NebulaByte AI Consultation - Technical Architecture Discussion

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Discussion Summary:

The team discussed the technical architecture for the new multi-agent system. The proposed solution involves four core agents: Controller, PDF RAG, Web Search, and ArXiv agents. The Controller agent will use a combination of rule-based logic and LLM-based decision making to route queries to the appropriate agents.

Technical Requirements: 1. FastAPI backend for API endpoints 2. FAISS vector store for PDF document retrieval 3. Integration with Groq API for LLM processing 4. Secure PDF upload with size limitations 5. Comprehensive logging of all agent interactions

Next Steps: - Implement Controller agent decision logic - Set up FAISS vector store for RAG - Integrate with web search APIs - Create basic frontend interface