

# MARC

## MULTI-AGENT REQUIREMENT COLLABORATION

### WHAT IS MARC?

A framework that enables collaborative, LLM-powered, RE documentation creation through multi-agent collaboration. Give an AI representative your personal requirements as a stakeholder, and let it advocate for your needs in the project.

### MILESTONES PART 1

- 1. UI:** Complete a chat frontend for stakeholders to interact with our AI agents.
- 2. DB and Multi-Agent RAG:** Set up a SQL database for storing stakeholder requirements as provided in chats with AI agents. Each representative agent has access to their own table in the database while the orchestrator agent has access to the whole database.
- 3. Orchestrator tuning.** The orchestrator is the agent which takes the requirements discovered by the representative agents and synthesizes them into an RE doc. Few-shot prompting of the orchestrator, as well as tool-calling capabilities, is a unique element of this agent.
- 4. Collaboration:** The orchestrator must be able to facilitate added discussion on requirements if it or any stakeholder deems such discussion necessary. Some of this discussion can be automated between agents, while some of it must include human stakeholder feedback.

### STAKEHOLDERS

MARC is a tool for any stakeholder in any project ever, so the usual list of them can be found here.

- Managers
- Customers
- Developers
- Regulators

### CASE STUDY: FOOD DELIVERY

Hey! I am an engineering manager building out the requirements for our next project. Here are some of my requirements.

1. MVP in 6 months
2. needs to happen on time
3. we have 5 engineers and 1 web developer and we need to split the work effectively

Hey! Happy to help you think through your project planning. To give you the most useful guidance on splitting the work effectively and hitting that 6-month MVP deadline, I'd need to understand a bit more about what you're building:

What would be helpful to know:

- What type of product/system are you building? (e.g., web app, mobile app, API platform, internal tool)
- What's the current technical landscape? (starting from scratch, extending existing systems, integrating with other services)
- What are your engineers' skill sets? (frontend, backend, full-stack, infrastructure, etc.)
- What's the scope/complexity level you're targeting for the MVP?

Let all your stakeholders, managers, chefs, delivery drivers, customers, all pitch in to make the best version of your product possible.



PostgreSQL

