

Build an AI Agent with RAG using VideoSDK Agents SDK

Goal

Your task is to build a **voice AI agent** using the [VideoSDK Agents SDK](#).
The agent should be able to:

1. Listen to the user (speech-to-text).
 2. Respond with synthesized speech (text-to-speech).
 3. Use a **local RAG pipeline** (Retrieval-Augmented Generation) to answer questions from a small set of documents.
 4. Fall back to the base LLM when no relevant documents are found.
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Requirements

1. **Set up the Agent SDK**
 - Follow the quickstart guide to create a simple voice agent with STT → LLM → TTS.
2. **Add RAG Pipeline**
 - Use any local vector DB (e.g., FAISS, Chroma, or LlamaIndex).
 - Ingest the given **docs/** folder (3–4 small text files).
 - Implement a retrieval step:
 - User query → embed → nearest neighbor search → top results → passed as context to LLM.
3. **Fallback**

- If no relevant docs are found (low similarity score), the agent should just use the LLM response.

4. Test Flow

- Ask a question that matches one of the documents → Agent should use RAG context.
- Ask a general question not covered in the docs → Agent should answer using the LLM.

Deliverables

- Codebase (Python or Node.js).
- README with:
 - Setup instructions.
 - Example queries and expected behavior.