MVP Flow: AI-Powered Contract Drafting with Pinecone

Tech Stack

- **Backend**: FastAPI (contract generation API)

- **Database**: Pinecone VDB (corpus of professional documents)

- **Frontend**: Streamlit (MVP) → React (later production)

Workflow

1. **User Input (Project Details)**

   - User provides key project information: client name, project scope, timeline, deliverables, etc.

   - Input captured via Streamlit UI.

2. **Document Retrieval (from Pinecone)**

   - System queries Pinecone vector DB (pre-trained with professional contract/document corpus).

   - Retrieves the most relevant base document structure.

3. **AI Auto-Fill & Drafting**

   - Retrieved document acts as the template.

   - AI fills user/project details into placeholders.

   - Ensures proper formatting and professional tone.

4. **Compliance & Risk Check**

   - AI runs checks for compliance with standards (GDPR, insurance norms, etc.).

   - Flags missing or risky clauses.

   - Provides suggestions for adjustments.

5. **Plain-English Summary**

   - AI generates a concise summary for the user.

   - Example: *"This contract establishes a service agreement with GDPR compliance, covering confidentiality and liability for 2 years."*

6. **User Review & Iteration**

   - User reviews draft + summary in Streamlit.

   - Options:

     - ✅ Accept draft.

     - ✍️ Edit fields (regenerate document).

     - ❌ Restart flow.

7. **Final Document Export**

   - User can download the drafted contract as a Word/PDF.

   - Document saved locally for MVP (no external integrations yet).

MVP Scope (Phase 1)

- FastAPI backend with endpoints for:

  - Project details input

  - Pinecone retrieval

- AI drafting

- Compliance check

- Summary generation

- Streamlit UI for:

  - User form (project details)

  - Draft + summary display

  - Export button

Future Extensions (Post-MVP)

- Replace Streamlit with React frontend.

- Add integrations (DocuSign, Drive, CRMs).

- Advanced compliance engine (multi-jurisdiction).

- Multi-document types (beyond NDA/insurance agreements).

- Dashboard with analytics (time saved, risk detection stats).