

AI Lawyer Chatbot

Fall in Love with DeepSeek

lab
lab
ai

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Project Overview

The goal of this project is to build an AI-powered chatbot that helps lawyers and legal professionals streamline their workflow by querying legal documents (PDFs). The system enables users to upload legal PDFs, ask specific legal questions, and receive context-aware answers generated by advanced AI models.



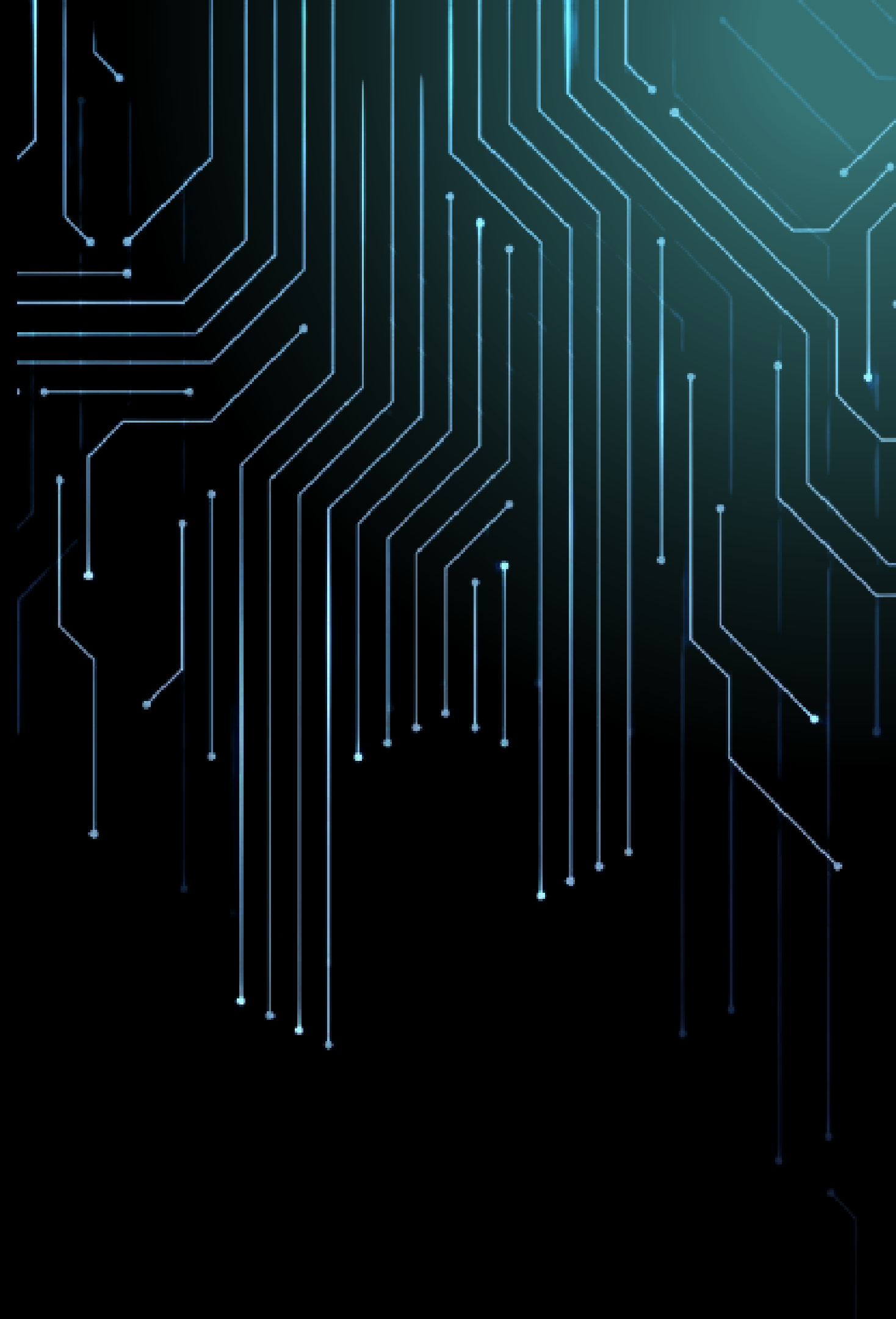


Challenge: Lawyers and legal professionals spend significant time manually reviewing legal documents like contracts, agreements, and terms of service, which can be time-consuming and prone to errors.

