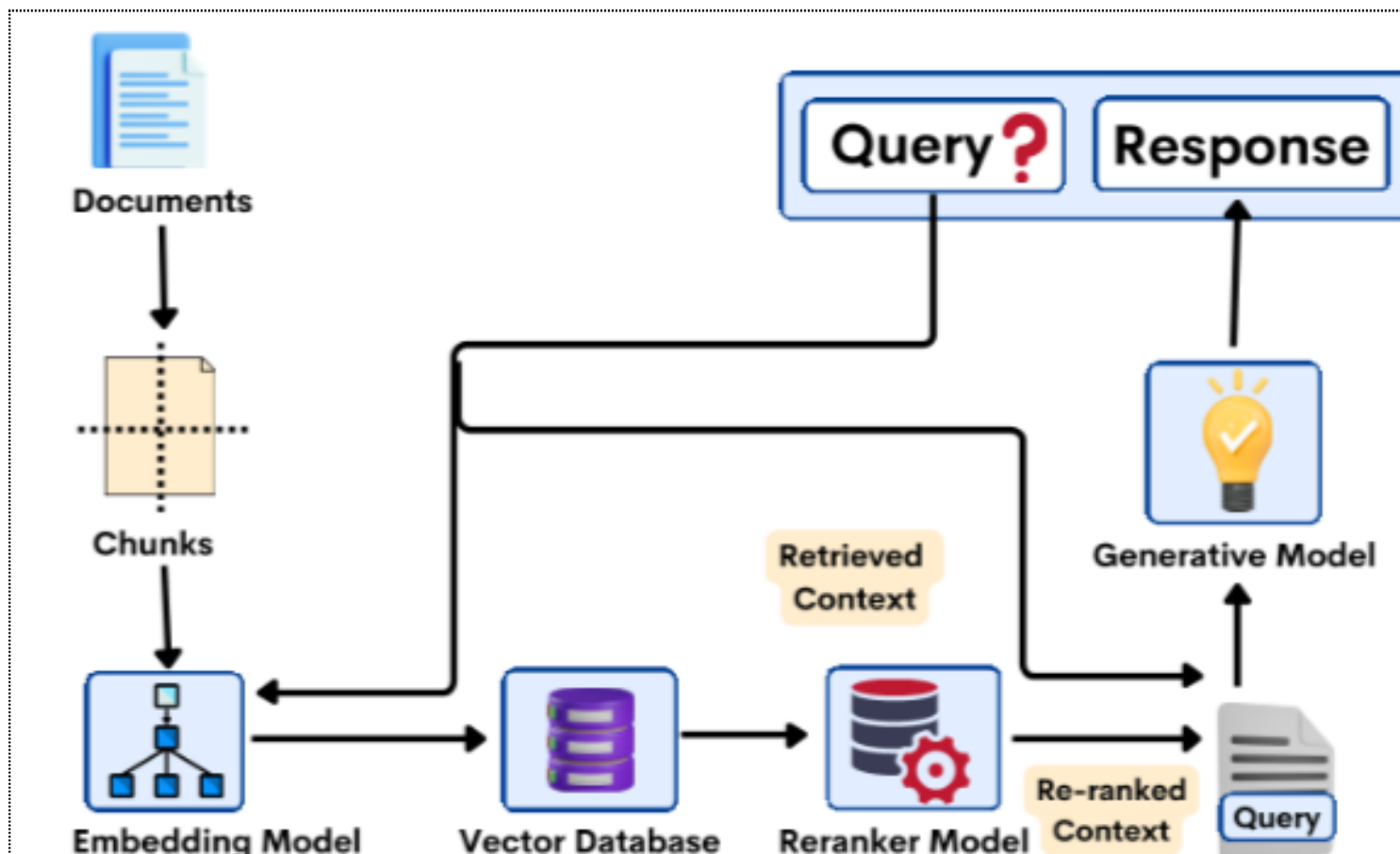
HYBRID RAG

Key Advantages:

- Combines semantic and symbolic approaches to ensure more accurate and meaningful retrieval.
- Effectively balances contextual depth (via vectors) and relational structure (via graphs).
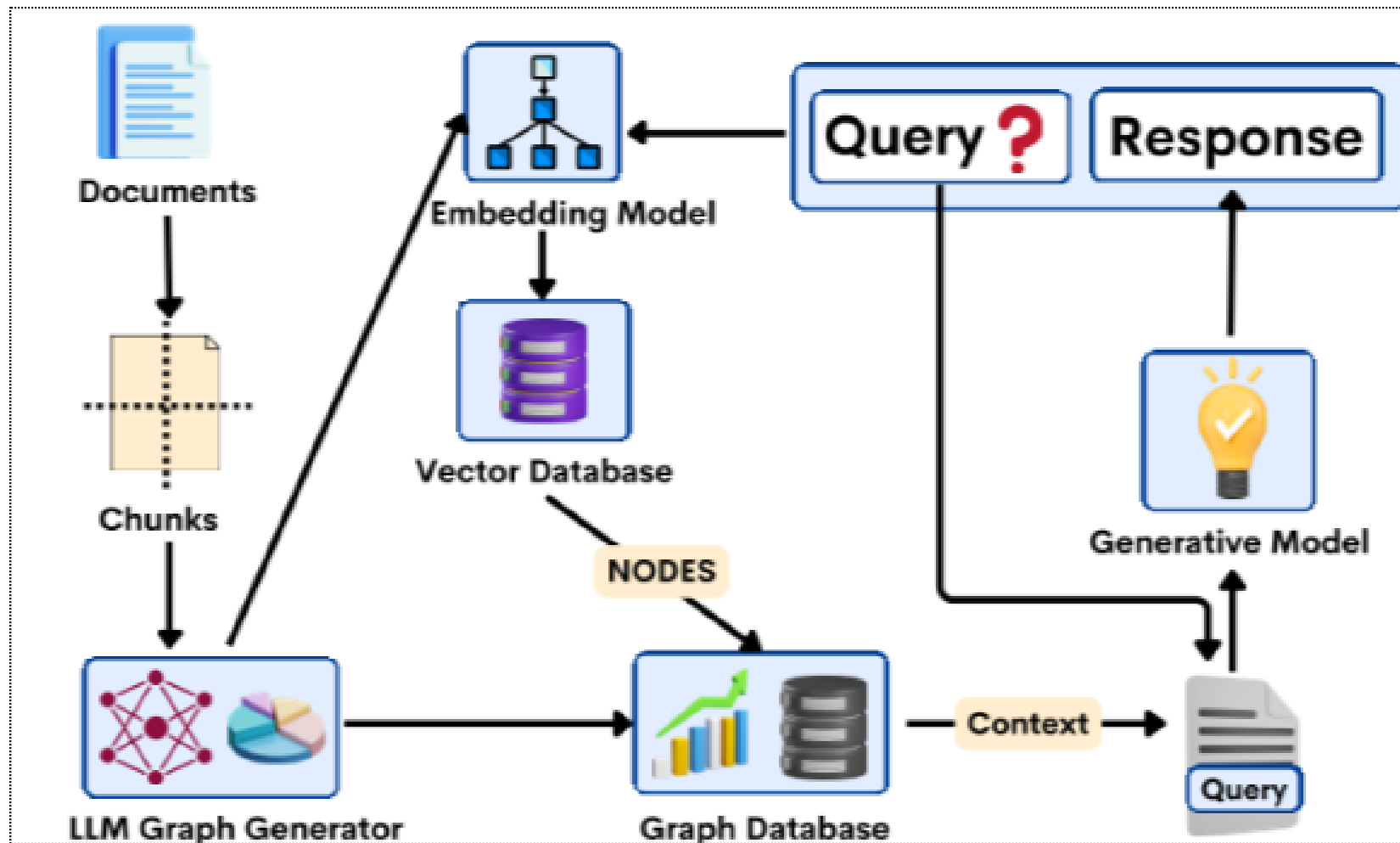- Handles both fuzzy queries and explicit keyword/entity queries well.

RETRIEVE-AND-RERANK RAG

Key Advantages:

- Enhances retrieval precision by introducing a re-ranking step after initial search.
- Ideal for scenarios where high relevance and quality filtering are critical.
- Reranker model helps filter out noise and prioritize the most informative chunks.

GRAPH RAG

Key Advantages:

- Uses explicit entity relationships to enhance precision and logical consistency.
- Enables reasoning over structured knowledge, going beyond just similarity.
- Bridges unstructured semantic data and structured relational insights.

WAS THIS POST USEFUL?

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