



# A CHATBOT TO GUIDE MARGINALIZED COMMUNITY (LEGAL GUIDE)

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**Abstract:** Legal Guide is an innovative technology-driven initiative aimed at breaking down barriers for marginalized communities in India. Anchored by a chatbot named Legal Guide, powered by Node JS version 20.1, the platform offers a multilingual legal information repository and a comprehensive legal aid directory. Utilizing React JS for seamless user interaction and SQLite for robust database management, Legal Guide ensures intuitive assistance and accessible resources for all. With a mission to promote legal empowerment and enhance access to justice, Legal Guide stands as a beacon of support and connection in the pursuit of equality and fairness for all individuals. It is a pioneering endeavor leveraging cutting-edge technology to address the systemic challenges faced by marginalized communities across India. At its core is Ollama, an AI-powered chatbot developed using Node JS version 20.1, which serves as a gateway to a wealth of legal knowledge and assistance. Backed by React JS for a dynamic and user-friendly interface, Legal Guide offers a multilingual legal information repository to bridge language barriers. With SQLite as its database backbone, the platform ensures robust data management and scalability.

**Keywords:** Legal Guide, Marginalized communities, Node JS, Multilingual\_legal\_information.

## I. INTRODUCTION

Legal guide is an innovative initiative designed to empower marginalized communities in India by providing accessible legal resources and support. Through a multilingual legal information repository, individuals gain access to a wealth of legal knowledge in their native languages. Additionally, an AI-powered chatbot named Legalguide offers personalized assistance, guiding users through legal procedures and clarifying complex concepts. Complementing these features, a comprehensive legal aid directory connects individuals with reputable legal professionals and organizations. By leveraging technology to bridge gaps in legal access, Legal Guide aims to promote legal empowerment and enhance justice for all.

Accessible in Multiple Languages Provides a wide range of legal resources and knowledge accessible in multiple languages, catering to the diverse linguistic needs of marginalized communities. Comprehensive Resource Hub Serves as a centralized repository for legal information, covering various legal topics, rights, and procedures relevant to individuals' needs. Conversational Assistance: Utilizes advanced natural language processing (NLP) algorithms to interact with users conversationally, offering personalized assistance and guidance. Clarification and Guidance: Helps users navigate legal complexities, clarify legal concepts, and understand procedures through interactive dialogue

### 1.1 OBJECTIVE

The project is to develop and implement Legal Guide, a technology-driven initiative focused on empowering marginalized communities in India by enhancing their access to legal information, assistance, and support. Through a multifaceted approach, Legal Guide aims to address the systemic barriers faced by these communities in navigating the legal system. Specifically, the project seeks to achieve the following objectives:

Establish a multilingual legal information repository to provide comprehensive legal resources accessible in multiple languages; Introduce an AI-powered chatbot, named Ollama, to offer intuitive assistance and guidance, enabling individuals to clarify legal concepts, understand procedures, and access relevant resources; Curate a comprehensive legal aid directory, connecting individuals with reputable legal aid organizations and practitioners to provide expert guidance, representation, and support.

By leveraging cutting-edge technologies and innovative solutions, Legal Guide aims to promote legal empowerment and enhance access to justice for marginalized communities, ultimately contributing to a more equitable and inclusive society.



## 1.2 SCOPE

The scope of this project encompasses the development and implementation of Legal Guide, a comprehensive platform aimed at empowering marginalized communities in India through enhanced access to legal resources, assistance, and support. Within this scope, the project will focus on the creation of three key components: a multilingual legal information repository providing a wide range of legal resources accessible in multiple languages, an AI-powered chatbot named Ollama, designed to offer personalized assistance and guidance on legal queries and procedures, and a curated legal aid directory connecting individuals with reputable legal aid organizations and practitioners.

## II. ANALYSIS

### 2.1 SYSTEM ANALYSIS

System Analysis is a combined process dissecting the system responsibilities that are based on problem domain characteristics and user requirements

#### 2.1.1 PROBLEM DEFINITION

In India, marginalized communities face significant barriers when seeking legal assistance and navigating the complexities of the legal system. Access to legal information is often limited, particularly in languages accessible to these communities, and individuals may struggle to understand their rights and obligations within the legal framework. Furthermore, the lack of affordable legal aid exacerbates the challenges faced by marginalized individuals, hindering their ability to assert their rights and seek redressal for grievances. In light of these systemic barriers, there is a pressing need for innovative solutions that can bridge the gap between marginalized communities and legal resources, empowering individuals to navigate the legal landscape with confidence and access the justice they deserve. Thus, the problem statement for this project revolves around developing a comprehensive and accessible platform that provides multilingual legal information, intuitive assistance through an AI-powered chatbot, and connections to reputable legal aid services, ultimately promoting legal empowerment and enhancing access to justice for marginalized communities in India.

