

Virtual Legal Buddy-AI Chatbot for Legal Advice on Indian Laws

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Abstract

Access to accurate legal information remains a major challenge for citizens due to the complexity of laws, lack of legal awareness, high consultation costs, and limited availability of legal professionals. Many individuals struggle to understand their rights and legal procedures, especially in urgent or non-critical situations. To address these challenges, this paper proposes Virtual Legal Buddy, an AI-powered chatbot designed to provide instant, reliable, and user-friendly legal assistance based on Indian laws. The system allows users to interact through text or voice input, enabling them to ask legal questions in natural language and receive structured, easy-to-understand responses. By leveraging Natural Language Processing (NLP), information retrieval techniques, and a curated legal knowledge base, the chatbot delivers relevant legal guidance across multiple domains such as civil, criminal, family, and cyber laws. The application also supports secure user authentication and maintains query records for improved interaction and analysis. By automating legal information access through an intelligent conversational interface, the proposed system reduces dependency on manual consultations, enhances legal awareness, and offers a scalable, cost-effective solution for preliminary legal assistance.

Keywords — *Artificial Intelligence, Legal Chatbot, Natural Language Processing, Indian Laws, Virtual Legal Assistant, Voice-Based Interaction, Legal Information System.*

INTRODUCTION

With the rapid growth of digital platforms and the increasing complexity of legal systems, access to accurate and timely legal information has become a significant challenge for the general public. Many individuals lack awareness of their legal rights and procedures, while professional legal consultation is often expensive, time-consuming, and not easily accessible, especially for common or preliminary legal issues. Traditional methods of seeking legal advice rely heavily on manual consultations, paperwork, and physical visits to legal offices, which can create delays and inconvenience. In recent years, the integration of Artificial Intelligence and Natural Language Processing technologies has gained attention as an effective way to simplify legal information access and improve public legal awareness. Among these technologies, AI-powered chatbots provide a scalable, cost-effective, and user-friendly solution by enabling users to interact in natural language and receive instant responses. The proposed Virtual Legal Buddy – AI Chatbot for Legal Advice on Indian Laws is designed to address these challenges by offering an intelligent conversational platform that supports both text and voice-based interactions. The system enables users to query legal information related to Indian laws and receive relevant, structured guidance without manual intervention. This approach reduces dependency on traditional consultation methods, improves accessibility to legal knowledge, ensures seamless integration with modern web-based applications.

LITERATURE SURVEY

Legal information systems and automated legal assistance tools have gained significant attention in recent years due to the increasing complexity of laws and the need for quick access to legal guidance. Various approaches have been proposed, including rule-based expert systems, information retrieval models, and AI-driven chatbots, each with their own strengths and limitations.

Rule-Based Legal Expert Systems:

Khan and Afzal (2020) [1] proposed a rule-based legal chatbot to enhance legal awareness by providing support through pre-defined legal rules and decision-making logic. The proposed system provided structured responses to help users understand basic legal procedures. Nevertheless, the proposed system lacked flexibility in dealing with complex queries and required manual updates for legal rules, making it hard to scale.

Information Retrieval-Based Legal Systems:

Wolf et al. (2020) [2] talked about the information retrieval methods for searching large text databases using keyword-based and transformer-based approaches. These methods were helpful in the retrieval of important legal documents and statutes. But these methods were completely dependent on proper user queries and were not very helpful for users who lack proper knowledge of the law to understand the retrieved information.

AI and NLP-Based Legal Chatbots:

Bench-Capon & Gordon (2016) [3] examined the application of AI and NLP technologies for legal reasoning using argumentation frameworks. The research allowed for more natural interaction and understanding of legal queries in context. Nevertheless, the research pointed out the difficulties of dealing with complex legal language and ensuring sound responses to legal queries in various domains.

Voice-Based and Multilingual Legal Systems:

Surden (2018) [4] examined the use of machine learning techniques to support advanced legal decision systems, including voice-based and multilingual interactions. These approaches improved accessibility for users from diverse linguistic backgrounds. However, the study noted that such

systems require large training datasets and computational resources to maintain accuracy performance.

Gap in Existing Works:

From the literature review, it is evident that many existing legal assistance systems are either rule-limited, complex to use, or lack personalization. Few systems offer an integrated

platform combining AI-based chatbot interaction, secure user handling, and scalability for real-world deployment.

Our Contribution:

The proposed Virtual Legal Buddy addresses these limitations by providing an AI-based legal chatbot that offers user-friendly interaction through natural language. The system focuses on accessibility, scalability, and ease of use, making legal guidance more approachable for common users without requiring deep legal knowledge.