Problem Statement 1

Need: Legal professionals need a fast, reliable tool that can automate document review, extract relevant details, and assist with legal inquiries from these documents.

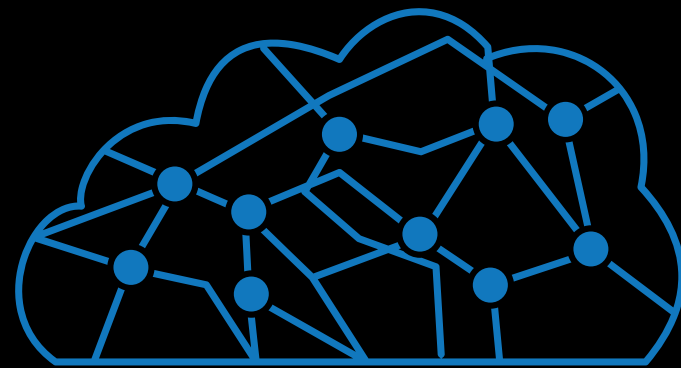
Problem Statement 2



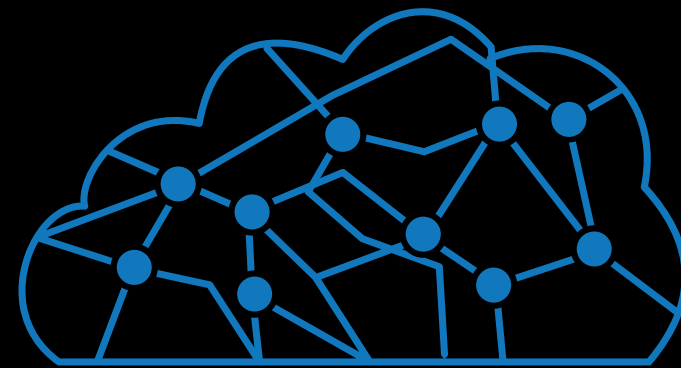
Methodology



Design & System Architecture:



**AI Model & Query
Processing**



**Testing, Deployment &
Future Enhancements:**

Frontend:

Developed using Streamlit to provide a simple and interactive interface where users can upload PDFs and ask legal queries.

Backend:

- PyMuPDF for extracting text from the uploaded legal PDFs.
- Groq API integrated for AI-driven legal query processing using a fine-tuned language model (**deepseek-r1-distill-llama-70b**).

Workflow:

The system follows a simple process where users upload documents, enter queries, and receive context-aware AI responses in real-time.

Design & System Architecture

AI Model & Query Processing

Retrieval-Augmented Generation (RAG):

The model first extracts relevant content from the PDF, then uses Groq's API to generate a precise response to the user's query based on the context.



Testing, Deployment & Future Enhancements:

Testing:

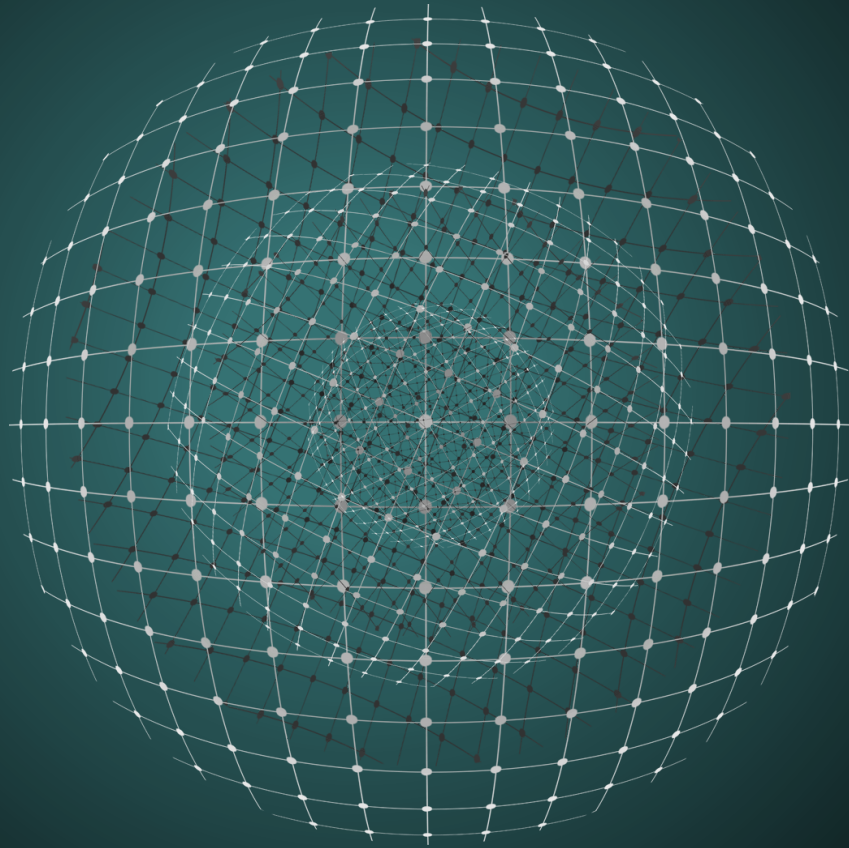
The system will be tested for accuracy, response time, and usability with legal professionals.

Deployment:

The application will be deployed on a cloud platform (e.g., Streamlit Cloud or AWS).

Future Plans:

Implement additional features like **multi-document support**, **legal document summarization**, and more complex query handling for an even more efficient and scalable system.



Efficiency:

Reduces the time lawyers spend reviewing documents and finding key clauses.

Accuracy:

Provides exact information from the document, eliminating human error.

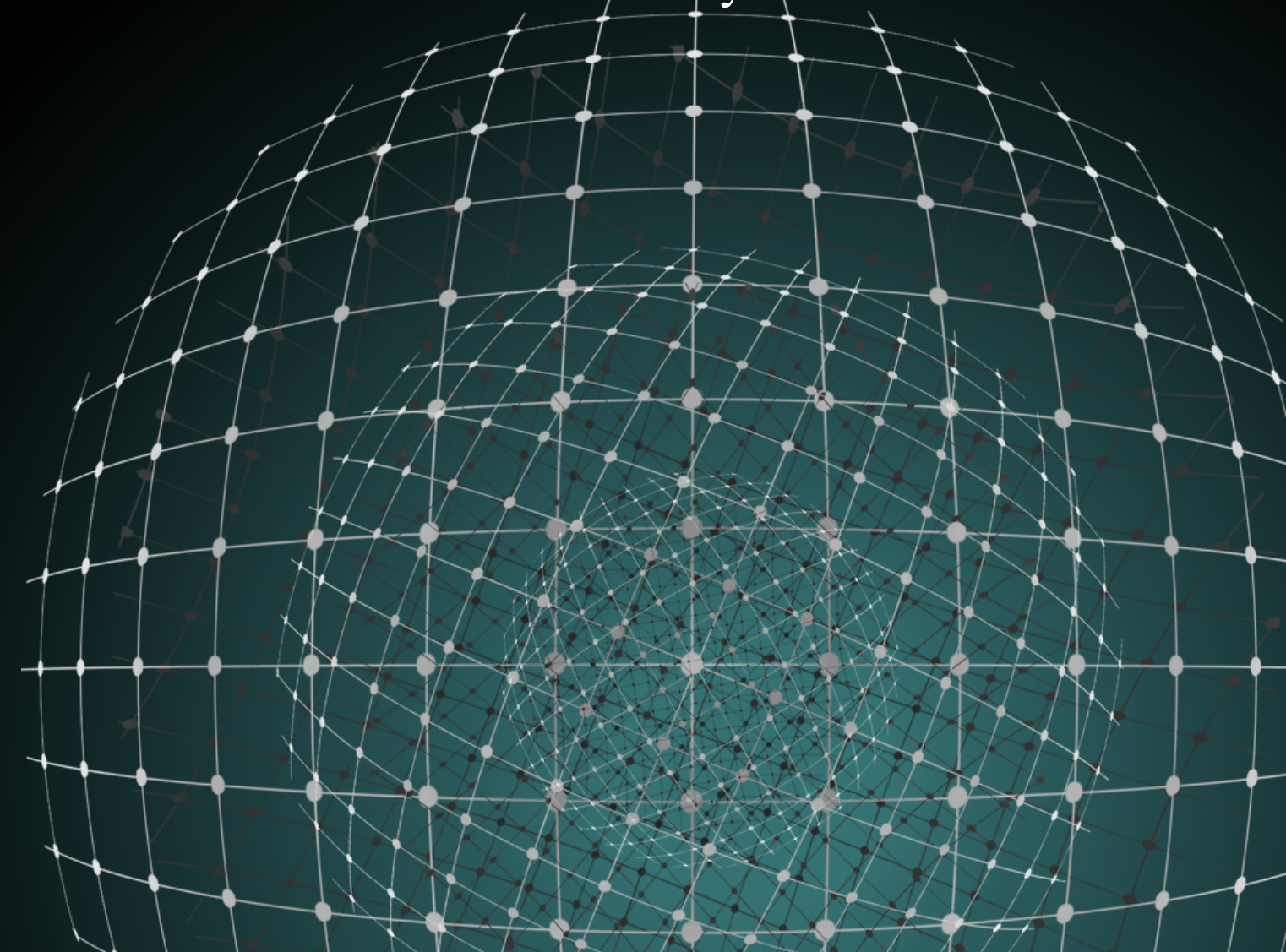
User-Friendliness:

