AI-Driven Support Workflow (Bitlance Prototype)

Overview: Designed an intelligent customer support workflow using **n8n** and **LangChain** for Bitlance, a company offering Al-driven assistance. This system blends conversational Al, smart tool routing, and external API calls to deliver efficient and personalized support experiences.

Key Features:

- Webhook Chat Trigger: Listens for user messages in real time.
- Al Agent with Google Gemini: Uses language modeling and contextual memory to understand and respond empathetically.
- **Gmail Integration**: Sends user queries directly to support inboxes.
- RAG Question Tool: Handles frequently asked questions with dynamic data sourcing.
- Secure API Communication: Employs environment variables for token security and proper header configuration.
- Memory Node: Maintains context for smoother multi-turn conversations.

What I Learned:

- Leveraged memory and agent tooling for responsive LLM behavior.
- Gained confidence in API workflows, secure header use, and multi-tool orchestration.
- Strengthened backend debugging and integration across n8n modules.

Tech Stack: n8n | LangChain | Google Gemini (PaLM) | Node.js | HTTP APIs | Gmail OAuth2

Use Case: Scalable support system for small service providers and large enterprises—balancing AI precision with human-like empathy.