

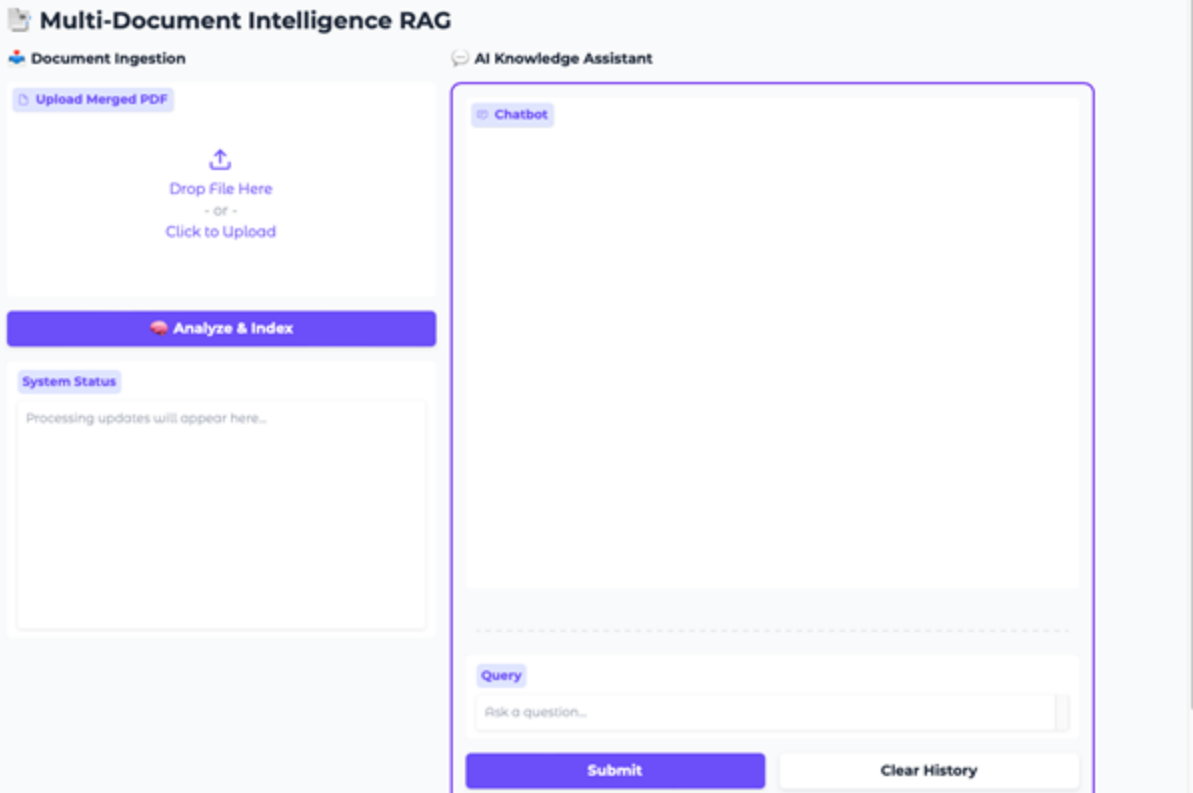
Full RAG Pipeline with Interactive Gradio Chatbot



