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AI CHATBOT FOR PUBLIC FACING BUSINESS WEBSITE

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The ScoobySquad AI Agent is an intelligent customer support and workflow automation system designed to enhance the efficiency and scalability of a small service-based business specializing in pet waste removal. This capstone project integrates modern artificial intelligence techniques, including natural language processing and retrieval-augmented generation (RAG), to create a responsive chatbot capable of answering customer inquiries, guiding service requests, and supporting internal operations. The system is built using a combination of web-based technologies, a vector database for semantic search, and automation workflows powered by n8n to connect customer interactions with business logic. At its core, the AI agent leverages a structured knowledge base stored in a cloud database, where frequently asked questions and operational data are embedded into vector representations. When a user submits a question through the website chat interface, the system retrieves the most relevant information using similarity search and generates a context-aware response. This approach allows the AI agent to provide accurate, conversational answers while continuously improving as new data is added. Additionally, n8n enables seamless orchestration of backend processes, such as handling incoming requests, routing data between services, and supporting potential integrations like scheduling and customer management systems. The value of this project lies in its ability to demonstrate how advanced AI technologies can be applied to small, local businesses to improve customer experience and operational efficiency. By reducing the need for constant manual communication, the ScoobySquad AI Agent allows business owners to focus on service delivery while maintaining high-quality customer engagement. This project highlights the growing importance of AI-driven solutions in modern business environments and showcases a practical implementation of intelligent automation.