PROBLEM FORMULATION

Accessing legal guidance is often time-consuming, expensive, and confusing for common individuals. Traditional methods depend on physical consultations or complex legal documentation, which may not be easily understandable. There is a need for a simple, intelligent, and accessible system that can provide basic legal guidance efficiently. The proposed system uses AI and NLP techniques to assist users through an interactive legal chatbot.

PROBLEM STATEMENT

In many cases, individuals lack immediate access to reliable legal information and professional guidance. Existing legal systems either require physical presence, high consultation fees, or prior legal knowledge. This creates delays and confusion, especially for minor legal issues. Therefore, an intelligent digital system is required to provide timely, accurate, and user-friendly legal assistance.

OBJECTIVE

- To develop an AI-based virtual legal assistant for providing basic legal guidance.
- To enable users to interact with the system using natural language queries.
- To reduce dependency on manual legal consultations for common legal issues.
- To improve accessibility to legal information in a simple and understandable manner.
- To provide a scalable and efficient legal assistance platform.

SCOPE

The Virtual Legal Buddy can be used by individuals seeking high basic legal guidance related to common laws and procedures. It can be deployed as a web-based application for easy access.

The system helps improve legal awareness, reduces response time, and provides a convenient platform for preliminary legal assistance. With future enhancements, it can support multiple users, advanced AI models, and integration with legal professionals.

DRAWBACKS OF EXISTING SYSTEM

- Common people lack immediate access to legal guidance for basic legal issues.
- Legal document preparation requires professional help, increasing dependency on lawyers.
- Finding nearby police stations or courts is difficult without proper guidance.
- There is no centralized system to store and manage legal evidence securely.
- Existing systems are not user-friendly for non-technical users.

PROPOSED SYSTEM

The proposed Virtual Legal Buddy (Indian Legal Assistant) is a Streamlit-based web application designed to provide easy and accessible legal assistance to users. The system offers multiple legal support features such as an AI-based legal chatbot, legal document generation, nearby police station and court search, and secure evidence storage. By using Streamlit, the application provides an interactive and responsive user interface without the complexity of traditional web frameworks. The system reduces dependency on manual legal consultations and helps users handle basic legal needs efficiently.

Key Features of the Proposed System

1. User Registration and Login

- Allows users to securely register and access the system with personal credentials.

2. Legal Chatbot

- Provides AI-based answers to user queries related to Indian laws and legal rights.

3. Legal Document Generator

- Automatically generates legal documents based on user-provided details.

4. Find Nearby Police Stations and Courts

- Helps users locate nearby police stations and courts using location details.

5. Evidence Storage

- Enables users to upload and securely store case-related evidence in the system.

SYSTEM DESIGN

The Virtual Legal Buddy is designed as a Streamlit-based application that integrates AI, file handling, and location services to provide comprehensive legal assistance. The system uses Python libraries for backend logic and Streamlit components for the user interface.

Key Components:

- **Streamlit Web Interface:** Provides interactive UI elements such as forms, chat interface, sidebar navigation, and file uploads.

- **AI Legal Engine:** Processes user legal queries and generates appropriate responses using NLP techniques.

- **Document Generator Module:** Creates legal documents dynamically based on user-provided details.

Architecture:

- **User Interaction:** Users access the system through the Streamlit UI, where they can log in, submit legal queries, generate documents, and manage evidence.

- **Legal Query Processing:** User legal queries are processed within the Streamlit application using the Legal AI module to generate appropriate legal guidance.

- **Document Generation:** Based on user input, the system generates legal document templates such as complaints or applications using predefined formats.

- **Court and Police Lookup:** The system retrieves nearby police stations and courts from stored datasets to assist users in finding legal help.

- **Data and Evidence Storage:** User details, case information, generated documents, and uploaded evidence files are stored securely in the database or local storage.

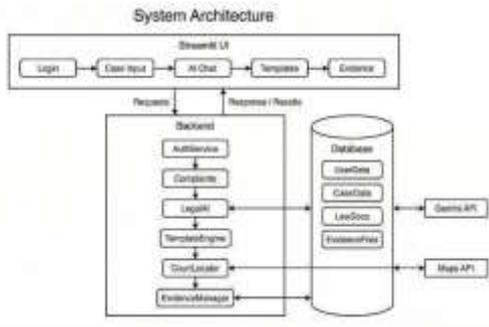


FIG.1.ARCHITECTURE DIAGRAM

Workflow

User registration and login

1. Enter legal query and get AI response
2. Generate legal documents
3. View nearby police stations and courts
4. The system supports multilingual interaction, allowing users to communicate in their preferred language.
5. The user uploads, stores, and views legal evidence and results through the dashboard

IMPLEMENTATION

The Virtual Legal Buddy system is implemented as a web-based application designed to provide accessible and user-friendly legal assistance based on Indian laws. The system integrates secure authentication, multilingual interaction, speech support, document handling, and location-based services to support users in understanding basic legal procedures.

