

NATIONAL LEVEL PROJECT EXHIBITION

NyayAl

Project Name: NyāyAl

Team name: Future Advocates

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OUR TEAM



Rocky Kumar (Faculty)



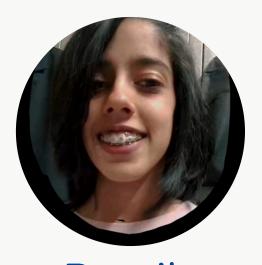
Raghav (Leader)



Aryan (Member)



Sneha (Member)



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INTRODUCTION

NyayAI is a digital platform designed to make legal help affordable and accessible for everyone in India. It allows citizens to share their legal problems online and receive guidance supported by Artificial Intelligence.

At the same time, the platform gives law students practical experience by letting them work on real cases with AI assistance. By combining technology and legal knowledge, NyayAI ensures faster, smarter, and fairer solutions, making the vision of "Nyay Sabke Liye" (Justice for AII) a reality in the digital era.

BACKGROUND

NyayAl bridges this gap by combining law, Al, and education:

- Citizens can submit legal issues online and receive AI-assisted guidance, making legal help affordable and efficient.
- Law students can take up real cases, use AI tools for research and documentation, and gain practical, hands-on learning.
- Artificial Intelligence helps in analyzing cases, suggesting laws, and providing solutions, supporting both citizens and students.

By integrating AI in legal education, NyayAI transforms learning from theoretical knowledge to practical skills, while also ensuring that citizens get fast and accessible justice.

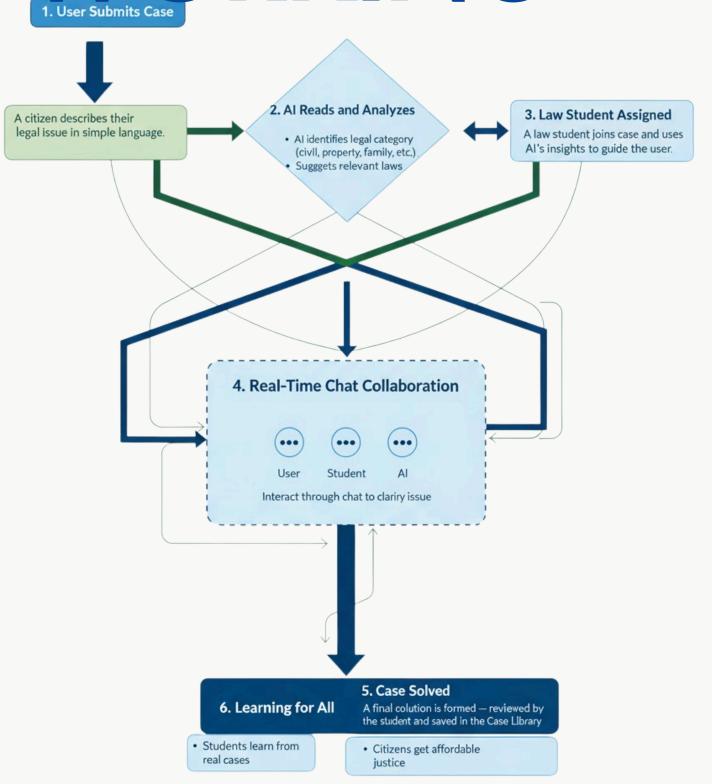
PROBLEMS

- High Legal Costs: Many citizens cannot afford lawyers or proper legal consultation.
- 2 Lack of Practical Learning: Law students have limited opportunities to work on real-world cases.
- 3 Delayed Legal Research: Finding relevant laws and judgments is often time-consuming.
- 4. Limited AI and technology adoption in legal practice.
- 5. Limited opportunities for collaborative learning.
- Delayed Legal Research: Finding relevant laws and judgments is often timeconsuming.

