

Software Engineer

## Task: Build an AI Agent Prototype


### Core Features (Mandatory)

- Select **one manual task** from your daily life or university work, and build an AI agent that can **reason, plan, and execute** to automate it.
- Implement a **user interface** (any format is acceptable: **chat UI, website, mobile app, desktop app**).

### Optional Features (Bonus Points)

- **Multi-agent collaboration** (e.g., Planner + Executor).
- **External integrations** with components such as **RAG, MCP, or custom Tools**.
- A user interface for **monitoring or editing the agent's plan**.
- Scheduling, batch execution, or other operational support features.

## Notes

- Programming languages and frameworks are open (e.g., Python, Node.js, Next.js, Ionic, etc.).
- Backend style (REST, GraphQL, agent frameworks, NoSQL/SQL, etc.) is also open, but the reasoning must be explained in the design document.
-  **You are allowed (and encouraged) to use LLMs during development** (e.g., for code generation). Just make sure to submit the **interaction logs**.

## Deliverables

- **Source code** of the prototype.
- **System design document** (architecture, data design, component breakdown, chosen technologies, and reasons for the choices).
- **Interaction logs**: the **prompts used** and the **chat history with the AI**.
- (Optional) **Demo video or screenshots**.

# Evaluation

Evaluation will be based on **comprehensive evaluation** of the following aspects. \*Not only pure technical perspectives.

- System Design
- Coding
- Originality of the system concept and its social impact.
- UI,UX design

## Submission Details

Please push all “Deliverables” to your GitHub repository.

### NOTE

-Please describe your name, university, department in the README. This is to associate your repository with your intern application.

-Please notify it by **sending email to the following addresses**. Please contain the url of the repository.

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# Reference

- AI Agent Design Pattern
  - <https://www.anthropic.com/engineering/building-effective-agents>
  - <https://arxiv.org/pdf/2405.10467>