Gen AI Exchange Hackathon

Google Cloud   H2S

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Problem Statement :   Generative AI for Demystifying Legal Documents

LegalEase AI – Demystifying Legal Documents with Generative AI

Problem:

- Legal documents are complex, full of jargon, and inaccessible to students, freelancers, tenants and MSMEs.
- Existing tools only summarize but fail to highlight risks or adapt to user context.
- People sign contracts blindly -> financial & legal vulnerability.

Our Solution:

AI Powered assistive platform that:

- Translates legal language into simple, plain English.
- Offers an Interactive Q&A chatbot for clause-specific queries
- Provides visual dashboards (timelines, flowcharts, risk overview)
- Adapts explanations by user profile (Student, Tenant, Freelancer, MSME)
- Supports multi-document comparison with risk scoring

Why it Stands Out?:

- Not Just "summarization" -> risk alerts + visualization + personalization.
- Positions itself as "Google Translate for Legal Docs, but with risk heatmaps and smart insights"
- Designed as an assistive tool, not legal advice (safety + accountability built in)

Impact:

- Empowers everyday people to understand & negotiate legal documents.
- Saves time & money on lawyers for small stakeholders.
- Builds trust and accessibility in legal processes.

LegalEase AI - Opportunity

How Different from Existing solution?:

Current tools (DoNotPay, LawGeex, Legalese Decoder, RobinAI):

- Focus on summarization or basic legal automation.
- Limited risk interpretation and contextual personalization.

LegalEase AI difference:

- Adds risk heatmap visualization on actual documents.
- Adapts to user profiles (Student, Tenant, Freelancer, MSME).
- Combines summaries, Q&A, and dashboards in one flow.

How it Solves the Problem?

- Simplifies legal jargon → makes contracts human-readable.
- Flags unfair clauses (deposit refunds, hidden charges, one-sided terminations).
- Interactive chatbot → lets users ask, "What does this mean for me?"
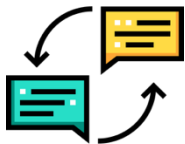- Comparison mode → shows how risks change across contract versions.

Unique Selling Proposition (USPs)

First-of-its-kind assistive AI legal translator with:

- Risk heatmap overlays (instant visual understanding).
- Profile-based explanations (tailored insights).
- Confidence-level indicators (transparent about AI reliability).

Positions itself as "Google Translate for Legal Docs + Risk Radar."

Google Cloud

H2S

LegalEase AI - Features

Plain Language Translation
Converts dense legal jargon into simple, easy-to-read text.

Risk Heatmap Overlay
Highlights risky clauses directly in the PDF with red/yellow/green markers.
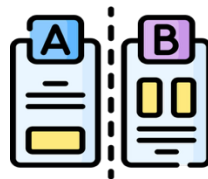
Interactive Legal Chatbot
Context-aware answers, linked back to the original clause.

User Profile Tailoring
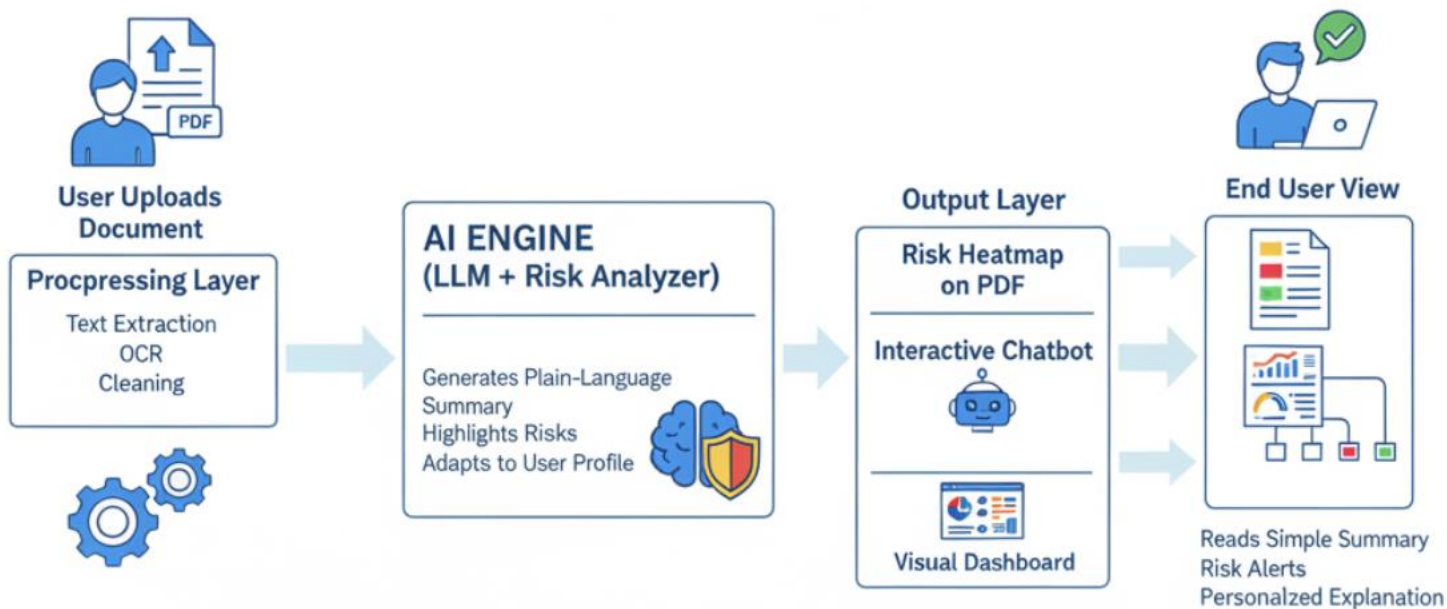Same clause explained differently based on user needs.

