

CASE BRIDGE

AI-Powered Legal Research & Case Analysis

G 474

Nikhilesh Nilagiri



PROJECT SCOPE

Objective : Build a web-based research assistant that retrieves the top 5 most relevant legal cases for a query and generates a concise, citation-grounded analysis brief.

Core Capabilities :

- Semantic case retrieval
- Concise summarization
- Hallucination minimization

Target Users :

- Lawyers & legal researchers
- Law students
- Policy analysts

End Goal :

- MVP web tool with query input, results page, and downloadable brief
- Integrated retrieval + legal language model for citation-grounded analysis
- Evaluation of retrieval accuracy and citation precision

Understanding the Research Paper (CLERC)

Key Insights from the Paper :

- CLERC dataset – 1.8M+ U.S. federal cases
- Case retrieval – precedent search
- Analysis generation – citation-based legal briefs

Business Problem Identified in the Paper :

- Manual precedent search – time-consuming
- AI tools – hallucinated citations
- Poor long-context legal reasoning

Challenges in Legal AI :

- Long legal documents – hundreds of pages
- Precise, credible citations required
- Domain-specific legal vocabulary

Paper's Benchmarks:

Shows current models struggle with both retrieval and citation-faithful generation

BUSINESS CASE ADDRESSED

Current Pain Points

- Time-intensive – manual case law search
- High costs – limited access for small firms
- Citation errors – hallucinated references

Business Value of Case Bridge

- Faster research – seconds vs. hours
- Lower costs – affordable/open access
- Trustworthy outputs – citation-grounded summaries
- Scalable – adaptable to other jurisdictions/domains

PROPOSED SOLUTION

Idea & Work Flow:

Next-gen legal research platform – hybrid retrieval, AI brief generation, jurisdiction-specific (U.S. & India)

Hybrid Retrieval

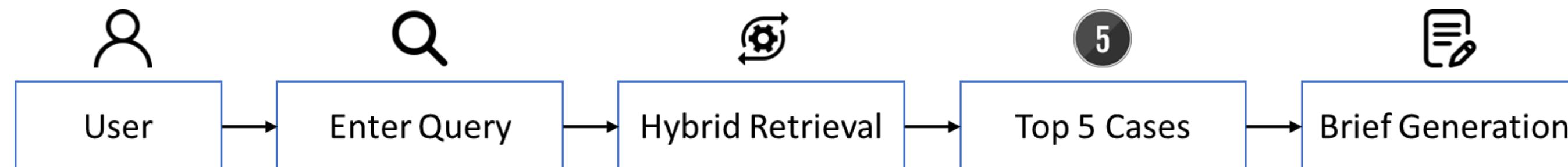
Uses multiple retrieval models (keyword-based and semantic) for comprehensive legal coverage

Context-Aware Processing

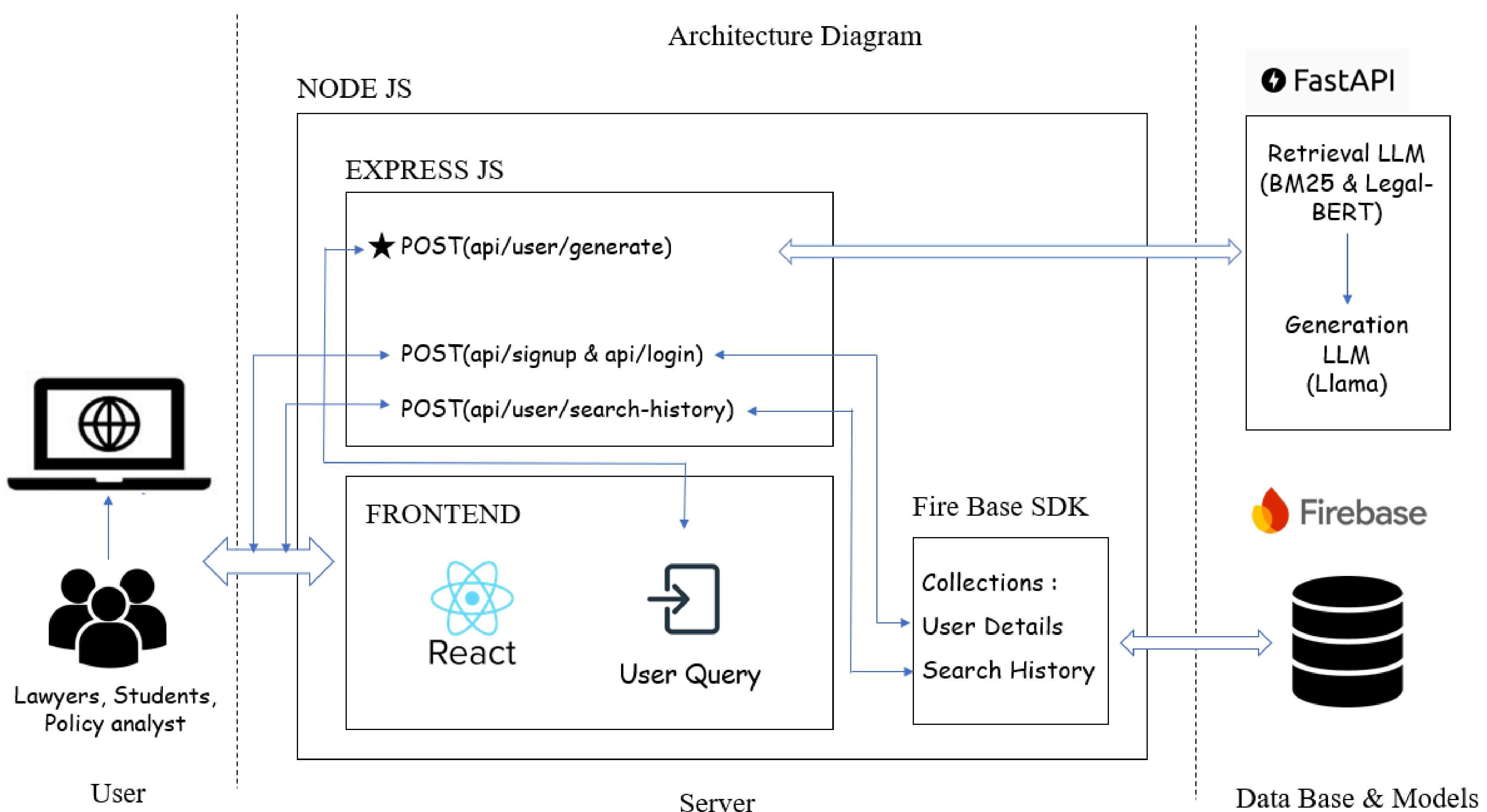
Context-aware re-ranking for jurisdiction relevance

Brief Generation

LLM produces concise, verified, and jurisdiction-aware legal briefs, scalable to other domains



Architecture Diagram





THANK YOU