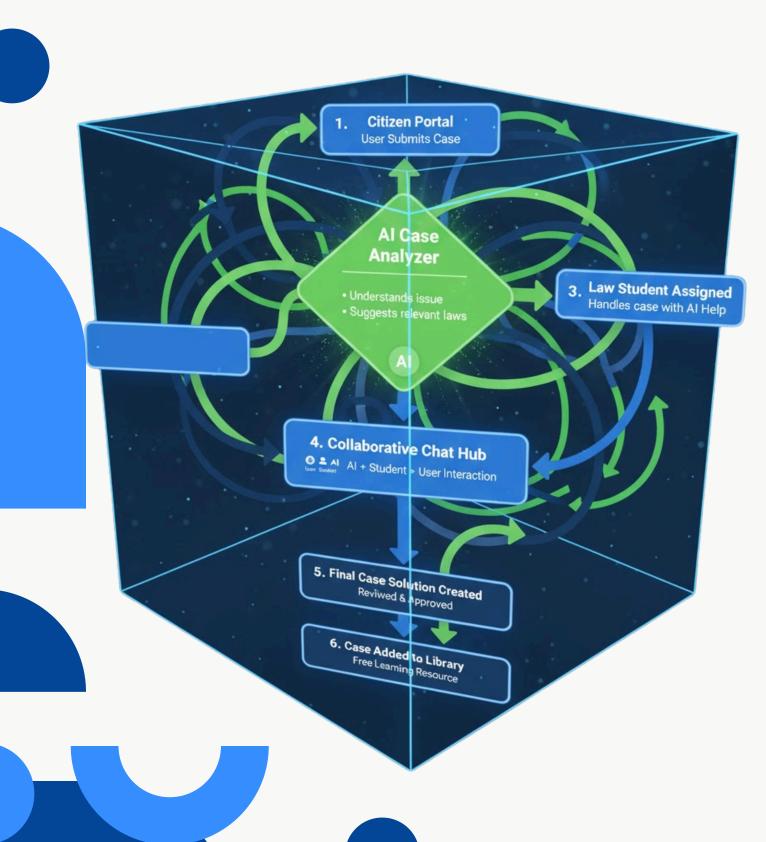
GOALS

- To digitize legal help and make it accessible to every Indian.
- 2 To provide free or low-cost Al-assisted legal advice.
- 3 To train law students with real legal cases guided by Al.
- To create a public case library for learning and reference.

FLOW CHATS OF WORKING



PROCESS



1. Process of Working for the User (The NyāyAl Flow)

This is the step-by-step journey a citizen and a law student take when using your service.

1. Case Submission:

 A citizen with a legal issue navigates to the NyāyAI portal. They describe their problem in simple, everyday language using a guided form.

2. Al Analysis & Triage:

 As soon as the case is submitted, the AI backend analyzes the text. It identifies the legal category (e.g., civil, property, family), extracts key entities, and suggests relevant laws and precedents from its knowledge base.

3. Assignment to Law Student:

The system intelligently assigns the case to an available law student. The student receives
the citizen's original query along with the AI's initial analysis and insights, giving them a
head start.

4. Real-Time Collaboration:

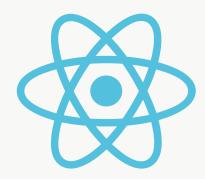
A secure chat interface is opened, connecting the citizen, the law student, and the AI
assistant. They can all interact in real-time. The student can ask clarifying questions, and
the citizen can provide more details. The AI can be queried by the student for quick legal
information.

5. Solution Formulation & Review:

 Guided by the discussion and AI-powered research, the law student drafts a final solution, which could be legal advice, a summary of options, or guidance on next steps.
 The student reviews this solution for accuracy and clarity.

6. Case Resolution and Knowledge Archiving:

 The finalized solution is delivered to the citizen. Once the case is closed, an anonymized version (with all personal information removed) is saved into a "Case Library," which serves as a valuable learning resource for other students.



