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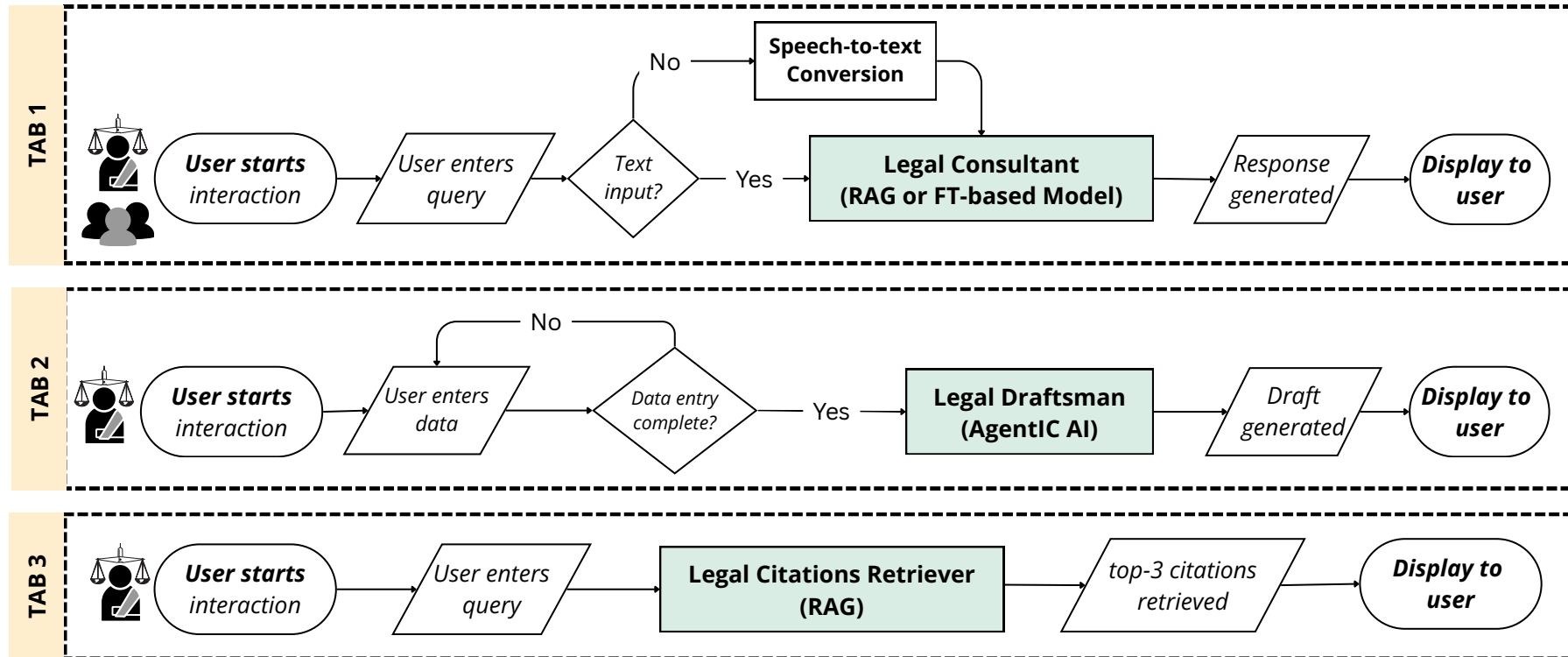**AI Legal Assistant for Family Law**

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1. SCOPE AND DELIVERABLES

 Wakeel is an AI-powered legal assistant that focuses on Pakistan Family Law, supporting Urdu and English interaction. Tailored for Pakistan's context, it enables Urdu-speaking users and lawyers to access legal advice, draft petitions, and retrieve relevant case laws through LLM-driven consultation and citation tools.

innovation
- **Urdu-First Legal Access:** _Lets users ask legal questions in Urdu and get accurate, user-friendly responses._
- **AI-Powered Drafting:** _Enables lawyers to quickly generate petitions like Khula using agentic AI workflows._
- **Contextual Case Retrieval:** _Combines RAG with Pakistan family law texts and case law to provide relevant, precedent-based answers._

Intended Audience: General Public, Lawyers

2. PROGRESS OF THE PROJECT

Deliverables Overview (with % Completion)

- TAB 1 – Legal Consulting – 70% complete
- TAB 2 – Drafting Interface – 80% complete
- TAB 3 – Citation Retrieval – 70% complete

✅ **What's working well**

- Successfully experimented with multiple LLMs and finalized the models for each module
- Retrieval-Augmented Generation (RAG) and finetuning workflows are complete
- Core UI and system architecture ("gray structure") is built and functional

⚠ **Blockers or Pending Issues**

- Integration across components is still in progress
- Smaller models show poor performance in Urdu, requiring further experimentation or fallback strategies

- **Technologies in Use**

  Key Tools/Frameworks, LangChain, HuggingFace, Streamlit, CrewAI
- **LLMs/APIs**

  deepseek-llm-7b-chat, mistral, llama3-70b-8192, Groq API

Evaluation Metric

Current Metric: Informal accuracy, based on expected vs. generated output

Next Steps: Define structured test dataset and use cases for formal evaluation

Planned Validation: Solicit feedback from at least one practicing lawyer

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3. DEMO HIGHLIGHTS

What We'll Showcase Live

Tab 1:
- Real-time responses from a fine-tuned LLM (via UI)
- Responses from a RAG-enhanced LLM (demonstrated via working Python notebook)

Tab 2:
- AI Draftsman (demonstrated via working Python notebook)

Tab 3:
- Legal Citations Retriever (demonstrated via working Python notebook)

Backend has not been fully integrated with UI yet.

4. NEXT STEPS

Planned Work After the Demo
- Improve the UI for a cleaner, user-friendly experience
- Integrate all backend components into a unified Streamlit interface
- Conduct formal evaluation using a test dataset and lawyer feedback
- Deploy the app on Hugging Face Spaces (currently running locally)
- Integrate speech-to-text model (whisper)

Solving Current Blockers / Improving Performance
- Optimize prompts for Tab 1 to improve response relevance
- Refactor code for modularity and reuse across tabs
- Create internal documentation for each tab to support future development and debugging
- Continue experimenting with Urdu performance across models to improve language handling

Hosting / Deployment Plan
- Final deployment planned on Hugging Face Spaces using Streamlit

Support / Dependencies (Optional)
- May require colab units for large models
- May require HuggingFace credits

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