AI-Powered Task Management System

This document outlines the features and capabilities of our AI-powered task management system. The system is designed to help users organize their tasks, set reminders, and manage their daily workflow through intelligent automation and natural language processing.

Key Features

• Natural Language Task Creation: Users can create tasks using conversational language

• Intelligent Reminder System: Smart scheduling based on context and user preferences

• Document Processing: Ability to extract tasks and information from uploaded documents

• WhatsApp Integration: Seamless interaction through popular messaging platform

• AI-Powered Summarization: Automatic summarization of long documents and conversations

• Vector-Based Memory: Persistent storage and retrieval of user interactions and documents

Technical Architecture

The system is built using modern technologies including FastAPI for the backend, IBM Granite models for AI processing, FAISS for vector storage, and Twilio for WhatsApp integration. The architecture supports scalable document processing, real-time messaging, and intelligent task extraction from various file formats including PDF, DOCX, and plain text files.

Common Use Cases

• Meeting Notes Processing: Upload meeting notes to extract action items and deadlines

• Project Documentation: Summarize project documents and create relevant reminders

• Email Management: Forward important emails to extract tasks and follow-up items

• Research Papers: Summarize academic papers and research documents

• Contract Review: Identify key dates and obligations from legal documents

Conclusion

This AI-powered task management system represents a significant advancement in personal productivity tools. By combining natural language processing, document analysis, and intelligent scheduling, it provides users with a comprehensive solution for managing their tasks and staying organized in today's fast-paced digital environment.