

Automated Youtube Summarizer Bot

An AI agent that automatically summarizes YouTube videos and updates a Google Doc – no manual work needed.

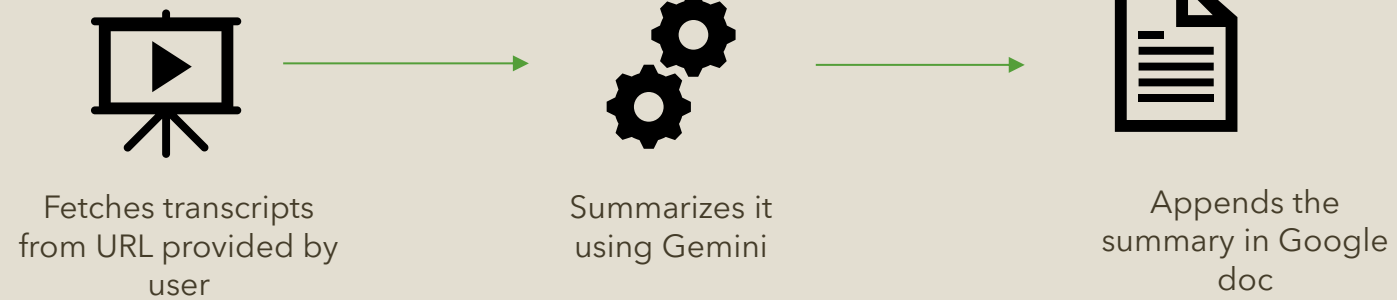
24075A0510 - Akshaya.L



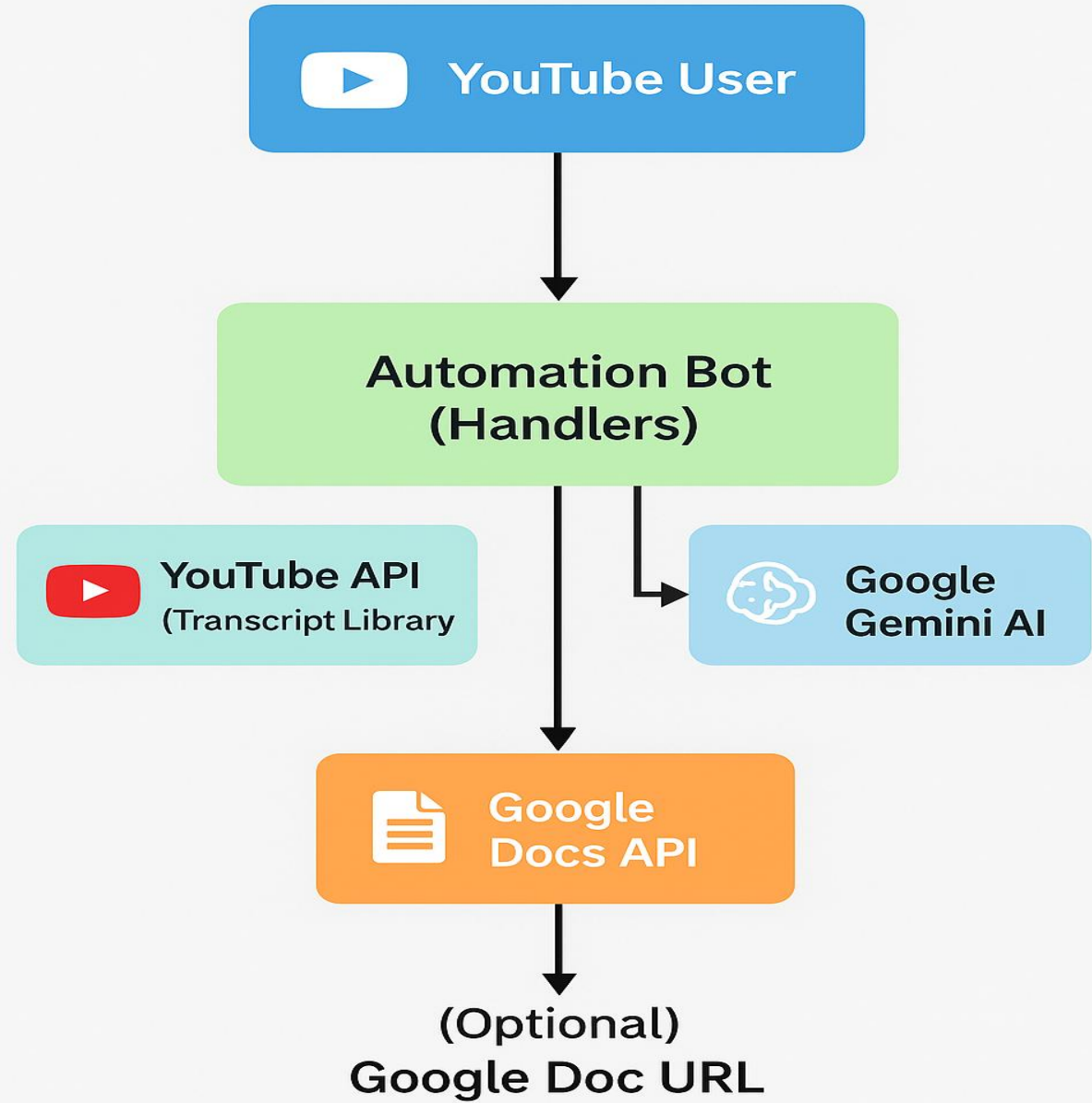
Problem Statement

- YouTube contains vast amounts of educational and informational content
- Manually summarizing videos is time-consuming
- Need: A system that automatically extracts key insights and organizes them efficiently

OVERVIEW



SYSTEM ARCHITECTURE



TECH STACK

Programming & Frameworks

- Python 3.10+
- Gradio (Web UI)
- Tenacity (Retry Logic)

AI & APIs

- Google Gemini API → Text Summarization
- YouTube Transcript API / yt-dlp → Transcript Extraction
- Google Docs API → Summary Storage & Document Creation

IMPACT

- Saves hours of manual note-taking
- Keeps all video insights in one document
- Demonstrates practical Agentic AI in action

FUTURE SCOPE

Multi-language support for transcripts and summaries

Smarter AI with topic detection & sentiment analysis

Vector memory to recall and improve future summaries

Integration with Google Drive, Notion, or Email automation

Cloud deployment for scalability and enterprise access



Thank you