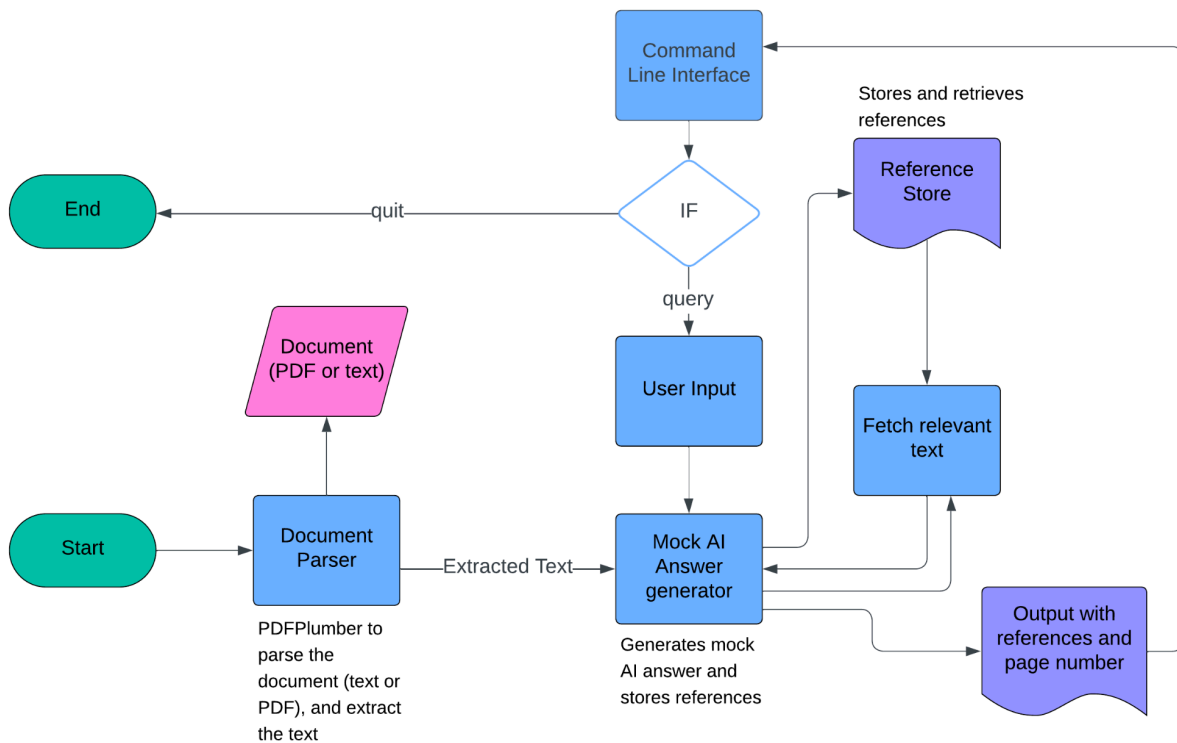


Document Reference Tracker

[Aaryan015/Track-reference \(github.com\)](https://github.com/Aaryan015/Track-reference)

1. System Architecture and Design

- a. This application is designed to allow users to fetch references from documents, using a command line interface. It comprises of the following key components (classes):
 - i. DocumentParser: Handles document parsing and text extraction.
 - ii. AIAnswerGenerator: Generates mock AI answers with references (page number and text fetched).
 - iii. ReferenceStore: Stores and retrieves references.
 - iv. CommandLineInterface: Manages user interaction.



2. Creativity

The mock AI answer generation class uses a simple keyword matching approach, as in Ctrl + F search function in a pdf file or code/website, to fetch relevant text from

the reference store. The DocumentParser class contains the parse_document method, which can be easily extended to support different file formats. And, the ReferenceStore class stores and retrieves the extracted text. It uses the in-memory storage system for keeping track of query-reference pairs.

3. Clarity and Communication

The code has been divided into four main classes, each with its own set of functions, and labeled clearly, to easily distinguish between the functions and determine what operation it performs. Also, the code which is to be used to test the application, has been included as a separate file, and imported in the main file, to keep the main code file easy to read and clutter-free.