#### 2.1.2 EXISTING SYSTEM

An existing system that provides legal information and assistance to marginalized communities in India is the National Legal Services Authority (NALSA) Legal Services Clinics (LSCs) network. NALSA is a statutory body tasked with providing free legal aid and services to the underprivileged and marginalized sections of society. The LSCs are established at various levels, including at the district, taluka, and village levels, to provide legal aid and assistance to those in need.

These clinics offer services such as legal advice, drafting of legal documents, representation in courts, and organizing legal literacy camps and awareness programs. They aim to empower marginalized individuals to assert their rights and access justice effectively. However, the existing system may face challenges such as limited accessibility, especially in rural and remote areas, language barriers, and constraints in providing personalized assistance to individuals with diverse legal needs.

#### Disadvantages of Existing System:

- Traditional methods of legal assistance such as legal aid clinics and helplines may not be easily accessible to marginalized communities, especially those in remote or rural areas.
- Many existing systems may not adequately address the linguistic diversity of India, leading to challenges for individuals who speak regional languages or dialects.
- Existing systems may offer generalized information or assistance, lacking the ability to provide personalized guidance tailored to individual circumstances.
- Long Wait Times: Individuals seeking legal assistance through existing systems may experience long wait times for appointments or responses, delaying resolution of their legal issues.
- Resource Constraints: Legal aid clinics and resource centers may face resource constraints such as limited staff or funding, impacting their ability to provide timely and effective assistance to all those in need.

#### 2.1.3 PROPOSED SYSTEM

The proposed system, Legal Guide, is a comprehensive platform designed to empower marginalized communities in India by providing enhanced access to legal information, assistance, and support. This platform integrates innovative technologies and user-centric features to overcome the limitations of existing systems and address the specific needs of marginalized individuals. Key components of the proposed system include.



A centralized repository of legal resources accessible in multiple languages, catering to the linguistic diversity of India's marginalized communities. Comprehensive coverage of legal topics, including rights, procedures, and relevant laws, presented in a user-friendly format for easy comprehension. An intuitive chatbot powered by advanced natural language processing (NLP) algorithms, such as BERT, to offer personalized assistance and guidance. Capable of understanding user queries, clarifying legal concepts, and providing relevant information and resources tailored to individual needs. Offers multilingual support and conversational interactions to ensure accessibility and ease of use for users from diverse linguistic backgrounds.

**Advantages of Proposed System:**

- Through the AI-powered chatbot, Ollama, Legal Guide offers personalized assistance and guidance tailored to individual queries and circumstances. This ensures that users receive relevant information and support specific to their needs, enhancing their ability to navigate legal complexities effectively.
- By equipping individuals with legal knowledge and resources, Legal Guide empowers marginalized communities to assert their rights, make informed decisions, and advocate for themselves within the legal system.
- The curated legal aid directory connects users with reputable legal aid organizations and practitioners, providing them with access to expert guidance, representation, and support when needed.

