

AI Skill-Up Assignment – JINSON

(Healthcare RAG – Data & Indexing Lead)

ASSIGNMENT A: Knowledge Base & Schema Prep

- Collect 5–10 clinical notes, 1 drug manual PDF, 1 guideline.
- Extract, clean, and standardize text.
- Build structured clinical-note schema.
- Create `healthcare_data_dictionary.md`.
- Create `schema_overview_diagram.png`.

ASSIGNMENT B: Embedding Store & Retrieval Experiments

- Build document store with:
 - Fixed chunks (500–800 tokens)
 - Semantic chunks (per section/topic)
- Generate embeddings and index.
- Implement `retrieval_test.py` returning top-5 chunks + similarity.
- Compare chunking strategies in `retrieval_comparison_jinson.md`.

Deliverables:

`healthcare_data_dictionary.md`

`schema_overview_diagram.png`

`rag_index_builder.py`

`healthcare_vector_store.py`

`retrieval_test.py`

`retrieval_comparison_jinson.md`