**🔹 Week 1 – Setup & Foundations**

🎯 Goal: Learn FastAPI basics, set up project skeleton, extract small dataset.

* **AI Engineer (Backend: Retrieval API)**
  + RAG research + FAISS demo (6h).
  + Compare embedding models (3h).
  + Plan explainability logic (citations) (3h).
  + **Backend:** Build /search FastAPI endpoint → input query, return top-3 clauses (8h).
* **Data Engineer (Backend: Data API)**
  + Collect 3 Nepali law PDFs (3h).
  + Try PyMuPDF + OCR extraction (4h).
  + Normalize Unicode + clean text (4h).
  + Draft dataset schema (3h).
  + **Backend:** Create /clauses FastAPI endpoint → return stored law clauses (6h).
* **System Developer (Backend: Auth API)**
  + Set up GitHub + FastAPI skeleton project (3h).
  + Build basic auth (JWT login/signup) (8h).
  + Draft chatbot UI mockups (3h).
  + Create survey form (2h).
  + **Backend:** Add /auth/register & /auth/login (4h).

**🔹 Week 2 – First Prototypes**

🎯 Goal: First dataset, prototype chatbot, connect APIs.

* **AI Engineer (Backend: Ask API)**
  + Build RAG prototype with 100 clauses (6h).
  + Run queries Nepali/English (4h).
  + Research LoRA/Unsloth fine-tuning (4h).
  + Prepare 50 law Q&A pairs (2h).
  + **Backend:** Add /ask endpoint → query in, retrieval results out (4h).
* **Data Engineer (Backend: Filter API)**
  + Expand dataset → 300 clauses (6h).
  + Add metadata (law\_name, year, article) (4h).
  + Export JSONL for fine-tuning (3h).
  + **Backend:** Enhance /clauses → add filters (law, part, article) (7h).
* **System Developer (Backend: Chat API)**
  + Build chat UI prototype (6h).
  + Add user/lawyer roles (4h).
  + Connect frontend chat → FastAPI backend (4h).
  + **Backend:** Implement /chat route (6h).

**🔹 Week 3 – Scaling & First Demo**

🎯 Goal: Larger dataset, fine-tuning start, working demo.

* **AI Engineer (Backend: Answer API)**
  + Fine-tune BLOOMZ-1.1B (LoRA) (6h).
  + Evaluate fine-tuned vs RAG baseline (4h).
  + Add explainability (return clause + citation) (4h).
  + **Backend:** Update /ask → return **answer + citation + confidence score** (6h).
* **Data Engineer (Backend: Dataset API)**
  + Grow dataset to 1,000 clauses (6h).
  + Add keyword tagging (TF-IDF/RAKE) (4h).
  + Validate OCR parsing errors (4h).
  + **Backend:** Add /laws endpoint → return list of laws, articles (6h).
* **System Developer (Backend: Booking API)**
  + Finish chat integration (4h).
  + Build file upload → doc summary feature (6h).
  + Add lawyer booking UI (4h).
  + **Backend:** Add /lawyer/book API → schedule appointments (6h).

**🔹 Week 4 – Final Integration & Demo**

🎯 Goal: Full integration + research + final deliverables.

* **AI Engineer (Backend: Explainable AI API)**
  + Improve multilingual answers (4h).
  + Add fallback: “consult lawyer” (3h).
  + Write AI methods research doc (5h).
  + **Backend:** Finalize /ask → retrieval + fine-tuned + citation support (8h).
* **Data Engineer (Backend: Export & Validation API)**
  + Expand dataset to 2,000+ clauses (6h).
  + Automate pipeline (extract → clean → save) (6h).
  + Write dataset dictionary + final report (4h).
  + **Backend:** Add /export → download dataset as JSON/CSV (4h).
* **System Developer (Backend: Dashboard API)**
  + Add multilingual toggle (3h).
  + Build lawyer dashboard (5h).
  + Deploy FastAPI backend + frontend demo (6h).
  + **Backend:** Add /dashboard → show user/lawyer activity history (6h).