

# Evaluation

## accuracy analysis

This report evaluates the accuracy of the Retrieval-Augmented Generation (RAG) system using the Ragas the faithfulness, correctness, relevance, and contextual accuracy of the generated responses.

## evaluation methodology

The following metrics were used to assess the RAG system:

- **faithfulness:** Measures how well the generated answer aligns with the retrieved context.
- **answer correctness:** Evaluates whether the response is factually correct.
- **answer relevancy:** Assesses how relevant the answer is to the user query.
- **context recall:** Measures the proportion of relevant context retrieved.
- **context precision:** Evaluates the accuracy of retrieved context in relation to the query.

## approach

- **ground truth comparison:** Responses were compared against a predefined ground truth dataset.
- **human evaluation:** reviewed the generated responses for accuracy and relevance.
- **metric-based scoring:** Automated scoring was applied using Ragas to quantify accuracy.