# **Project overview**

### **Generative Ai**

Sep 23,2024

### **Project Overview: AI-Powered PDF Chatbot**

Our project focuses on developing an AI-powered chatbot that allows users to upload a PDF document for analysis. The core functionalities of our chatbot include:

- 1. **PDF Summarization**: Once the user uploads a PDF, the chatbot processes the document and generates a brief, concise summary of its contents.
- 2. **Question-Answering**: After summarizing, users can ask specific questions related to the document. The chatbot uses natural language processing (NLP) to understand the question and retrieve the most relevant information from the PDF to provide an accurate answer.

This project combines advanced NLP techniques, text summarization models, and information retrieval, making it a useful tool for quickly understanding and interacting with complex documents.

We're still doing updates and searching for new ideas to include.

## Some details about our project

### **System Architecture**

- **Frontend**: User uploads PDF and interacts with the chatbot.
- **Backend**: Processes the PDF, generates a summary, and handles question-answering.
- AI Model: Summarization model and question-answering model based on NLP.

#### Workflow.

- **Step 1**: User uploads a PDF document.
- **Step 2**: The AI model processes the document and generates a summary.
- **Step 3**: The user can ask questions about the PDF.
- Step 4: The chatbot searches the document for the most relevant answer and provides a response.

### **Our team:**

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