

Tools + Languages

Frontend: React + Javascript/Typescript

Backend: Python / Node. Flask/FastAPI

LLM / Chatbot: OpenAI or Claude or Gemini or Anthropic

Geolocation: Google Maps API

Grocery Store Data: Apparently it's realistic to only choose 1-2 stores, so: Walmart or Target API

Dev Tools: Github, env vars, HTTP client

Other: Parallel API calling for speed, Vercel for deployment

Tasks:

- 1) Frontend Chat (Create the main page for a Chat input UI)
- 2) LLM (prompt design + JSON output)
- 3) Store (walmart/target) API integration (product results + mock data if necessary)
- 4) Business Logic (ingredient and product matching)

Github Link: <https://github.com/TheAsianFish/BuyList>

Gpt Generated Overview:

Frontend Chat UI

Build the chat page + results view. Work against a mocked `/plan` response (static JSON).

Done when: user can submit a message, see loading/error, and render a shopping plan grouped by store.

LLM → Ingredient JSON

Produce a single function/endpoint that takes user text and returns **strict JSON**: `{ dish, servings?, ingredients:[{name, quantity, unit, notes?}] }`. Done when: schema is consistent + robust on common inputs (cake, pasta, tacos) and failures return a safe fallback.

Store Connector

Implement one “search products” interface with two backends: (a) real API

(Walmart/Target/whatever you choose), (b) mock catalog JSON. Output normalized to:

`{store, items:[{title, price, url?, availability?, matched_terms}]}`.

Done when: same interface works with mock and real.

Matching + Fallback Logic

Pure deterministic module that takes `ingredients[]` + `storeResults[]` and returns a final

plan: {stores:[{store, purchases:[{ingredient, product, price}]}],
missing:[...], totals?...}. Done when: it minimizes store count and deterministically
assigns items using mock data.