Demo & Reflection

Author: Lashawn Fofung, MBA, PMP, CSM, CSPO

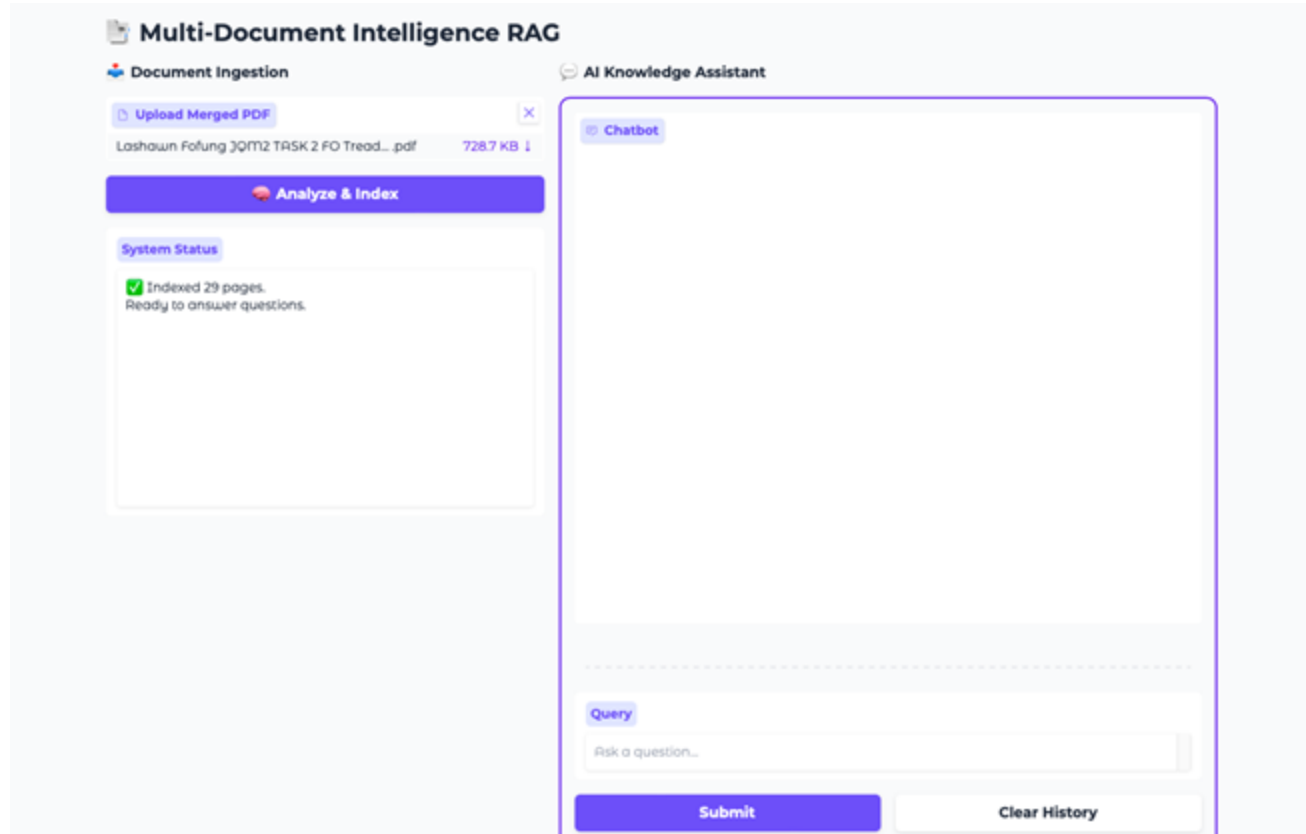
Gradio Chat Interface



On Launch

- Basic UI Layout Monochrome
- Active Button
 - Upload PDF
 - "X" to delete file
 - Analyze & Index
 - Submit Query
 - Clear History
- Labeling Button
 - System Status
 - Query
 - Chatbot