TECHNOLOGY

Frontend: React.js: Your entire user interface (UI)—what the user sees and interacts with in their browser—is built with React. It manages the app's state, renders components, and handles user input. When a user clicks "Login," it's React that captures that event.

Backend: Node.js: — This is the engine of your application. Your Node.js server (likely using a framework like Express.js) is responsible for all the heavy lifting

- Communicating with the database (to save user info, case details, etc.).
- Handling the logic for user authentication.
- Creating and managing the API that your React frontend communicates with.



3. Database: MongoDB Atlas (Cloud Database)

MongoDB Atlas is used as the main cloud database for storing all user information, case details, and AI chat records.

It provides high scalability, flexibility, and security for handling large volumes of legal data. Data such as user profiles, case history, and chat logs are stored in collections with automatic indexing and backup. Being cloud-based, MongoDB Atlas ensures real-time access and faster query execution from anywhere in the world.

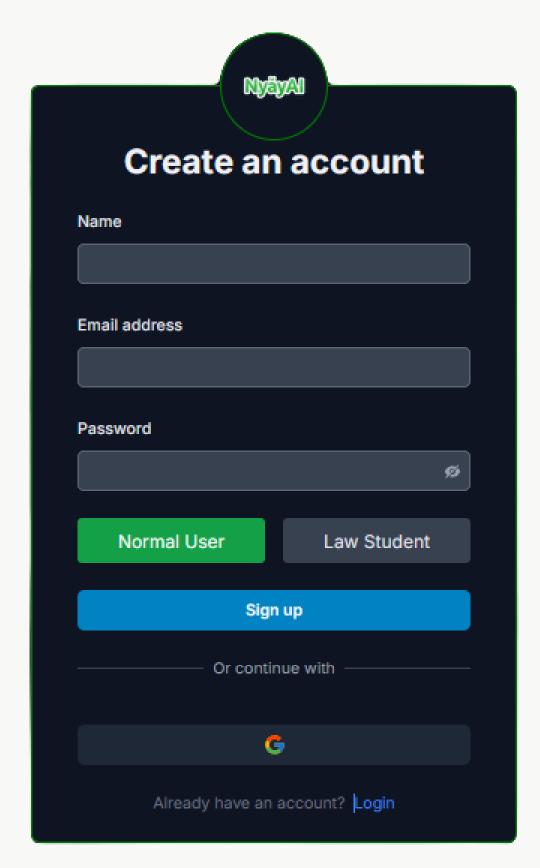
4. Artificial Intelligence: Gemini Al

Gemini AI (Google DeepMind model) is used as the main AI engine to analyze, summarize, and interpret legal cases.

It helps law students and users by generating Al-powered legal insights, document summaries, and case predictions.

Gemini AI enhances the system by providing natural language understanding, allowing users to chat in real time about legal topics.

It connects with the web app through a secure API for reliable and fast AI responses.



1. User Registration:

Users can create an account either by using Google Authentication or by manual signup (email, name, password).

2. Email Verification:

After signing up manually, users receive a verification email with a secure JWT token link. Once verified, their account becomes active and ready for access.

3. Login Process:

Verified users can log in securely using Google Auth or their registered credentials. JWT tokens are used to ensure safe and encrypted login sessions.

