**Justice Assist**

**Submitted for**

### Artificial Intelligence Machine Learning CSET301

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Submitted to

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**Jan-May 2025**

**SCHOOL OF COMPUTER SCIENCE AND ENGINEERING**

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# Abstract

In recent times, there has been a growing need to democratize access to legal information, particularly for individuals unfamiliar with complex legal systems. To address this, **Justice Assist** is developed as an AI-powered chatbot that provides legal guidance through a natural language interface. Built using **Streamlit** and integrated with **LLMs (LLaMA 3.2 via Groq)**, the system responds to real-life legal queries ranging from personal safety to investment laws. This tool aims to support individuals—especially vulnerable groups—by offering fast, AI-generated insights while promoting caution and verification.

# Introduction

India, being a densely populated and legally complex country, faces a significant challenge in making legal information accessible to the common citizen. Legal literacy remains low, and many people do not know how or where to seek justice when facing issues such as harassment, assault, or consumer grievances. **Justice Assist** is a conversational web tool built to bridge this gap. It uses natural language processing to understand users' questions and provide preliminary, AI-generated responses based on trained large language models. Although not a replacement for legal professionals, it aims to serve as a first layer of awareness and empowerment.

# Related Work

# Several government and non-government platforms provide static legal documentation (e.g., India Code, Nyaaya). However, most of these are not interactive and require users to manually search and interpret dense legal texts. More advanced solutions like LexisNexis or Manupatra are premium services and not easily accessible. Our approach differentiates itself by using LLMs like Groq's LLaMA 3.2 and Google’s Gemini, with user-friendly interaction through Streamlit, allowing conversational access to legal information. Semantic search is enhanced using the Qdrant vector database.

# Methodology

## Data Preprocessing

### Frontend: Built using Streamlit for a lightweight and responsive UI.

### Backend Logic:

### LLMs accessed via APIs (Groq and Gemini)

### Queries passed to get\_response() method for processing.

### Session Management: Maintains chat context using st.session\_state.

### Data Flow:

### User inputs query via chat interface.

### Input processed and routed to LLM with previous context.

### AI response is displayed and appended to chat history.

# Conclusions

**Justice Assist** provides a promising foundation for making legal awareness more accessible. By combining conversational AI with legal domain prompts, it helps bridge the gap between the public and legal systems. Though not a substitute for legal counsel, the platform empowers users with early insights and knowledge, promoting proactive action.

**Future Scope**

**Add voice-based query support** for accessibility.

**Multilingual capabilities** to cater to India’s diverse population.

**Connect with verified legal databases and APIs** for deeper legal coverage.

**Track and analyze query trends** to generate legal awareness reports.

**Deploy on cloud with user analytics** and feedback collection.

GitHub Link of our Project:

<https://github.com/anujyadav/Justice>Assist