

## Legal Ease AI

Deepthi Nair P<sup>1</sup>, Shobhana S<sup>2</sup>, Sushthiha S<sup>3</sup>, Yazhini G<sup>4</sup>

<sup>1</sup>Deepthi Nair P – CSE – Sri Shakthi Institute of Engineering and Technology

<sup>2</sup>Shobhana S – CSE – Sri Shakthi Institute of Engineering and Technology

<sup>3</sup>Sushthiha S – CSE – Sri Shakthi Institute of Engineering and Technology

<sup>4</sup>Yazhini G – CSE – Sri Shakthi Institute of Engineering and Technology

\*\*\*

**Abstract** - Legal documents can be complicated, take a lot of time, and be costly to review, making it difficult for individuals and small organizations to obtain legal help. Traditional legal systems depend significantly on manual procedures and expert advice, resulting in inefficiencies and delays. This paper presents LegalGPT, an AI-driven legal assistant that utilizes Artificial Intelligence (AI), Natural Language Processing (NLP), and Retrieval-Augmented Generation (RAG) to streamline legal processes. The system allows users to upload legal documents, comprehend their content, and access relevant information immediately via a conversational interface. By integrating Large Language Models with a vector database, the system delivers precise, context-aware responses based on data supplied by users. Moreover, the platform offers features such as automated document creation, clause retrieval, and legal correspondence. This method decreases the need for human involvement, lowers expenses, and improves access to legal services. The suggested system shows how AI can change conventional legal procedures into a more efficient, dependable, and user-friendly approach. Traditional methods often make analyzing legal documents a complex, time-consuming, and costly process. This project presents LegalGPT, an AI-driven legal assistant designed to make document comprehension and creation more straightforward.

**Key Words:** Artificial Intelligence, Natural Language Processing, Legal Assistant, RAG, Chatbot, Document Analysis

### 1. INTRODUCTION

In recent years, rapid advancements in Artificial Intelligence have significantly influenced various domains, including the legal industry. Traditional legal systems are often slow, expensive, and dependent on manual effort, making them less accessible to common users. Legal professionals are required to analyze lengthy documents, draft agreements, and provide consultations, which consumes considerable time and resources. This creates a need for an automated solution that can simplify and accelerate legal processes.

With the emergence of technologies such as Natural Language Processing (NLP) and Large Language Models (LLMs), it has become possible to develop intelligent systems capable of understanding and generating human-like text. These technologies enable the creation of AI-based assistants that can interact with users, analyze documents, and provide relevant insights. The integration of Retrieval-Augmented Generation (RAG) further enhances accuracy by grounding responses in specific document data.

This paper presents LegalGPT, an AI-driven legal assistant designed to streamline legal workflows. The system allows users to upload legal documents, process them into structured data, and interact through a chatbot to retrieve information or extract clauses. It also supports automated document generation and legal communication, reducing dependency on manual drafting. The rising need for fast and dependable legal support has brought to light the shortcomings of conventional systems, and this system seeks to address that gap.

### 2. SYSTEM ARCHITECTURE

The system architecture of Legal Ease AI is divided into five core modules:

Module Name	Responsibilities
User Authentication	Manages secure user registration and login with session handling and password encryption to ensure safe access to the platform.
Document Upload & Processing	Allows users to upload legal documents in PDF or DOCX format and processes them using document loaders and text splitters for further analysis.
RAG-Based Q&A Chatbot	Monitors students in real time using face detection, multiple face detection, and behavior analysis.
Legal Mailer	Generates formal legal emails or notices based on user input and sends them via SMTP for professional communication.
PDF Export Module	Converts AI-generated legal content into downloadable PDF files using ReportLab for offline use.

The LegalGPT system is structured into multiple integrated modules that work together to deliver a seamless and efficient legal assistance experience. It includes secure user authentication, document upload and processing, and a RAG-based AI chatbot for intelligent question answering. Additional modules such as clause extraction, document generation, and PDF export simplify complex legal tasks, while the legal mailer and advocate search features enhance practical usability.

### 3. METHODOLOGY

#### EXISTING SYSTEM

The current legal system mainly depends on manual methods for analyzing documents, drafting, and providing consultations. Legal professionals must review long documents, pinpoint key clauses, and offer guidance based on their specialized knowledge. This process takes a lot of time and demands considerable effort, particularly when handling large amounts of legal text. Moreover, users often need to consult lawyers for even basic questions, leading to higher time and expense. Moreover, traditional systems do not have automation or intelligent support, which makes it hard to access specific information quickly. Searching for applicable clauses in documents is frequently performed manually, resulting in inefficiencies and the risk of mistakes. Using outdated templates for creating legal documents also restricts personalization and reduces accuracy. In general, the current system is slow, costly, and not easily accessible, emphasizing the need for a more advanced solution such as LegalGPT. When a user engages with the system via the chatbot, a Retrieval-Augmented Generation (RAG) process is employed. The system pulls the most pertinent sections from the database depending on the query. These chunks are provided as context to the Large Language Model, which produces precise and context-sensitive responses. This guarantees that the responses are derived from the uploaded document and minimizes the chance of providing inaccurate information. In addition to handling queries, the system offers features like clause extraction and document creation. Users can pull out particular parts of documents or create new legal documents such as agreements and contracts. The system enables downloading documents in PDF format and sending legal emails via SMTP. In general, the approach combines.