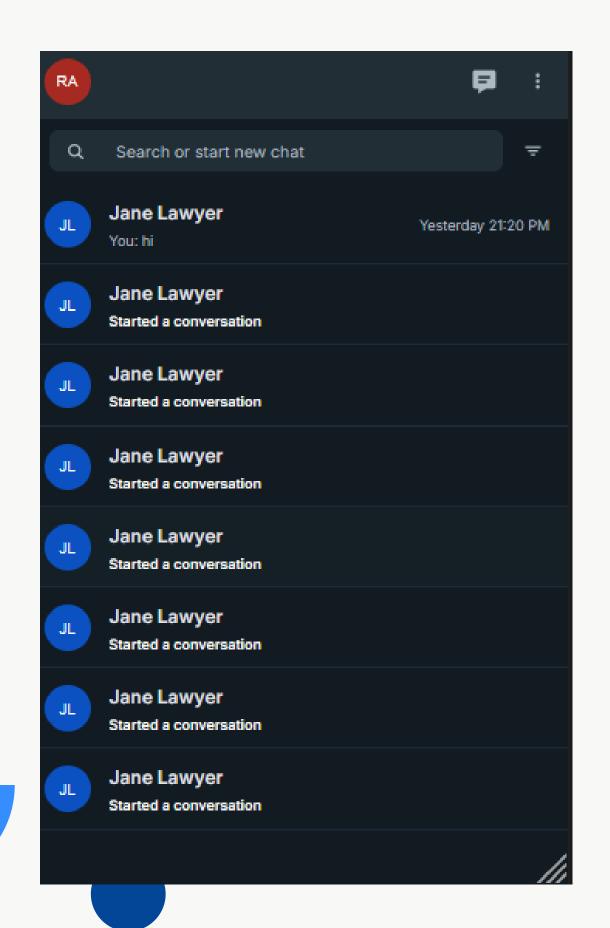
4. Connecting with a Lawyer:

After login, the system automatically matches the user with a random available lawyer based on the query or case type.

The connection is real-time and dynamic, ensuring immediate legal support.

5. AI + Chat System:

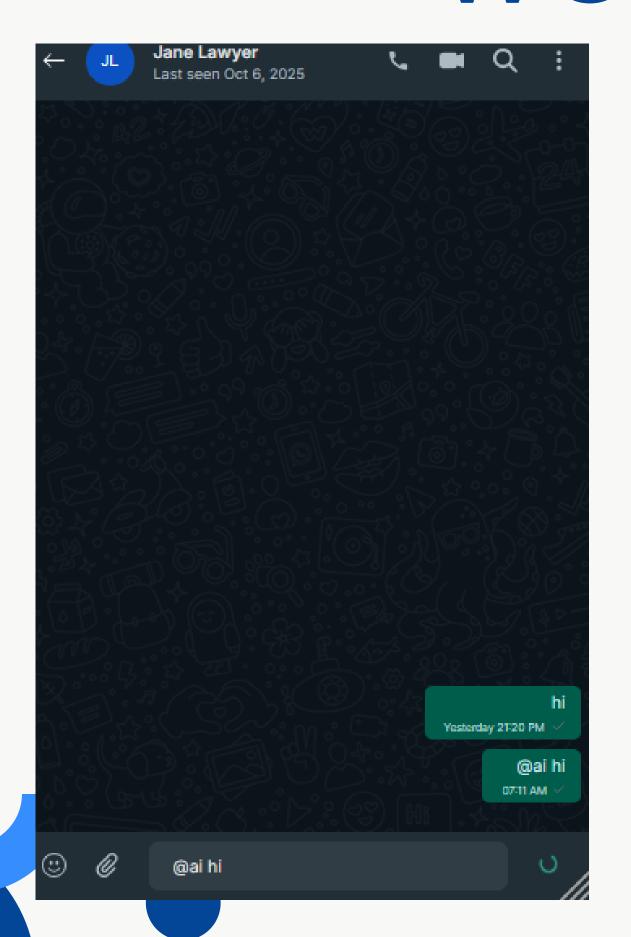
Users can start a chat where both the lawyer and AI (Gemini AI) participate. Gemini AI assists by providing legal suggestions, document summaries, and case interpretations during the conversation.



Chat System

The system allows users to chat directly with lawyers after account verification. A list of previous chats is shown, and users can start new conversations anytime.

Gemini Al assists during chats by providing legal suggestions and explanations. All chats are securely stored in the MongoDB database for future reference.