Non-legal professionals can easily understand the content with AI-powered explanations.

Cost-Effective:

Helps reduce dependency on external legal advisors for basic document analysis.

Benefits & Impact



How it Works

Step 1:

The user uploads a legal PDF (e.g., contract, terms of service).

Step 2:

The user enters a query related to the content of the document (e.g., "What is the expiration date of this agreement?").

Step 3:

The RAG Model processes the document, retrieves the relevant context, and formulates a response.

Step 4:

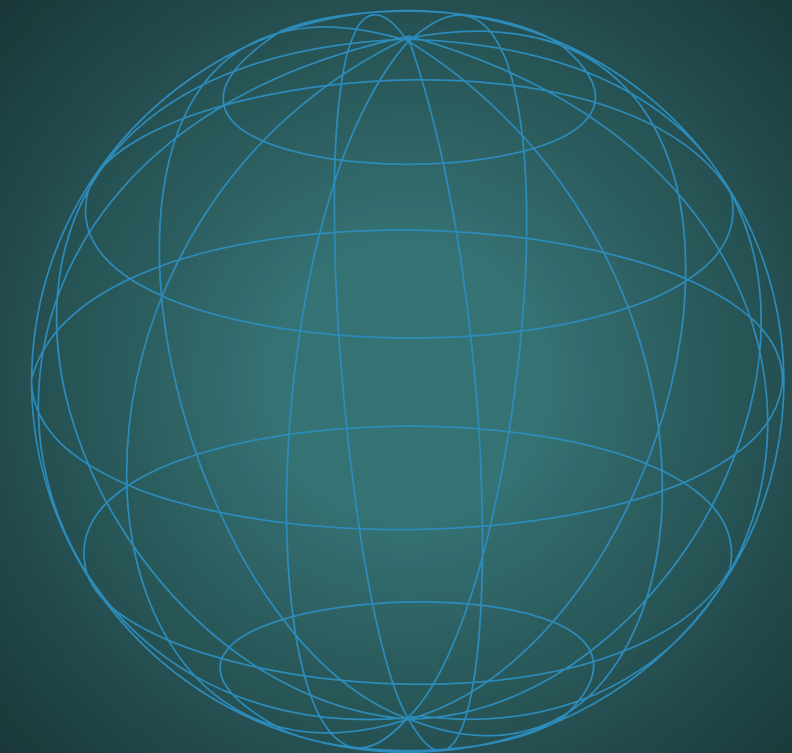
The chatbot provides a context-aware, AI-generated answer to the user.



Conclusion

Summary: The Legal AI Chatbot simplifies the process of reviewing contracts and legal documents, making it faster and more efficient for **lawyers and businesses alike.**

Call to Action: We invite you to explore the app and experience the power of AI in transforming legal work.



Thank You