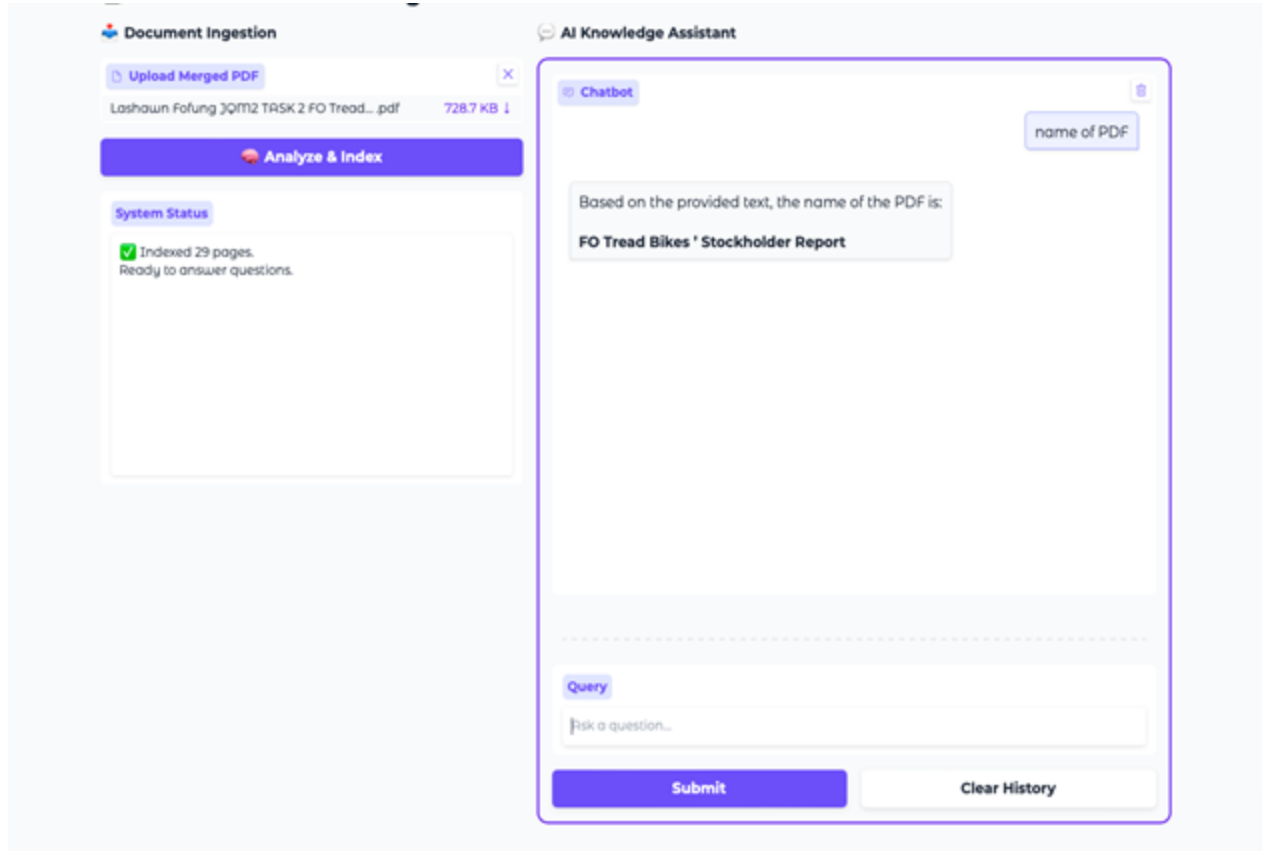
Gradio Chat Interface



File Upload & Processing

- File Uploaded: MBA Capstone PDF
- Before clicking Analyze & Index button
 - Filename
 - File size
- After clicking Analyze & Index
 - Processing time
 - System status shows number of pages