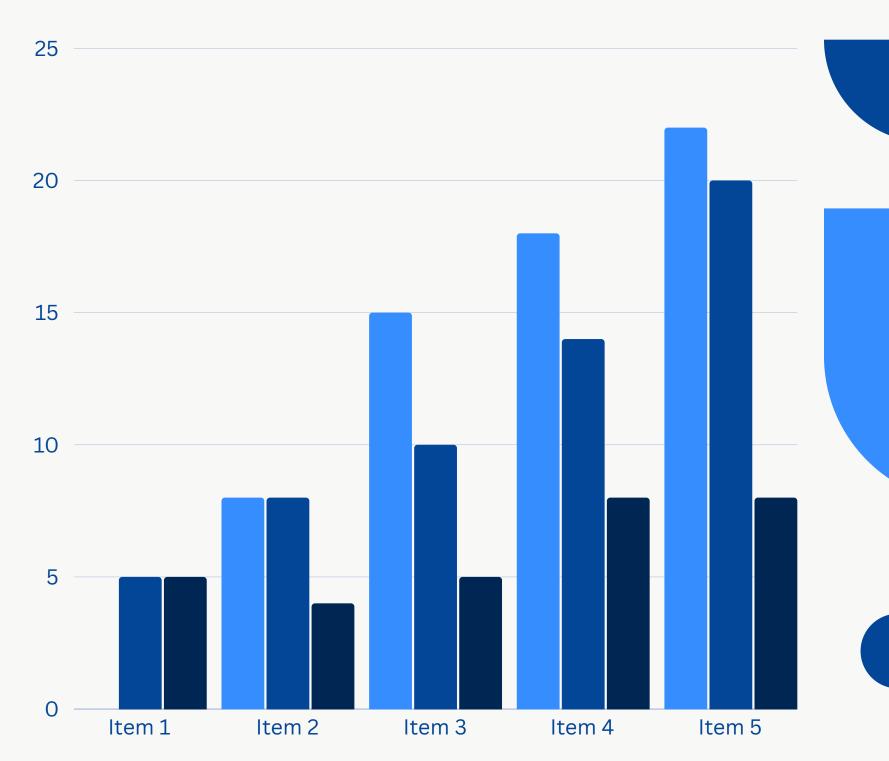
Users can directly message their connected lawyers through the built-in chat system.

Additionally, by typing @ai in the chat, users can interact with Gemini AI to get instant legal insights, explanations, or case-related help — all within the same conversation.

ANALYSIS

The platform provides an Alpowered analysis system that helps
law students and users understand
and solve legal cases at a much
cheaper rate.

By combining Gemini Al's analytical power with real-time lawyer collaboration, students can study real cases, learn legal reasoning, and assist in case solving — making legal help affordable and educational.



CONCLUSION

At the heart of NyayAI is a simple belief: everyone deserves access to legal clarity — not just those who can afford expensive law firms. We've built a system that translates complex legal ideas into real, actionable steps. We don't just deliver information; we empower people to act with confidence.

This is more than a tech project — it's about giving people a voice, protection, and peace of mind. Legal knowledge shouldn't be locked away behind books or fees. With NyayAI, we want a world where legal understanding is as easy as chatting with a friend.

We invite you — judges, mentors, collaborators — to join us in making justice and fairness accessible to all.

REFERENCE IDEA

This idea is inspired by government cybercrime initiatives where students or cyber volunteers assist in resolving cases <u>Cyber Volunteers</u> <u>Concept</u>

(https://cybercrime.gov.in/Webform/cyber_volunteers_concept.aspx)

The platform allows law students and volunteers to work on real or simulated cases, guided by AI support, helping them learn practical skills while contributing to efficient and affordable resolution of legal and cybercrime cases.

To enable real-time communication, the platform uses a WhatsApp-like chat interface WhatsApp (https://www.whatsapp.com), allowing users, lawyers, and AI to interact instantly, making legal guidance more accessible and immediate.

THANK YOU