AI-Powered Idea and Video Generation

(N8N + GEMINI + LANGCHAIN + SISIF API)

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WHY THIS PROJECT?

- Short videos dominate platforms like YouTube Shorts and Instagram Reels.

- Creators spend hours brainstorming ideas, writing scripts, and editing videos.

- There's a growing need for automated content creation pipelines that generate ideas and videos intelligently.
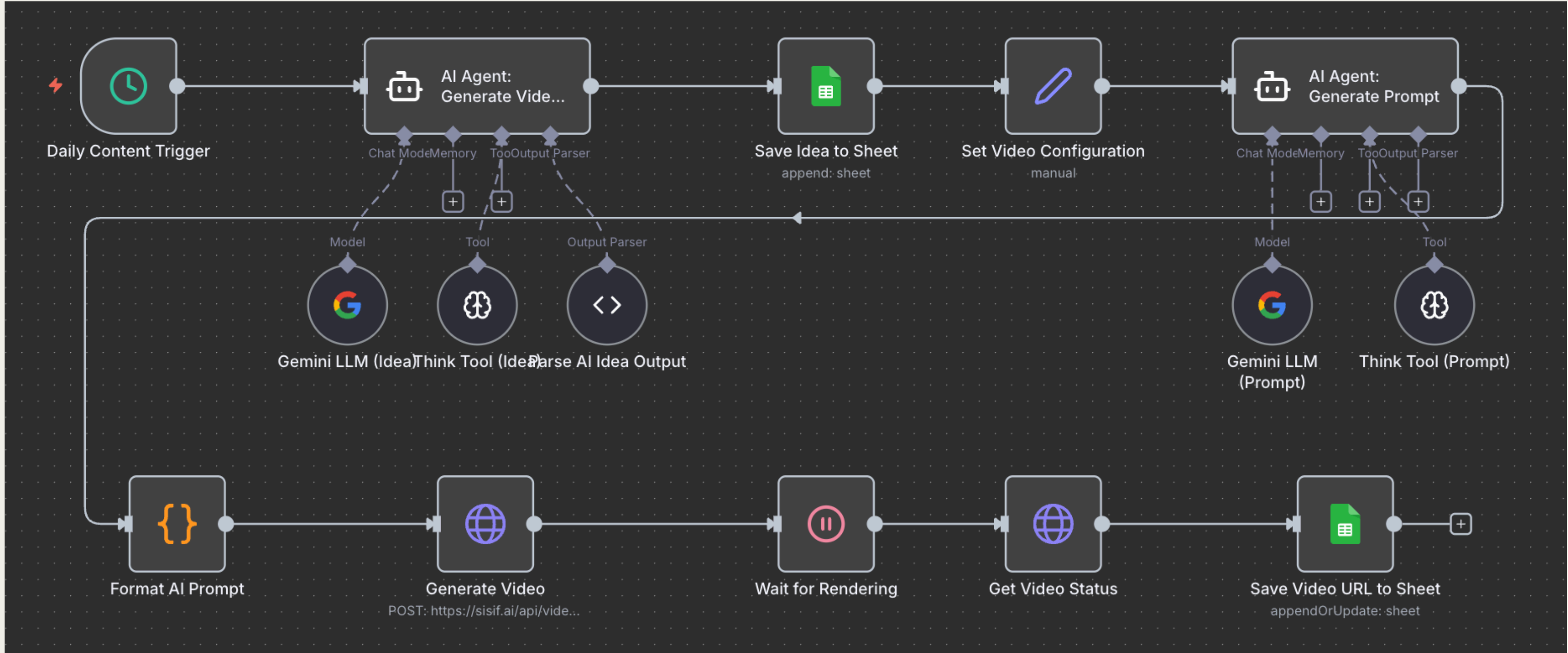
PROJECT OBJECTIVE

To build a fully automated workflow that:

- Generates an original idea using Google Gemini.

- Expands it into a structured prompt via LangChain's Think Tool.

- Sends the prompt to Sisif API to generate a video.

- Saves the video URL and details in Google Sheets.

TOOLS AND RESOURCES

Component	Type	Purpose
n8n	Workflow	Manages entire pipeline visually
Google Gemini API	AI Model	Generates creative "before/after" video ideas
LangChain	AI Agent - Think Tool	Expands idea into a structured prompt
Sisif API	Video Generator	AI videos from the prompts
Google Sheets	Cloud Resource	Stores metadata and video URLs

WORKFLOW

FUTURE SCOPE

- **Trending Ideas:** Connect with Google Trends or X to fetch trending topics.

- **Auto-Upload:** Post directly to Instagram Reels or YouTube Shorts.

- **Multiple Styles:** Allow selection of cinematic, nature, or futuristic templates.

- **Analytics:** Track engagement or performance data automatically.

CONCLUSION

This project demonstrates how AI creativity and workflow automation can merge to simplify content production.

By integrating Gemini, LangChain, Sisif, and n8n, we've built a scalable, no-code system for generating AI-powered short videos automatically.

Outcome:
- Automates the full creative cycle.
- Reduces human effort.
- Enables scalable, daily content generation.

Git Repo:

github.com/JeevanaMukku/ai-idea-and-video-generator.git

Thank you!

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