

AI Agent Intern – Take-Home Assignment

The Challenge

We'd like you to design an **AI agent** that does more than just call a single LLM. It should:

- Take a user query (e.g., *"Latest research on AI in education"*, *"Impact of Mediterranean diet on heart health"*, etc.).
 - Find 2–3 useful sources online.
 - Summarize what you found using an LLM.
 - Create a short, structured report with key points and links.
 - Save the report in a database so it can be looked up later.
 - Show the saved reports in a **basic web view** (a simple history page is enough).
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What You Should Build

- An agent that combines an **LLM + exactly 2 tools** (fixed):
 1. **Web Search API**: Tavily, Brave, Bing, or SerpAPI (pick one)
 2. **Content Extractor**: trafilatura/readability for HTML + pypdf for PDFs
- Some form of **memory** (store past queries & results in SQLite or MongoDB).
- A **web interface** that lists past reports and allows viewing a report by clicking on it.
- Clear handling of errors (e.g., if a search fails, show a friendly message).

Note: Use the search API to discover sources, then fetch each URL and extract clean text with the extractor (HTML and PDFs). If a page blocks scraping, show that gracefully and skip.

What to Submit

1. **Code Repo** (GitHub) with clean structure.
2. **README** that explains:
 - How it works (architecture in plain words or a simple diagram).
 - How to run it.
 - Example results (include sample queries and reports).
 - Where you used AI help (if any).
3. A short **demo recording** (≤3 min) showing: query -> results -> saved report -> viewing it on the web.

What we're looking for: someone who can think in systems, ship a working demo, and explain their choices clearly.