

SYNOPSIS

Project Title: Development of an Integrated AI Chatbot for Assisting with Departmental Legal Cases/Information on a Website

Problem Statement:

The Labour, Skill Development, and Employment Department faces challenges in managing legal cases efficiently. Legal teams struggle with retrieving historical General Registers (GRs), managing case files, and addressing complex legal queries due to the large volume of information. The existing manual approach leads to inefficiencies, delays, and human errors, which create bottlenecks in workflow.

Objective:

The primary goal of this project is to develop an AI-powered chatbot that streamlines legal case management by automating document retrieval, providing instant access to case-related information, and answering legal queries accurately. The chatbot will seamlessly integrate with the department's website and existing workflow.

Scope of the Project:

- AI-based chatbot capable of retrieving historical GRs based on user queries.
- NLP-driven legal query resolution system.
- Automated case file/document management and tracking.
- Integration with the department's website for easy access.
- Secure authentication and role-based access for department employees.
- Scalable and efficient design ensuring high accuracy and reliability.

Features & Functionalities:

1. AI-Powered Search & Retrieval:

- Intelligent search for General Registers (GRs) and case files.
- Document indexing for efficient retrieval.

2. Legal Query Assistance:

- NLP-based chatbot trained on legal documents and regulations.
- Provides automated responses to case-related FAQs.

3. Case Tracking & Status Updates:

- Integration with case management systems.
- Automated alerts for case progress updates.

4. Seamless Web Integration:

- Embeddable chatbot for easy access via the department's website.
- User-friendly dashboard for case/document management.

5. Security & Compliance:

- Role-based access control for authorized users.
- Data encryption and compliance with legal security standards.

Development Phases:

1. Requirement Analysis: Gather legal case data and define chatbot functionalities.
2. AI Model Development: Train NLP models on legal datasets.
3. Chatbot & Backend Integration: Implement search, retrieval, and case tracking.
4. Deployment & Testing: Deploy chatbot and conduct expert testing for accuracy.

Expected Outcomes:

- Efficient legal case management with quick retrieval of GRs and case files.
- Automated legal assistance reducing manual effort and errors.
- Improved productivity with seamless case tracking.
- Cost and time savings for the legal team.

Potential Impact:

The AI chatbot will enhance operational efficiency by automating legal document retrieval, answering legal queries, and reducing workflow bottlenecks. This will lead to improved decision-making, faster case resolutions, and optimized departmental resource utilization.

Team Details:

1. AI & NLP Developer: [Shiv Gupta and Bharat Mishra] - Leads AI model development, chatbot training, and NLP implementation for legal queries.
2. Backend Developer: [R Manoj Kumar] - Develops the backend infrastructure, integrates databases, and ensures seamless API communication.
3. Frontend Developer: [Arnav Sonwani] - Designs and implements the user interface, ensuring accessibility and ease of use.
4. Data Engineer & Document Management Specialist: [Rishideep Sengupta] - Manages data storage, indexing, and retrieval mechanisms for legal documents.
5. Security & Compliance Specialist: [Garvit Haswani] - Ensures data encryption, access control, and compliance with legal security standards.

Conclusion: The proposed AI chatbot aims to revolutionize legal case management within the department by offering a smart, efficient, and automated solution. By integrating AI and NLP, the chatbot will streamline legal workflows, reduce delays, and significantly enhance the productivity of legal teams.