#### PROPOSED SYSTEM

The proposed device, LegalGPT, is an AI-powered criminal assistant designed to simplify and modernize conventional criminal workflows by using integrating superior technology including huge Language fashions and a Retrieval-Augmented era (RAG) pipeline. The device allows users to safely upload prison files in codecs like PDF or DOCX, which might be then processed, break up into smaller chunks, and transformed into vector embeddings for efficient garage and retrieval. while a user interacts with the device thru a conversational chatbot, the RAG mechanism retrieves the most applicable content material from the uploaded report and gives correct, context-based totally responses, lowering the need for manual file evaluation. in addition to file expertise, the platform enables customers to extract precise clauses instantly and generate new prison documents consisting of agreements and NDAs, casting off the dependency on old templates. The gadget also consists of functions for downloading generated documents as PDFs, drafting formal criminal emails or notices, and sending them without delay through SMTP. furthermore, it guarantees cozy user authentication and statistics safety the use of databases like SQLite, even as additionally

presenting an advise seek module to help users discover criminal specialists primarily based on their desires. usual, the proposed device transforms the traditional, time-eating criminal system into a fast, efficient, and consumer-friendly revel in. whilst a user interacts with the system through a conversational chatbot, the RAG mechanism retrieves the maximum applicable content from the uploaded file and affords accurate, context-based totally responses, lowering the want for manual record evaluation.

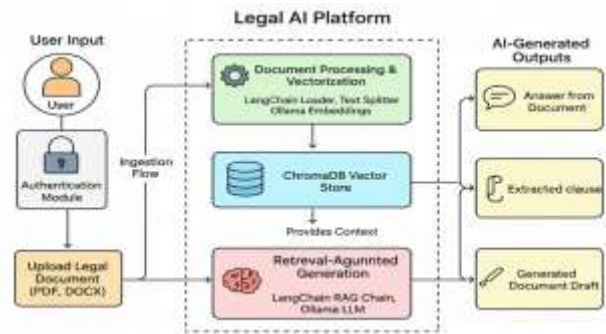


Fig -1: Flow chart

### 4. RESULT

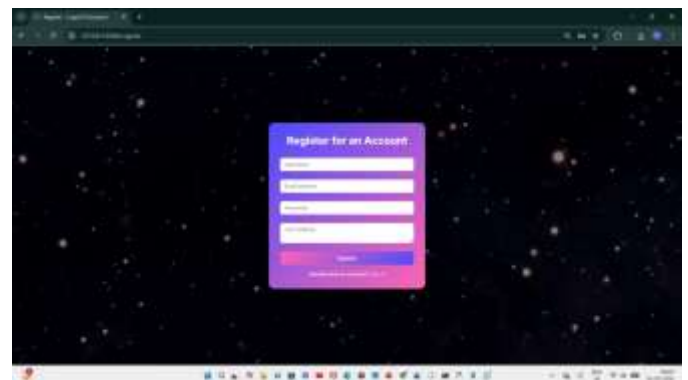
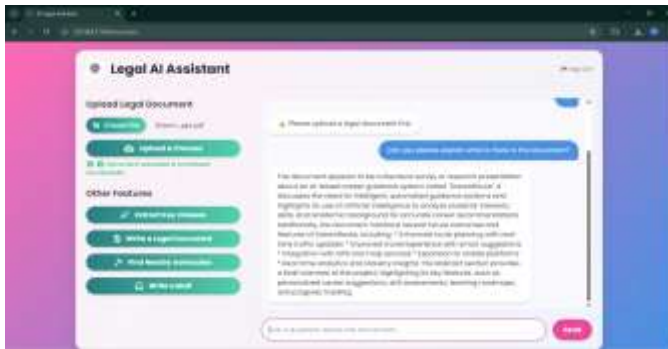


Fig -1: Secure login – Account creation



Fig -1: Features



**Fig -1:** Legal AI Assistant

## 4. CONCLUSION

LegalGPT modernizes traditional legal workflows by leveraging AI to deliver fast, accurate, and context-aware assistance for document analysis and drafting. It reduces dependency on manual effort and expert intervention through features such as clause extraction, intelligent question answering, automated document generation, and legal email communication. By incorporating technologies like Natural Language Processing and Retrieval-Augmented Generation, the system ensures that responses are grounded in user-provided documents, improving reliability and efficiency. Additionally, features like PDF export and an interactive chatbot enhance usability, while secure authentication safeguards sensitive data. Overall, LegalGPT simplifies complex legal tasks, improves accessibility for users, and demonstrates the potential of AI in transforming the legal industry with scope for future enhancements.

## ACKNOWLEDGEMENT

The authors sincerely thank the project mentors and faculty members for their guidance and support. Gratitude is also extended to the open-source and AI development communities for the tools and resources that made this project possible. Their contributions played a key role in the successful development of this system.

## REFERENCES

1. Ashish Vaswani, Noam Shazeer, Niki Parmar, Jakob Uszkoreit, Llion Jones, Aidan N. Gomez, Łukasz Kaiser, and Illia . Attention Is All You Need. *Advances in Neural Information Processing Systems*, 30, 2017.
2. Colin Raffel, Noam Shazeer, Adam Roberts, Katherine Lee, Sharan Narang, Michael Matena, Yanqi Zhou, Wei Li, and Peter J. Exploring the Boundaries of Transfer Learning Using a Unified Text-to-Text Transformer. *Journal of Machine Learning Research*, 21(1):54855551, 2020.
3. Jon Saad-Falcon, Omar Khattab, Christopher Potts, and Matei Zaharia. ARES: An Automated Evaluation Framework for Retrieval-Augmented Generation Systems. *arXiv preprint arXiv:2311.09476*, 2023.
4. Michalewicz, Z.: Li, Zhi; Cheng, Qian; Wu, Xiaodong. Retrieval-Augmented Generation in Educational Applications: A Comprehensive Review. *Computers & Education: Artificial Intelligence*, 2025.