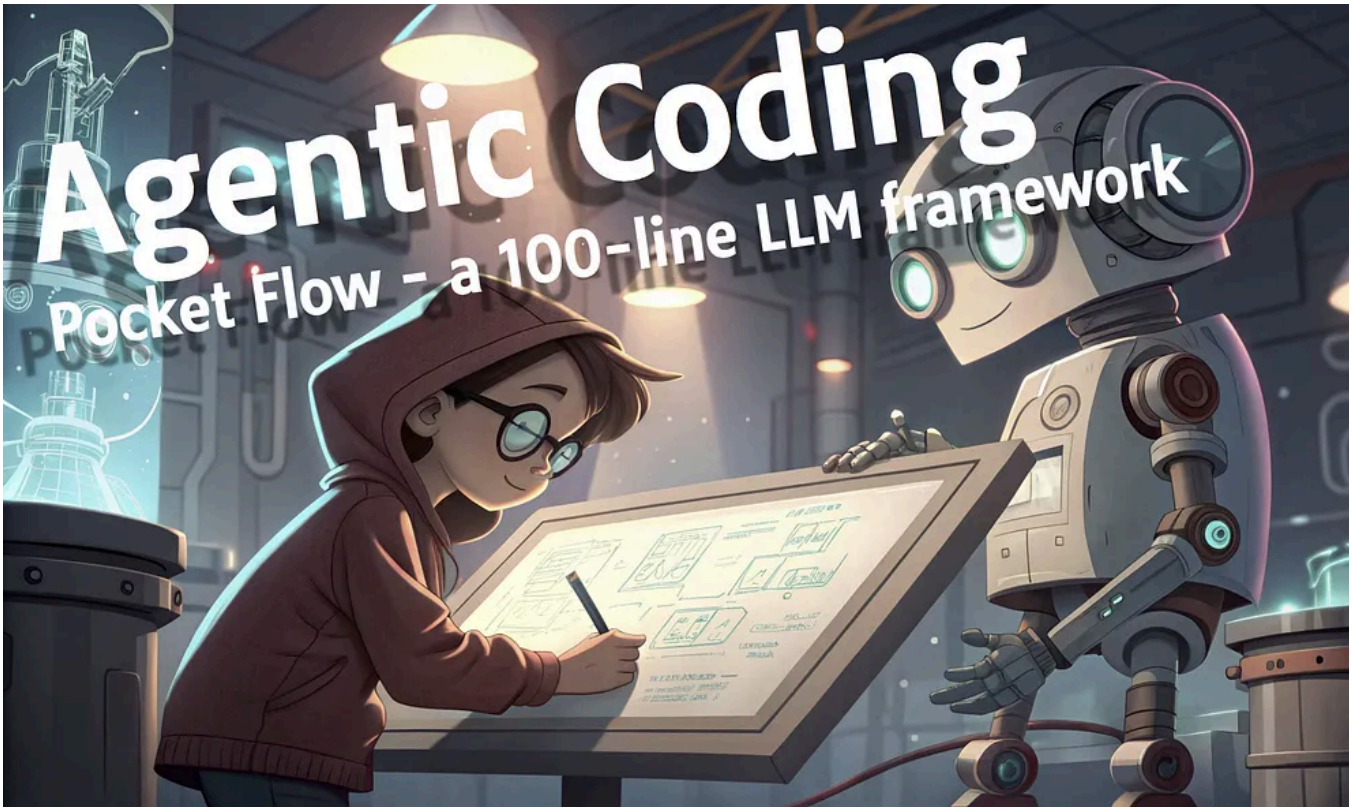
Agentic Coding: Let Agents Build Agents for yc