1. User Registration and Login

- The user accesses the application and completes the registration process by providing basic details.
- User credentials are securely stored in the database.
- Existing users can log in using their registered details.
- This step ensures that only authenticated users can access legal services and stored records.

2. Legal Query Submission

- After login, the user can submit a legal query using text input or speech input.
- The system processes the input and analyzes the legal situation.
- Based on the analysis, the system provides a clear and structured response related to applicable Indian laws.
- This allows users to receive legal guidance without requiring immediate professional consultation.

3. Multilingual and Speech Support

- The system supports multiple languages to improve accessibility for users from different regions.
- Speech recognition enables users to interact. the queries through the dashboard
- Generated legal results and uploaded files can

4. Legal Document Generation

- Based on the user’s legal situation, the system generates legal documents such as FIR complaint drafts.
- The generated document can be reviewed and downloaded by the user.
- This feature helps users prepare preliminary legal documents efficiently.

5.Evidence and Location Support

Users can upload, store, and view legal evidence linked to be managed for future reference

- The system displays nearby police stations and courts based on their user’s location

RESULTS

The Indian Legal Assistant was successfully designed, implemented, and tested to provide accessible legal support to users through an AI-driven platform. The system integrates a legal chatbot, document generation, nearby legal help search, and evidence storage into a single web-based application to simplify interaction with legal services.

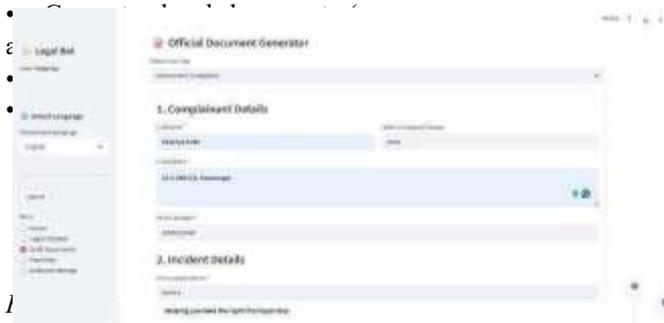
The application effectively supports text-based and voice-based queries, along with multilingual input, enabling users from diverse backgrounds to interact with the system comfortably. The legal chatbot provided relevant responses to user queries, while the document generator produced structured legal drafts based on user inputs.

User authentication and session management worked reliably, ensuring secure access to personal data and case- related information. The evidence storage module successfully allowed users to upload, store, and retrieve case- related files. Overall, the system demonstrated stable performance, usability, and scalability, fulfilling the primary objectives of improving legal awareness and accessibility.

FIG 2: USER LOGINPAGE

- Secure user login and registration
- Provides authenticated access to the system





- Displays all system features in one dashboard
- Supports text input, voice input, and multilingual selection
- Easy navigation for users



FIG 6: NEARBY LOCATIONS OF POLICE STATIONS

- Finds nearby police stations and courts
- Uses user-entered location details
- Displays accurate and relevant results



FIG 4: CHATBOT INTERFACE

- Allows users to ask legal queries
- Supports voice-based queries
- Provides multilingual legal assistance



FIG 7: EVIDENCE STORAGE

- Allows users to upload and store evidence files
- Secure storage linked to user cases
- Easy retrieval of uploaded evidence



FIG 5: DOCUMENT GENERATOR

FUTURE SCOPE

In the future, the Virtual Legal Buddy can be developed as a complete web-based platform to provide easier access for both clients and legal professionals. Separate login modules can be introduced for lawyers and clients, allowing them to use the system together with role-specific features. Clients can seek legal guidance and track their queries, while lawyers can manage consultations, respond to requests, and maintain case-related information. The system can also be enhanced by integrating customizable AI chatbots where organizations or legal firms can train the model using their own legal documents and case data. This will improve response accuracy and allow domain-specific legal assistance. With further improvements, the platform can become a collaborative digital legal ecosystem that simplifies legal support and communication.

CONCLUSION

This project presents Virtual Legal Buddy, an AI-based chatbot that makes legal information more accessible and easier to understand for common users. By using natural language processing and voice interaction, the system allows people to ask legal questions and receive instant guidance without depending on physical consultations. It helps reduce time, cost, and effort involved in accessing basic legal support. The web-based design ensures ease of use and scalability. Overall, the system highlights how AI can play a meaningful role in improving legal awareness and digital justice support.

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