AI Text Utility - Groq: Summarizer & Keyword Extractor

GitHub Repo Link: AI Text Summarizer - Keyword Extractor

Deployed Streamlit App: https://ai-text-tool.streamlit.app/

This project is an AI-powered web application designed to help users summarize text, extract relevant keywords, and detect the intent behind a given text. The app supports three input modes: plain text, PDF files, and article URLs. It uses Groq's AI API to process the input and provide insightful results.

How It Works

Users can interact with the app in three ways:

- 1. **Text Input:** Users can directly input their text into the app.
- **2. PDF Upload:** Users can upload PDF files, and the app uses pdfplumber to extract the text.
- 3. **Article URL**: Users can input a URL, and the app fetches and parses the content from the article.

Once the text is extracted, users can select from four available tasks:

- 1. Summarization: Condenses the input text into a concise summary.
- **2. Keyword Extraction:** Extracts the most relevant keywords from the text.
- 3. Text Intent Detection: Identifies the main purpose or intent behind the text.
- 4. **Dual Output:** Provides both a summary and a list of keywords.

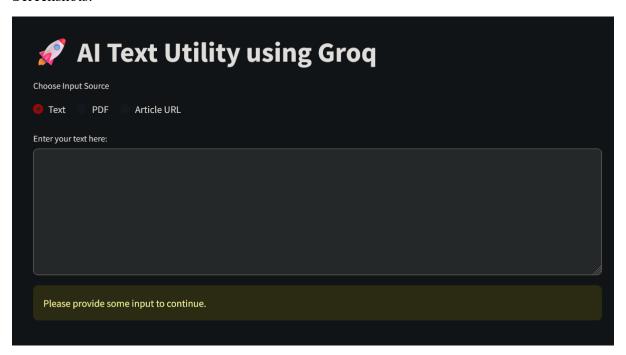
Model/API

The app uses **Groq's AI API**, specifically the **llama-3.3-70b-versatile** model, to analyze and process the input text. The API generates responses based on the user's selected task, providing accurate and meaningful results.

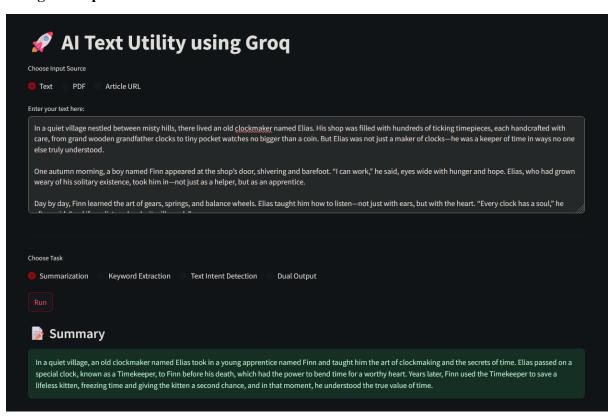
Scope for Improvement

- **Multi-language Support:** Introduce support for multiple languages to cater to a broader user base.
- Advanced Customization: Allow users to customize the length of summaries or specify the number of keywords to be extracted.
- **Better Handling of Large Files:** Improve the app's ability to handle larger PDF files and more complex web page structures.

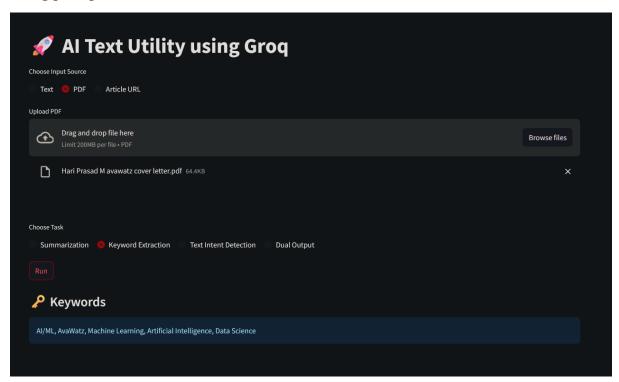
Screenshots:



Using Text upload:



Using pdf upload:



Using Article Url:

