**AI Crew to Automate Fundamental Stock Analysis**

- Q&A Workflow

What does this do?

* **Document Upsertion:**
  + **Fetches a PDF:** Downloads a PDF file (e.g., a report or document) from Google Drive.
  + **Processes the File:** Converts the binary PDF into text, then splits it into manageable chunks.
  + **Vectorizes the Content:** Generates embeddings for each text chunk using OpenAI, and inserts these vectors into a Qdrant vector store (in a collection named “crowd”).
* **Question & Answer Interaction:**
  + **User Query Received:** When a query is sent via a webhook, the system uses a Retrieval QA Chain to process the question.
  + **Contextual Retrieval:** The workflow retrieves the top relevant document chunks from the vector store based on the query.
  + **AI-Powered Response:** An OpenAI Chat Model processes the retrieved data and crafts a natural language answer.
  + **Response Delivery:** The final answer is sent back to the user through the webhook response.
* **Additional Features & Guidance:**
  + **Conversation Memory:** A window buffer memory stores the last 20 messages to maintain context.
  + **Sticky Notes:** Throughout the workflow, sticky notes provide setup instructions and guidance (e.g., replacing credentials and configuring connections).