

# Automated Youtube Summarizer Bot

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

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24075A0510 - Akshaya.L



# Problem Statement

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- 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

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Fetches transcripts  
from URL provided by  
user

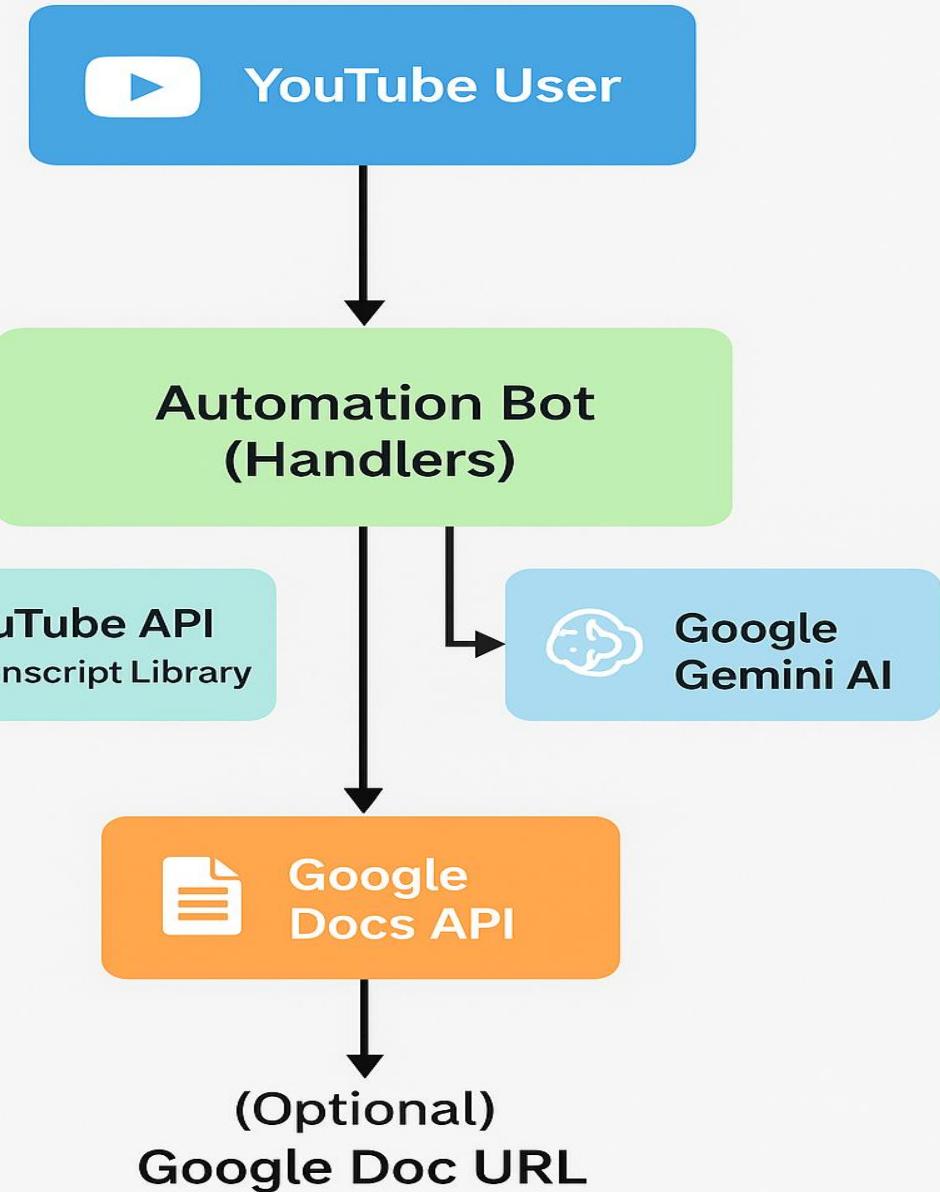


Summarizes it  
using Gemini



Appends the  
summary in Google  
doc

# 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

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