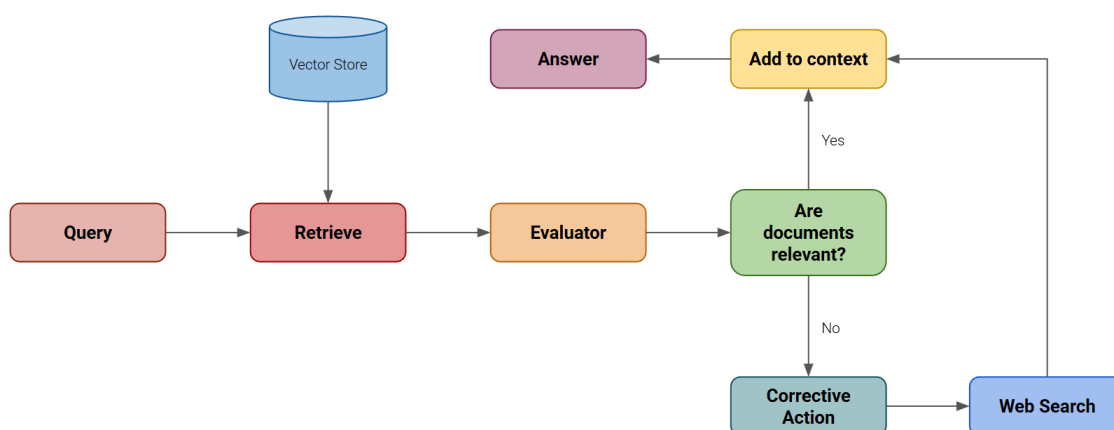# Corrective RAG

Corrective RAG (CRAG) is an advanced technique within Retrieval-Augmented Generation (RAG) that focuses on improving the accuracy and relevance of generated responses by incorporating mechanisms for self-reflection and self-grading of retrieved documents. It does this by evaluating the quality of retrieved documents and applying corrective actions when necessary, such as refining or replacing incorrect retrievals

Addressing Limitations of Basic RAG

Traditional RAG systems rely heavily on the accuracy of retrieved documents. If the retrieved information is flawed or incomplete, the generated response can also be inaccurate.

CRAGs Core Components

1. **Retrieval Evaluator:** This component assesses the quality and relevance of retrieved documents

2. **Generation Model:** This model generates the initial response based on the retrieved information

3. **Refinement and Correction:** CRAG employs strategies like knowledge refinement or web search to address issues identified by the retrieval evaluator

Benefits of CRAG

1. **Improved Accuracy:** By evaluating and correcting retrieved information, CRAG helps ensure the accuracy of generated responses.

2. **Enhanced Relevance:** CRAG can identify and filter out irrelevant information, making the generated response more relevant.

3. **Increased Robustness:** CRAG can handle cases where the initial retrieval process is not perfect, leading to a more robust RAG system