

Your Quality and Workflow Improviser.

Project Name: KneadQualityAI Team Name: Jumpers

University: Dayananda Sagar University Mentor Name: Ms. Kavyashree I Pattan

Problem Statement: Modern companies deal with an overwhelming amount of quality-related documentation—like SOPs, manuals, and compliance reports. Employees often waste time searching for specific information or trying to understand complex standards. Smaller organizations especially struggle, lacking the resources to hire QA experts or build custom AI tools to streamline these tasks.

Our Solution: **QWalt.AI** is an intelligent AI-powered chatbot tailored for organizations aiming to enhance their quality management processes. It delivers smart, real-time support by:

- Providing accurate answers to complex Quality Assurance (QA) queries.
- Analyzing documents like SOPs and QA manuals to extract and deliver relevant.
- Comparing user query with uploaded content to ensure accurate, doc-based responses.
- Recommending meaningful improvements in workflow and operational processes based on contextual understanding.

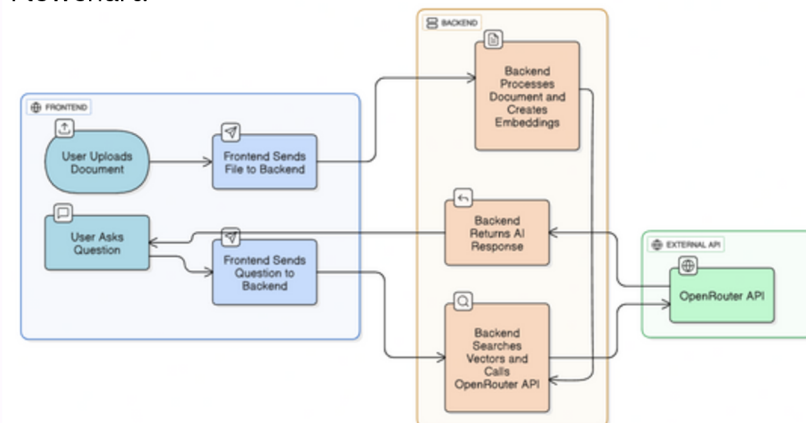
App Features:

- Quality-Oriented Chatbot with 7QC principles
- AI Features Retrieval-Augmented Generation
- Modern, Responsive UI with glass morphic effect
- Progressive Web App (Downloadable on devices)
- Document Based Querying

Tech Stack:

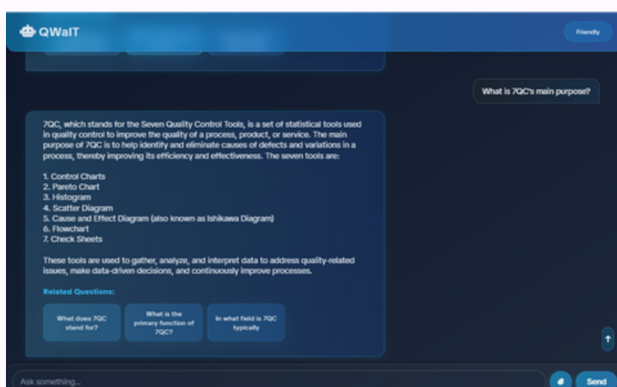
- ~ Frontend Hosting: Vercel
- ~ Backend Hosting: Render
- ~ Frontend: ReactJS, Vite, CSS, PWA Lib
- ~ Backend: Python with FastAPI, Uvicorn
- ~ Model: Mistral via OpenRouter LLMS API
- ~ Search: FAISS, TF-IDF Vectorizer

Flowchart:



GitHub Source Code QR

Sample Response:



Team Members:

- + Ayush Singh
(Backend Developer and Deployment)
- + Arji Jethin Naga Sai Eswar
(Frontend Developer and UI/UX)
- + Aluru Bala Karthikeya
(Frontend Developer and ML Integration)

Project Live Link: <https://qwalt.vercel.app>