

## Part 2: Interactive QA Bot Interface

### Overview

The deployed RAG bot is a frontend-based application that allows users to upload PDF files, process the text, and interact with the bot by asking questions based on the uploaded document. The bot uses Retrieval-Augmented Generation (RAG) techniques to ensure that all answers are derived exclusively from the document content, making it highly contextualized.

### Step-by-Step User Guide

#### 1. Uploading PDF Files:

The user interface offers the ability to Browse Files or to upload files using a drag-and-drop interface. PDF files are acceptable, and each file can only be 200 MB in size. Both single and many documents can be uploaded.

#### 2. Processing the Documents:

The user must click the Process Documents button after choosing the PDF files. The background text will be extracted, cleaned, and vectorized by the system. Depending on the quantity and quality of the documents, this process could take a few moments. Answers to questions can now be provided for the processed document.

#### 3. Predefined Queries:

Under the Process Documents button, you'll find convenient pre-defined searches.

Summary: Click this button to view a concise version of the document.

Bullet Points: This option summarizes the document, highlighting its key ideas.

Key Takeaways: Clicking this will provide you with important insights from the document.

#### 4. Using the Chat Interface:

You can ask specific queries using the chat interface found below the predefined queries. Enter your query in the Ask a Query input form and click Get Response. The bot will provide an answer only based on the parsed document. The conversation history will remain available, allowing users to refer back to earlier queries and responses.

#### 5. Handling Limitations:

The bot is programmed to react exclusively to inquiries about the uploaded document. It will not respond to any generic or unrelated queries. Make sure the submitted PDF is properly formatted and contains extractable text. Scanned PDFs containing non-selectable text may not be processed properly.

## Example:

### Digital Personal Data Protection Act 2023

Here I have uploaded Digital Personal Data Protection Act 2023.pdf


After clicking **Process Documents**, I have searched a query related to the file uploaded.

Below is the snippet of the document processed and the query along with the response.

## RAG BOT

Upload PDF files to extract, clean, and process the text.

Choose PDF files

 Drag and drop files here  
Limit 200MB per file • PDF

Browse files

Digital Personal Data Protection Act 2023.pdf 177.8KB

Process Documents

What is the summary of the documents?

What are the bullet points of the documents?

What are the key takeaways?

Ask a Query

How does the Act address data breaches and the requirement for notification?

Get Response

**Bot:** The Act addresses data breaches and the requirement for notification in the following ways:

- Notification of data breaches:** Data Fiduciaries are required to notify the Board and affected Data Principals of any personal data breach without undue delay. The notification must include information about the breach, including the nature and extent of the breach, the categories of personal data affected, and the steps taken to contain and mitigate the breach.
- Investigation and enforcement:** The Board has the power to investigate personal data breaches and impose penalties on Data Fiduciaries who fail to comply with their obligations under the Act. The penalties for data breaches can range from Rs. 250 crore to Rs. 10,000, depending on the severity of the breach.
- Additional obligations for Significant Data Fiduciaries:** Significant Data Fiduciaries, who process the personal data of more than 10 million individuals, have additional obligations under the Act, including the obligation to conduct a Data Protection Impact Assessment (DPIA) before processing personal data for any new purpose. DPIAs must assess the risks to the rights and freedoms of Data Principals and identify measures to mitigate those risks.
- Voluntary undertakings:** The Board may accept voluntary undertakings from Data Fiduciaries to comply with the Act. If a Data Fiduciary breaches a voluntary undertaking, the Board may impose penalties of up to Rs. 10,000.