

Telegram Voice RAG Bot

A voice-enabled Telegram bot that:

- Accepts voice messages
- Transcribes them with **local Whisper**
- Queries **Together AI (Mixtral)** with a `.txt` knowledge base (RAG-style)
- Replies with both text **and voice** using **ElevenLabs**
- Replies with **text only** for text input

Features

✓ Voice → Whisper → GPT → ElevenLabs\ ✓ `.txt` RAG support\ ✓ Telegram integration (Python)\ ✓
Simple `.env` setup\ ✓ Fully local Whisper (no OpenAI needed!)

Project structure

```
📁 telegram-rag-bot
├── telegram_rag_bot.py      # main bot logic
├── knowledge.txt           # custom knowledge base for GPT
├── .env                    # contains API keys (not uploaded)
├── README.md
└── Telegram_RAG_Bot_User_Guide.pdf
```

How it works

Voice message:


- User sends a voice message
- Bot transcribes with Whisper
- Sends to Together API (Mixtral)
- Replies with text + ElevenLabs voice message



Text message:


- User sends a text question
- Bot replies with GPT answer in text only


How to interact with the bot

Simply start a chat with the bot and:

Option 1: Send a voice message \  Example: *(voice)* "How long does the approval take?"

-  Bot transcribes the question
-  Responds with text and voice

Option 2: Send a text message \  Example: "What documents do I need to apply for a loan?"

-  Bot replies with a quick text answer

Suggested example questions:

- "How can I check my past transactions?"
- "What documents are required for verification?"
- "Where do I upload my ID?"
- "How fast is the loan approval process?"
- "What happens if I miss a payment?"

All answers are based only on the knowledge.txt file (RAG).

Built with

- Python 3.9+
 - Whisper (local)
 - Together API (Mixtral)
 - ElevenLabs TTS
 - Telegram Bot API
 - dotenv, requests, pydub, SpeechRecognition
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Use case ideas

- Customer support bots (internal docs)
 - Medical triage bots (HIPAA-safe knowledgebase)
 - Loan onboarding bots
 - Multilingual smart assistants
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Author

Made by VikNo — AI integrator for real-world automation