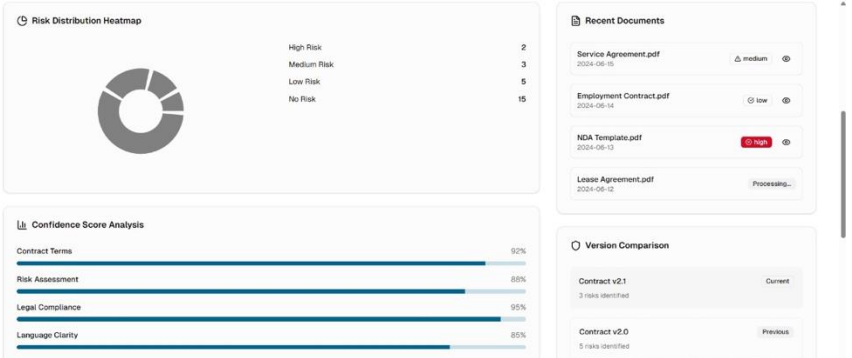### Multi Document Comparison
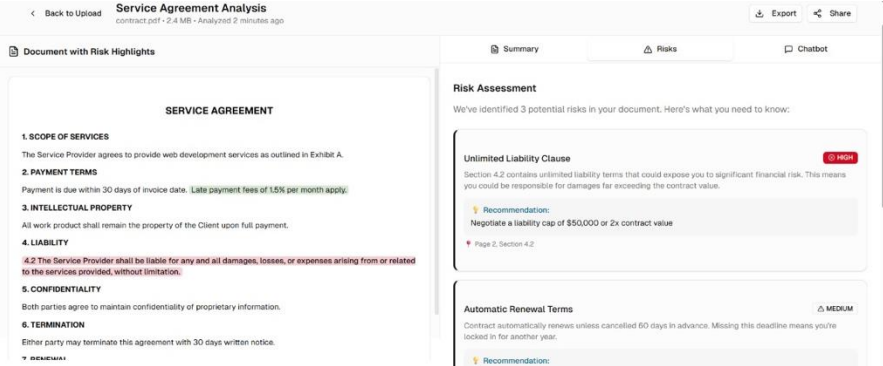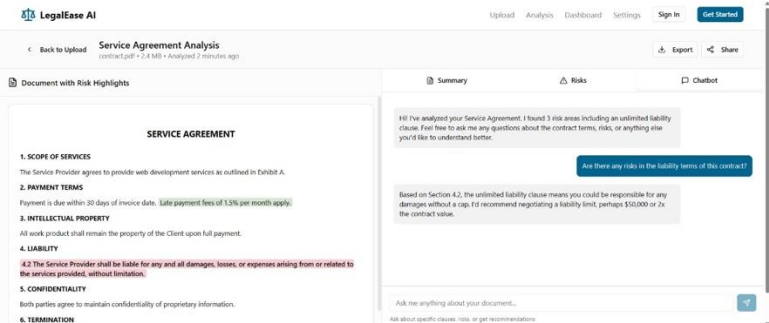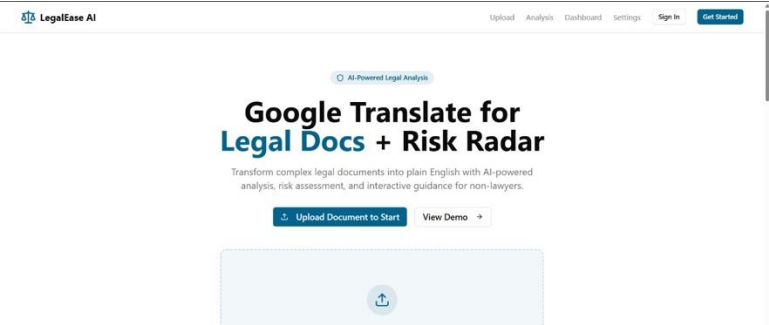Compare contract versions side by side.