**III. SYSTEM DESIGN**

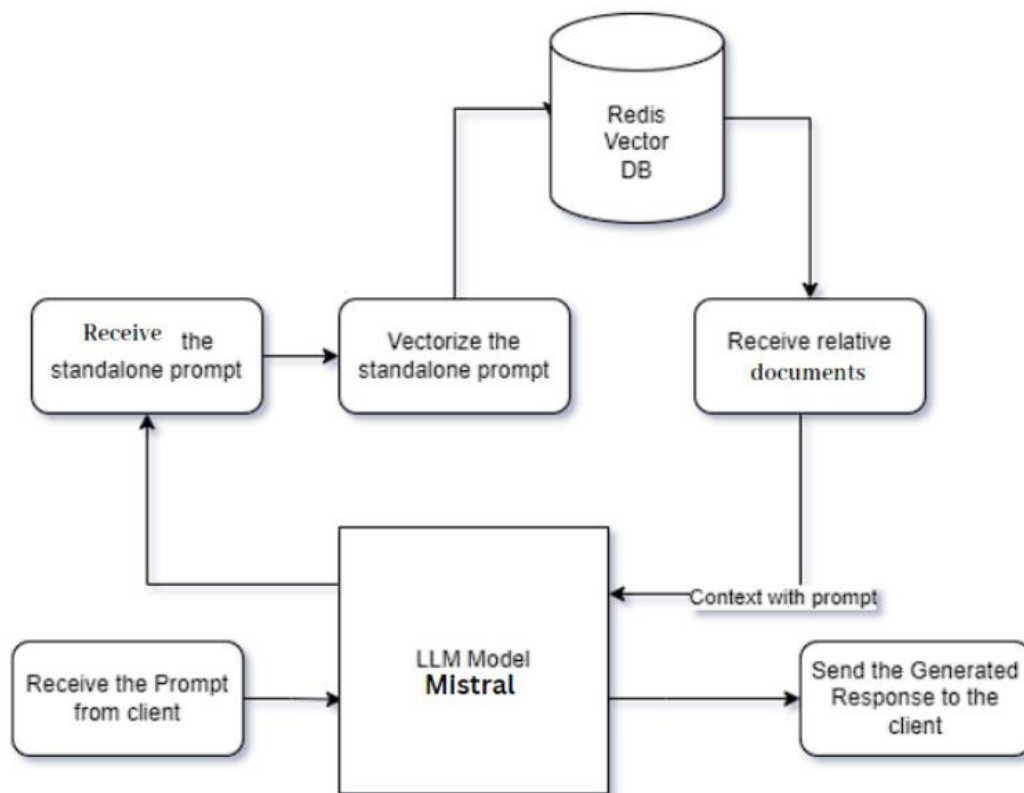


Fig. 1 Architecture diagram

**IV. MODULES**

**4.3.1. Chat Screen:**

**Description:** The Chat Screen module provides the user interface for interacting with the AI-powered chatbot, Ollama. It displays the chat interface where users can type messages and receive responses from Ollama in real-time. The Chat Screen module includes text input fields, message display area, and options for sending messages and interacting with Ollama.



#### 4.3.2. Chat History:

**Description:** The Chat History module stores and manages the conversation history between users and Ollama. It tracks the messages exchanged during each user session, including user queries, Ollama's responses, and any additional interactions or prompts. The Chat History module ensures that users can review previous conversations and access relevant information shared by Ollama.

#### 4.3.3. Generate Standalone Questions:

**Description:** The Generate Standalone Questions module generates standalone questions based on user queries or prompts. It analyzes the user's input and identifies key concepts or topics, then formulates relevant questions to further clarify or expand on the user's request. The module enhances the conversational experience by prompting users for additional information or context when needed.

#### 4.3.4. Fetch Related Documents from the Repository:

**Description:** The Fetch Related Documents from the Repository module retrieves relevant legal documents from the platform's repository based on user queries or prompts. It searches the repository for documents related to the topics or keywords mentioned in the user's input and presents them as additional resources or references. The module enriches the conversation by providing users with access to supplementary legal information.

#### 4.3.5. Generate Response with Related Document and Prompt:

**Description:** The Generate Response with Related Document and Prompt module generates a response combining relevant legal documents from the repository with additional prompts or clarifications. It synthesizes the information retrieved from the repository and formulates a comprehensive response to the user's query, including links to related documents and follow-up questions or suggestions. The module enriches the conversation by providing users with actionable insights and additional resources.

#### 4.3.6. Send Response to the Client:

**Description:** the response is transmitted securely and efficiently from the server to the client, maintaining the integrity and real-time nature of the conversation. The module facilitates seamless communication between the server-side processing components and the client-side user interface.

## V. RESULT AND EVALUATION

Legal Guide, presents a comprehensive and innovative solution to address the barriers to legal access faced by marginalized communities in India. The utilization of Node.js, React.js, and SQLite-DB underscores your commitment to efficiency and accessibility.

## VI. CONCLUSION

In conclusion, the Legal Guide project represents a transformative initiative leveraging technology to promote legal empowerment and enhance access to justice for marginalized communities in India. Through its innovative approach, the platform offers a comprehensive solution comprising a multilingual legal information repository, an AI-powered chatbot, and a curated directory of legal aid services. By providing intuitive guidance, personalized assistance, and connections to legal resources and professionals

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