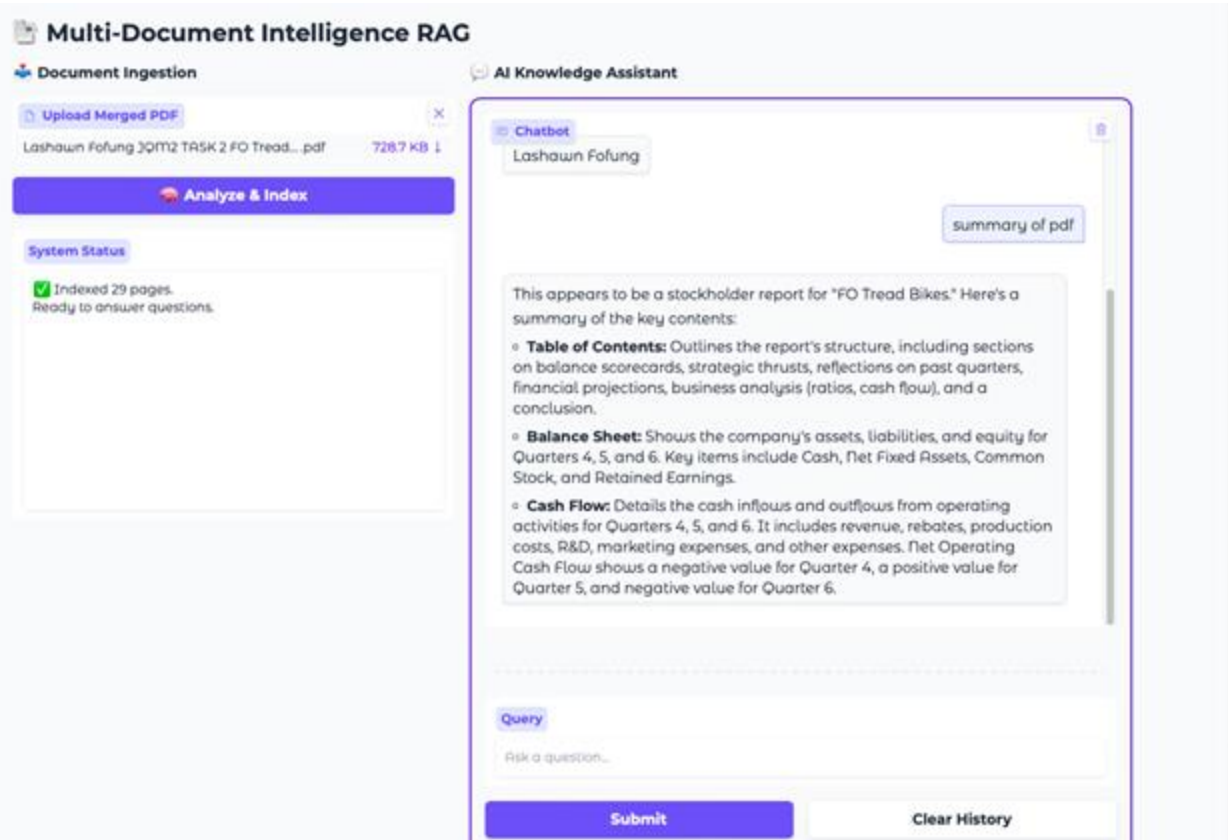
Gradio Chat Interface



Query #1

- Simple question on PDF file name
- Accurate response for title of document
- Not full name

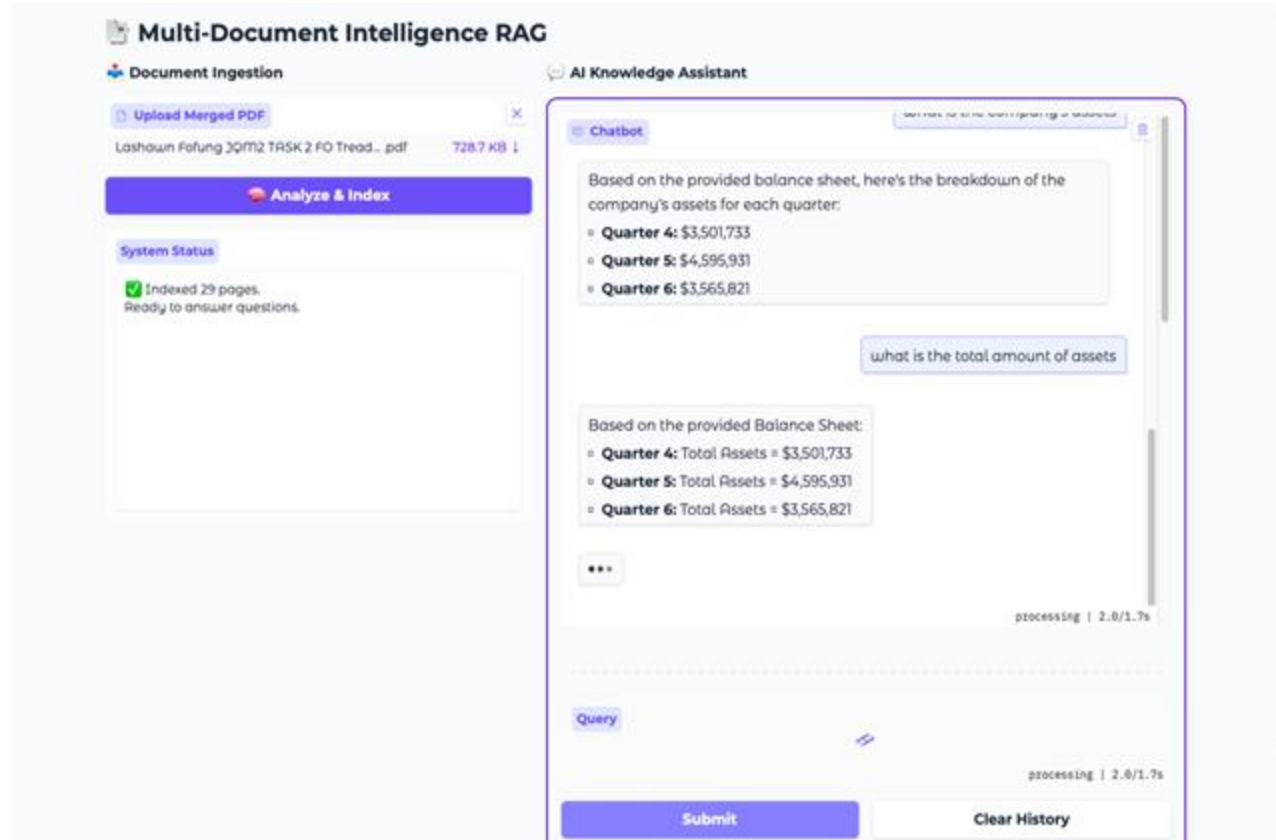
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Query # 3