Transparency & Safety Layer
Confidence-level indicators on each explanation.

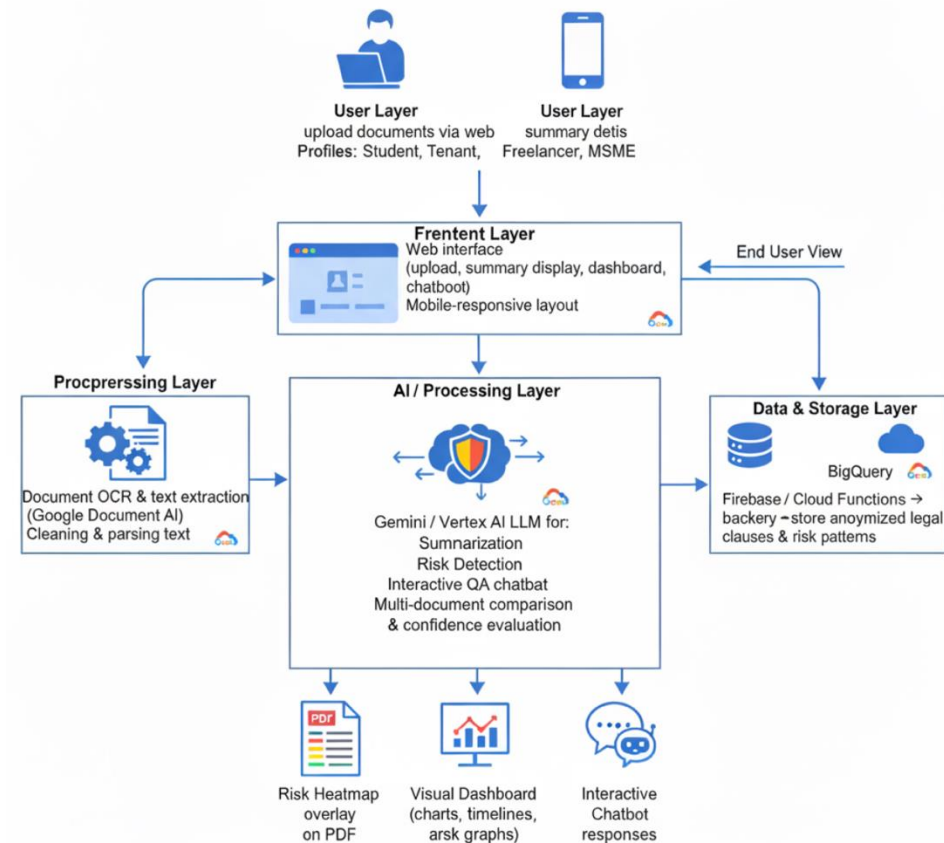# LegalEase AI – Use Case Diagram

LegalEase AI – Wireframes/Mockups

LegalEase AI – Architecture Diagram

LegalEase AI – Tech Stack

AI & ML

- Gemini / Vertex AI LLM → Summarization, risk detection, interactive Q&A
- Generative AI → Plain-language explanations
- AI-based Document Comparison → Highlights clause differences & risks

Document Processing

- Google Document AI → OCR & text extraction
- Preprocessing scripts → Clean & structure text

Backend & Cloud

- Firebase + Cloud Functions → Real-time storage & serverless backend
- BigQuery → Clause/risk pattern database

Frontend & UI

- Responsive Web Interface → Upload, dashboards, chatbot
- Visualizations → Risk heatmap, charts, timelines

Security & Compliance

- Encrypted document storage, Firebase Auth
- Disclaimer & confidence

Integration Tools

- Gemini Code Assist → Accelerates prototype development
- Vertex AI Search → Clause similarity & comparison

LegalEase AI – Estimated Cost of Implementation

1. Cloud Services (Google Cloud)

Component	Estimated Cost*	Notes
Vertex AI (LLM, Gemma)	₹15,000–₹25,000 / month	For summarization, Q&A, and risk detection
Document AI (OCR)	₹5,000–₹10,000 / month	Text extraction from PDFs & scanned docs
BigQuery	₹2,000–₹5,000 / month	Store anonymized clause data
Firebase + Cloud Functions	₹3,000–₹5,000 / month	Backend, real-time database, serverless execution

2. Frontend / UI Development

- Web / Mobile interface: ₹10,000–₹15,000 (design + basic development using Next.js / Tailwind)

3. Miscellaneous

- Prototype tools / libraries / icons: ₹2,000–₹3,000

Assumptions

- Costs assume hackathon scale / prototype stage.
- Production-grade scaling may increase costs.
- AI usage is optimized for prototype & demo purposes.

LegalEase AI – Links

Github

Website

Youtube

Gen AI Exchange Hackathon

Thank you