

HealthFlow AI – Requirements Specification

Project Overview

HealthFlow AI is a Responsible AI-powered assistant designed to improve efficiency, understanding, and support within healthcare and life-sciences ecosystems. The system focuses on clinical and research information summarization, workflow automation, patient education, and documentation support. HealthFlow AI is not a medical diagnosis or treatment system.

Objectives

- Reduce time spent on medical documentation
- Improve clarity of healthcare information
- Support healthcare professionals ethically
- Use only synthetic or publicly available data

Functional Requirements

- Clinical document summarization
- Workflow automation for healthcare professionals
- Patient education and care navigation chatbot
- Research paper summarization and documentation support

Non-Functional Requirements

- Explainable AI outputs
- Secure and scalable system
- Fast response time
- Human-in-the-loop validation

Data Requirements

Allowed Data: Synthetic and publicly available datasets (PubMed, WHO, open literature)

Restricted Data: No real patient or hospital data

Ethical Considerations

- No medical diagnosis or treatment advice
- Clear disclaimers on AI outputs
- Transparent and responsible AI usage

Limitations

- Prototype system only
- Educational and research use
- No real hospital integration

Future Enhancements

- Multilingual support
- Voice-based assistant
- Mobile application integration