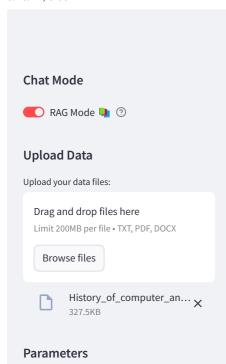
10/23/24, 5:09 PM



8

Max Length

Temperature 0.70 0.00 1.00

1024

2048

Actions

New Chat Clear History

Response Time (RAG): 46.65 seconds

CPU Usage (RAG): 17.70%

Memory Usage (RAG): -0.30%



🚀 A chatbot powered by LlamaIndex and Ollama 🐂

- Hello, I'm your assistant, how can I help you?
- 8. Given a distributed system using the Paxos consensus algorithm, what is the minimum number of nodes that must be operational to achieve consensus in a system with N nodes? a) N/2 b) N/2 + 1 c) 2N/3 d) N - 1
- The answer is (b) N/2 + 1.

Here's why:

- Paxos Consensus: Paxos is a distributed consensus algorithm used to ensure that all nodes in a system agree on the same value.
- **Quorum Requirement:** To achieve consensus, Paxos requires a quorum of nodes. A quorum is a supermajority of nodes - more than half.
- Minimum Operational Nodes: In a system with N nodes, the minimum number of operational nodes required to form a quorum is (N/2) + 1. This ensures that there's always a majority of nodes available to reach agreement even if some nodes fail.

Let me know if you have any other questions about Paxos or distributed systems!

Ask a question: