

Gen AI Exchange Hackathon

Team Name : Impact Forge

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Problem Statement : Generative AI for Demystifying Legal Documents

Brief about the prototype:

- Generative AI-based platform that demystifies contracts and agreements.
- Provides clause-by-clause simplification in plain language, with role-based perspectives (Tenant vs Landlord, Employee vs Employer).
- Detects hidden risks, penalties, and obligations with easy-to-read risk heatmaps.
- Supports multilingual explanations (English, Hindi, Tamil, Marathi, etc.) and voice-based summaries for accessibility.
- Offers interactive Q&A: users can ask questions like “What happens if I cancel?”.
- Includes comparison tools for contracts (loan offers, updated agreements, T&Cs).
- Designed with Explainable AI → transparent reasoning and alignment with Indian laws.

Opportunity should be able to explain the following:

How is it different from other existing solutions? Current tools offer surface-level summaries.

ClauseClear provides a multi-dimensional analysis:

- **Role-Based Context:** It understands your position (e.g., employee, tenant) and tailors its explanation accordingly.
- **Deep Risk Analysis:** Instead of just simplifying text, it actively flags risks, penalties, and obligations using visual heatmaps.
- **India-First Accessibility:** We focus on multilingual support (Hindi, Tamil, etc.) and voice-based explanations to cater to diverse literacy levels across India.

How will it be able to solve the problem? ClauseClear directly tackles the information asymmetry in legal documents by:

- **Empowering Users:** Transforming dense jargon into plain language, giving individuals the knowledge to negotiate better terms and avoid unfavorable conditions.
- **Reducing Financial & Legal Risks:** Proactively identifying hidden clauses and potential pitfalls before a contract is signed.
- **Democratizing Legal Understanding:** Making crucial legal information accessible to everyone, regardless of their background or language.

USP of the proposed solution Our Unique Selling Proposition is "Protective Intelligence." We don't just summarize; we analyze, alert, and advise. ClauseClear acts as a personal legal guardian that explains what a contract says, what it really means for you, and what dangers might be hiding in the fine print.

List of features offered by the solution:

■ **Clause-Level Summarization:** Breaks down contracts into simple, easy-to-understand explanations for each clause.

⚠️ **Risk & Obligation Detection:** Automatically identifies and highlights potential risks, penalties, hidden fees, and mandatory obligations with a visual color-coded heatmap (Green, Yellow, Red).

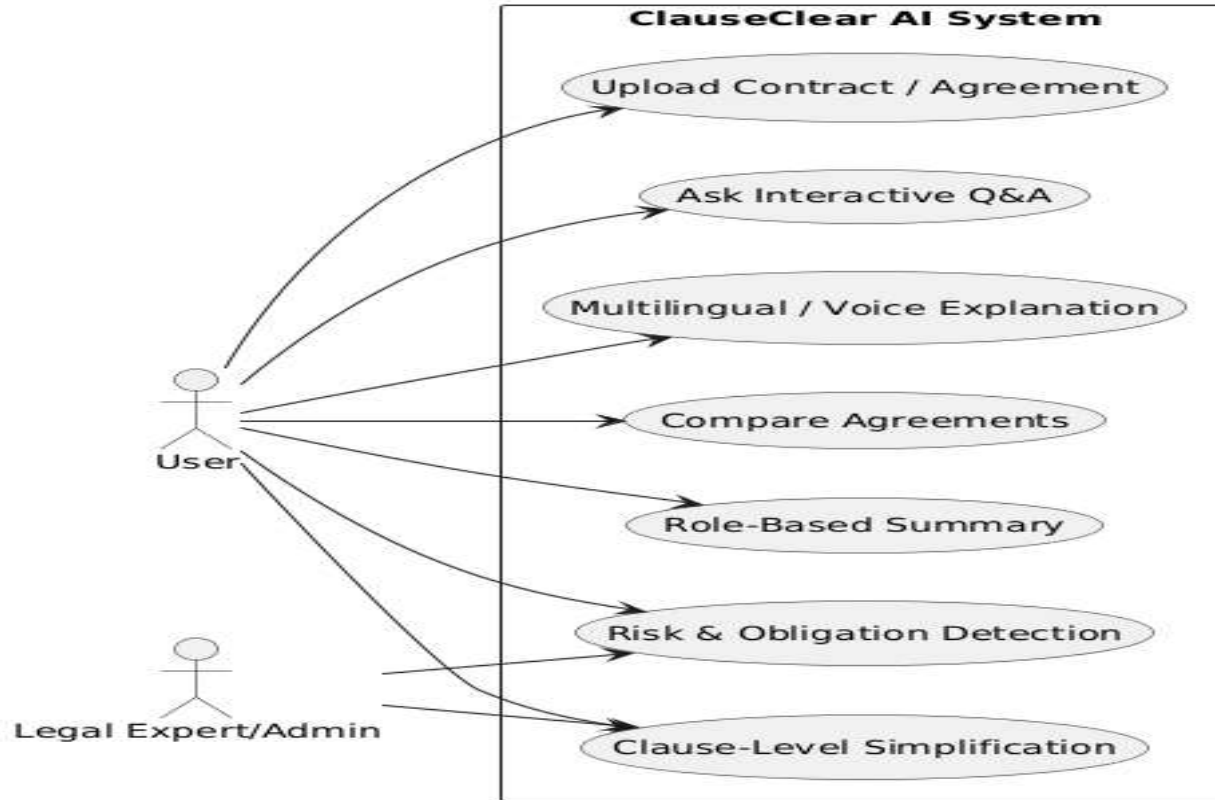
🌐 **Multilingual & Accessible Simplification:** Translates and simplifies legal text into multiple Indian languages (Hindi, Tamil, Marathi, etc.). Includes voice-based explanations for users with low literacy.

💬 **Interactive Legal Q&A Chatbot:** An AI assistant that answers specific questions about the document, like "What is my notice period?" or "What happens if I miss a payment?".

⚖️ **Agreement Comparison:** Allows users to upload and compare two different agreements (e.g., two job offers or two loan contracts) side-by-side to identify the better option.

🔒 **Explainable & Trusted AI:** Built on a foundation of LLMs combined with Legal Ontologies to ensure accuracy. The system provides reasons why a particular clause is flagged as risky, building user trust.

Process flow diagram or Use-case diagram



Wireframes/Mock diagrams of the proposed solution (optional)

ClauseClear - Upload Contract

Drag & Drop File Here

Browse File

Language: [English ▼]

Voice Mode: [On / Off]

Analyze Now

Risk & Obligation Dashboard

"Risk Heatmap: [Low Medium High]"

Obligations:

☐ "Tenant must pay monthly"

☐ "Landlord must provide maintenance"

Download Report PDF

"Original Document"	"Simplified Clauses"

"Clause 1: Original Text..."	"Clause 1: Simple explanation"
"Clause 2: Original Text..."	"Clause 2: Risk △"
"Clause 3: Original Text..."	"Clause 3: Obligation □"

"Toggle View: [User / Lawyer / Admin]"	

ClauseClear Q&A

AI: This clause means the tenant must pay rent.

User: What if payment is delayed?

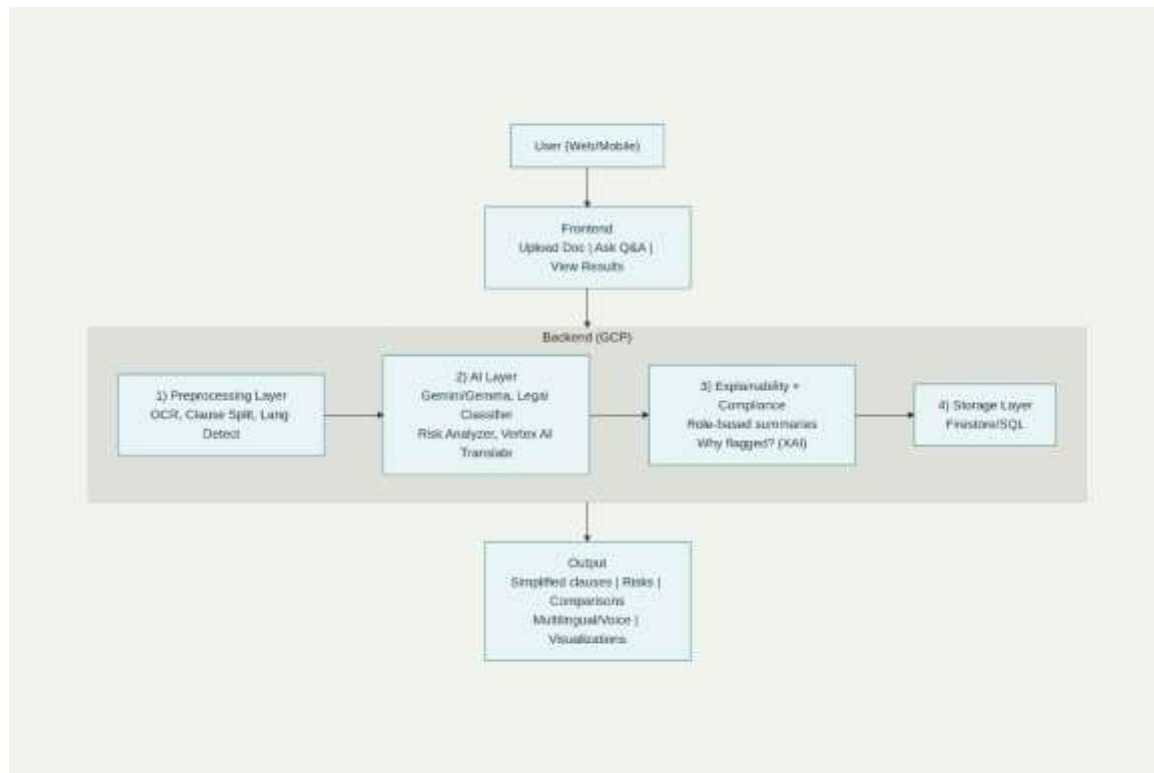
AI: A penalty of 5% is applied.

Ask a Question... [Send] [Translate] []

"Contract A"	"Contract B"

"Clause 1: Same"	"Clause 1: Same"
"Clause 2: Payment 10 days"	"Clause 2: Payment 5 days △"
"Clause 3: No termination"	"Clause 3: Termination allowed"

Architecture diagram of the proposed solution



Technologies to be used in the solution:

- **Cloud Platform:**
- **Google Cloud:** For secure, scalable, and compliant infrastructure.
- **Generative AI & Machine Learning:**
- **Google Vertex AI:** Central platform for managing AI models.
- **Gemini Models:** For advanced reasoning, multi-lingual summarization, and interactive Q&A.
- **Gemma Models:** Fine-tuned for specific legal clause classification tasks.
- **Gemini Code Assist:** To accelerate development and deployment.
- **Backend & API:**
- **Python (Flask/FastAPI):** For backend logic.
- **Cloud Run / App Engine:** For serverless and scalable application hosting.
- **Cloud Storage:** For secure and private document storage.
- **Frontend:**
- **React / Vue.js:** For building a responsive and interactive user interface.
- **Database:**
- **Cloud SQL / Firestore:** To store user data and legal ontology information.

Estimated implementation cost (optional):

Add as per the requirements for the hackathon:

Impact & Vision: Why ClauseClear Matters for India

Massive Social Impact

Everyday Citizens: Make safer decisions on rental agreements, loans, and insurance policies.

Employees: Understand employment contracts better and negotiate fairer terms.

Small Businesses: Simplify vendor agreements and service contracts without expensive legal fees.

The ClauseClear Advantage

India-First Focus: Built with a deep understanding of Indian languages and the legal challenges faced by its citizens.

Empowerment Through Technology: Uses cutting-edge AI to democratize legal knowledge, fostering a more transparent and equitable society.

Scalable & Accessible: A cloud-native solution with the potential for mass adoption, reaching millions through web and mobile platforms.

Our Pitch to the Judges:

“ClauseClear is your AI-powered legal guardian that simplifies contracts, flags hidden risks, and empowers every Indian — from tenants to entrepreneurs — to sign with confidence.”

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Thank you