1. **File Type:**

* Only PDF files are supported for document upload.
* PDFs are assumed to be text-based, not image-based. If image-based, OCR functionality needs to be integrated.

2. **Data Size:**

* Each document is split into manageable chunks (e.g., 500 characters) to ensure efficient embedding generation and query processing.

3. **Vector Database:**

* The FAISS index operates in memory, with periodic saving to disk for persistence.
* FAISS uses an L2 distance metric, with similarity computed as 1 - (distance / 2) for scoring.

4. **Query Precision:**

* Query results depend on the quality of embeddings and the preprocessing of text (e.g., removal of noise).

5. **Concurrency:**

* The Streamlit app is designed for single-user scenarios; multi-user scalability may require additional considerations (e.g., hosting on a server with session handling).

6. **Embedding Model:**

* The Sentence Transformer model (all-MiniLM-L6-v2) is preloaded and supports vector dimensionality of 384. Alternate models can be substituted if needed.