Legal Compass AI — Hackathon Q&A Bank

Product & Value

Q: What problem are you solving? A: Legal research is slow, language-limited, and hard to verify. We deliver bilingual, grounded answers with citations to official sources.

Q: Who are the users? A: Lawyers, students, researchers, compliance teams, and citizens seeking accurate legal guidance.

Q: What makes it different from ChatGPT? A: We use retrieval-augmented generation with verifiable citations, legal metadata, and statute-specific grounding.

Q: Is this legal advice? A: No. It's an informational research assistant with citations to primary sources.

Tech & Architecture

Q: What stack did you use? A: Vite + React + Tailwind for UI; Python RAG service with a vector database (Chroma) for retrieval.

Q: How does the RAG flow work? A: Query → normalize language → retrieve top-k statute/judgment chunks → generate answer → attach citations.

Q: What LLM do you use? A: We can plug in any standard LLM; the key is grounding via retrieval and citations.

Q: How do you handle Hindi queries? A: We map bilingual terms and sections, then run retrieval on normalized text.

Data & Sources

Q: What data sources are used? A: IPC/BNS sections, IT and regulatory texts, and Supreme/High Court judgments.

Q: Are sources official? A: Yes, citations link back to official statutes or digitized government documents.

Q: How is data cleaned? A: Parsing → chunking → metadata tagging (section, act, year) for accurate retrieval.

Accuracy & Reliability

Q: How do you prevent hallucinations? A: Answers are restricted to retrieved chunks; every statement is footnoted.

Q: What if no relevant sources are found? A: The system responds with “insufficient evidence” and requests clarification.

Q: Any evaluation done? A: We ran manual relevance checks and retrieval accuracy sampling.

Demo & Features

Q: What should we notice in the demo? A: Bilingual parity, IPC↔BNS mapping, clickable citations, and judgment summaries.

Q: Can it compare old and new laws? A: Yes, it shows IPC sections side-by-side with BNS counterparts.

Q: Can it summarize long judgments? A: Yes, we extract key facts, arguments, and outcomes.

Security & Ethics

Q: Do you store user queries? A: The system can be configured for no-log mode; logs are optional for improvement.

Q: How do you address bias? A: We stick to primary legal sources and present citations for verification.

Scalability & Deployment

Q: How scalable is this? A: Vector retrieval scales horizontally; we can shard by act or jurisdiction.

Q: What about latency? A: Retrieval is fast; most time is in generation, which can be optimized with caching.

Q: Can it be deployed on-prem? A: Yes, the stack can run locally with private data sources.

Roadmap

Q: What’s next? A: Add more languages, include tribunal data, OCR integration, and audit logs.

Q: Can this be commercialized? A: Yes, as a legal research SaaS with institutional subscriptions.

Tough/Tricky Questions

Q: What if a citation is wrong? A: We show sources so users can verify. We also log mismatches to improve retrieval.

Q: Why not just keyword search? A: RAG provides contextual answers and cross-references across acts and judgments.

Q: How do you handle conflicting judgments? A: We show multiple citations and don't assert one as definitive without context.

Q: What are the limitations? A: Dataset coverage and OCR quality for scanned documents; we're addressing both.

One-Line Answers (Rapid Fire)

- **Biggest innovation:** Verifiable bilingual legal RAG with IPC↔BNS mapping.
- **Core benefit:** Faster, trustworthy legal research.
- **Target user:** Legal professionals and citizens.
- **Why win:** High impact, strong technical depth, practical demo.