- Request for summary
- Response detailed with pdf document headers (not all)

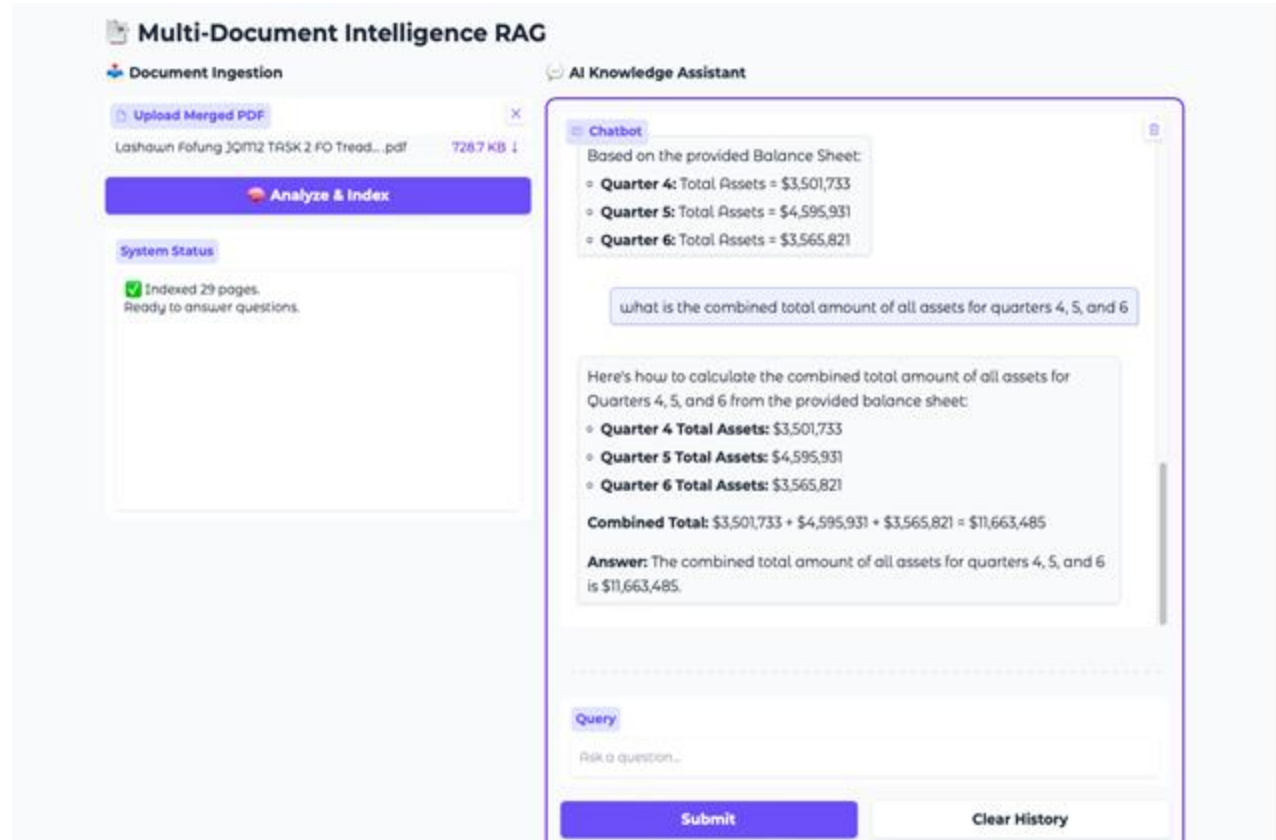
Gradio Chat Interface



Query #5

- With each query, processing time is displayed
- Non-specific query that required specific wording to get combined total assets (see in next slide)

Gradio Chat Interface



Query # 6

- Shows ability to do calculations
- Query specific by using prompt requesting for combined total assets for quarters 4, 5, and 6

Reflection

What did I add or change compared to the tutorial?

A	Additions and Key Changes	Added RAG & Document Splitting to improve parsing, and classifying documents. Tutorial used mock functions.
B	BGE Semantic Vector Search	Allowed for a more specific search instead of basic answer. Tutorial had no search capability
C	Custom Styling	Modified column with and window size with borders and a divider. Tutorial used a standard layout.



Thank You!