**User Guide for Operating and Maintaining the Multilingual RAG System**

**Introduction**

This user guide is designed to help you operate and maintain the Multilingual Retrieval-Augmented Generation (RAG) System effectively. This system allows users to process documents in various languages (Hindi, Bengali, Chinese, and English), extract relevant information, and generate responses to queries based on the content of the documents.

**System Overview**

The Multilingual RAG System integrates various components to ensure smooth operation. It performs text extraction from scanned and digital PDFs, utilizes advanced natural language processing techniques, and leverages a vector database for efficient retrieval.

**Getting Started**

**1. Initial Setup**

Before using the system, ensure that all necessary components are installed and configured. You may need access to the internet and appropriate permissions to run the software.

**2. Loading PDF Documents**

To use the system, start by loading the PDF documents you wish to process. These can include both scanned and digitally created files. Make sure that the files are organized in a way that is easy to navigate.

**3. Document Processing**

Once the PDFs are loaded, the system will automatically identify whether each document is scanned or digital. It will then extract the text content accordingly. During this process, the system may take some time depending on the number and size of the documents.

**4. Querying the System**

After processing the documents, you can start querying the system. The RAG system allows you to enter questions in any supported language. It will retrieve relevant information from the processed documents and provide responses based on the extracted content.

**5. Reviewing Results**

The system will display the results of your query. You can review the information retrieved, including the source of the documents and relevant excerpts. If the results are not satisfactory, consider rephrasing your question or using different keywords.

**Maintenance**

**1. Regular System Checks**

To ensure optimal performance, perform regular checks on the system:

* Monitor the system's performance to identify any lag or issues during document processing.
* Verify that all documents are being processed correctly and that the text extraction is accurate.

**2. Updating Document Collection**

Periodically update the collection of PDF documents to ensure that the system has access to the latest information. This may include adding new documents or removing outdated ones.

**3. Data Backup**

Implement a regular backup schedule for the document collection and any generated data. This will help prevent data loss and ensure that you can restore the system to a previous state if needed.

**4. User Feedback**

Encourage users to provide feedback on the system's performance. This feedback can be valuable for identifying areas for improvement and enhancing user experience.

**Troubleshooting**

**Common Issues**

1. **Slow Performance:** If the system is running slowly, check the number of documents being processed and consider reducing the batch size.
2. **Inaccurate Results:** If the retrieved information is not relevant, ensure that the documents are adequately prepared and that the queries are clear and precise.
3. **Access Issues:** Ensure that you have the necessary permissions to access the files and that the system is properly configured.

**Support**

For further assistance, consult the system administrator or refer to any available support documentation. You may also find additional resources or community forums where users share their experiences and solutions