LLM REQUIREMENTS ASSISTANT

TOOL FOR STRUCTURED, FOCUSED, AND COLLABORATIVE REQUIREMENTS DISCUSSIONS

Why? - The Challenge

- Requirements discussions with LLMs often produce vague, repetitive, or over-engineered outputs.
- Teams struggle with prioritization, deduplication, and conflict resolution.

What? - The Solution

- Lets users chat with an LLM to describe requirements naturally.
- Structures inputs into use cases with preconditions, main/alternative flows, and outcomes.
- Deduplicates similar requirements and highlights stakeholder conflicts.
- Supports MVP/priority checks to focus on core features.
- Produces a clean, exportable requirements document for teams.

Release 1

- LLaMA/OpenAI integration + chat interface
- Structured use case capture & database storage
- Stakeholder tagging & deduplication
- MVP checks & conflict visualization
- Export to PDF/Markdown
- Food delivery case study demo

TECH STACK

React, FastAPI, LLaMA 3-7B , SQLite , Python,Docker

The Stakeholders:

Students, Teaching Assistants, Instructors, Developers, Future Maintainers, Software Teams, Requirements Engineering teams
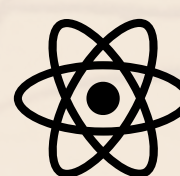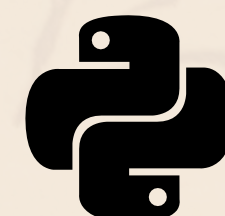
What? - The Impact

- Faster, higher-quality requirements generation.
- Avoids mistakes faced in Proj1 (zero-shot vagueness, scope creep).

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Future Improvements

- Advanced quality checks & clarification suggestions
- Enhanced conflict matrices & analytics
- MVP coverage visualization
- UI polish & help/tutorial panel
- Documentation & demo-ready system

Project Mockup