ZACHARY HUANG
MAR 22, 2025



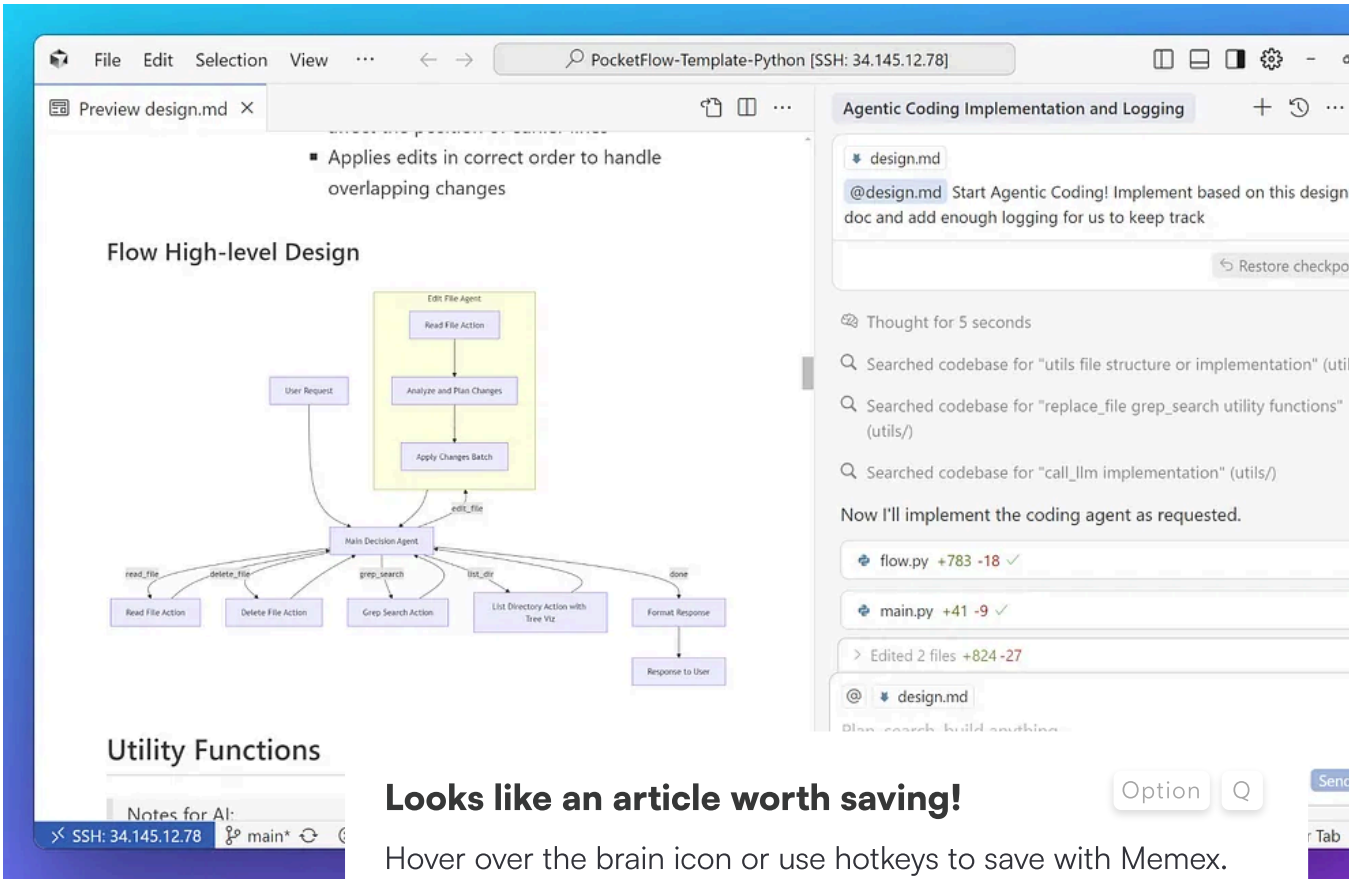
> *We all know AI agents are the future, but why build them by hand when AI agents coul build them themselves for us? Imagine a world where you simply design the blueprint a AI agents construct the AI agents themselves—this is Agentic Coding, where humans f on creative, high-level design while AI agents handle all the tedious implementation d*

What is A

Have you ever wishe to life? That's the prom

- **You** do what humans are best at: coming up with creative ideas and designing your app should work
- **AI** does what it's best at: writing the detailed code to make your ideas actually work

Now, this is possible! For instance, in the image below, you can see the agentic coding process in action. On the left side, a human designs the system for an AI app, focusing on high-level architecture and data flow. On the right side, with just a simple prompt like "Start Agentic Coding! Implement based on this design doc and add enough logging for us to keep track," the AI writes all the code with remarkable ease and precision.

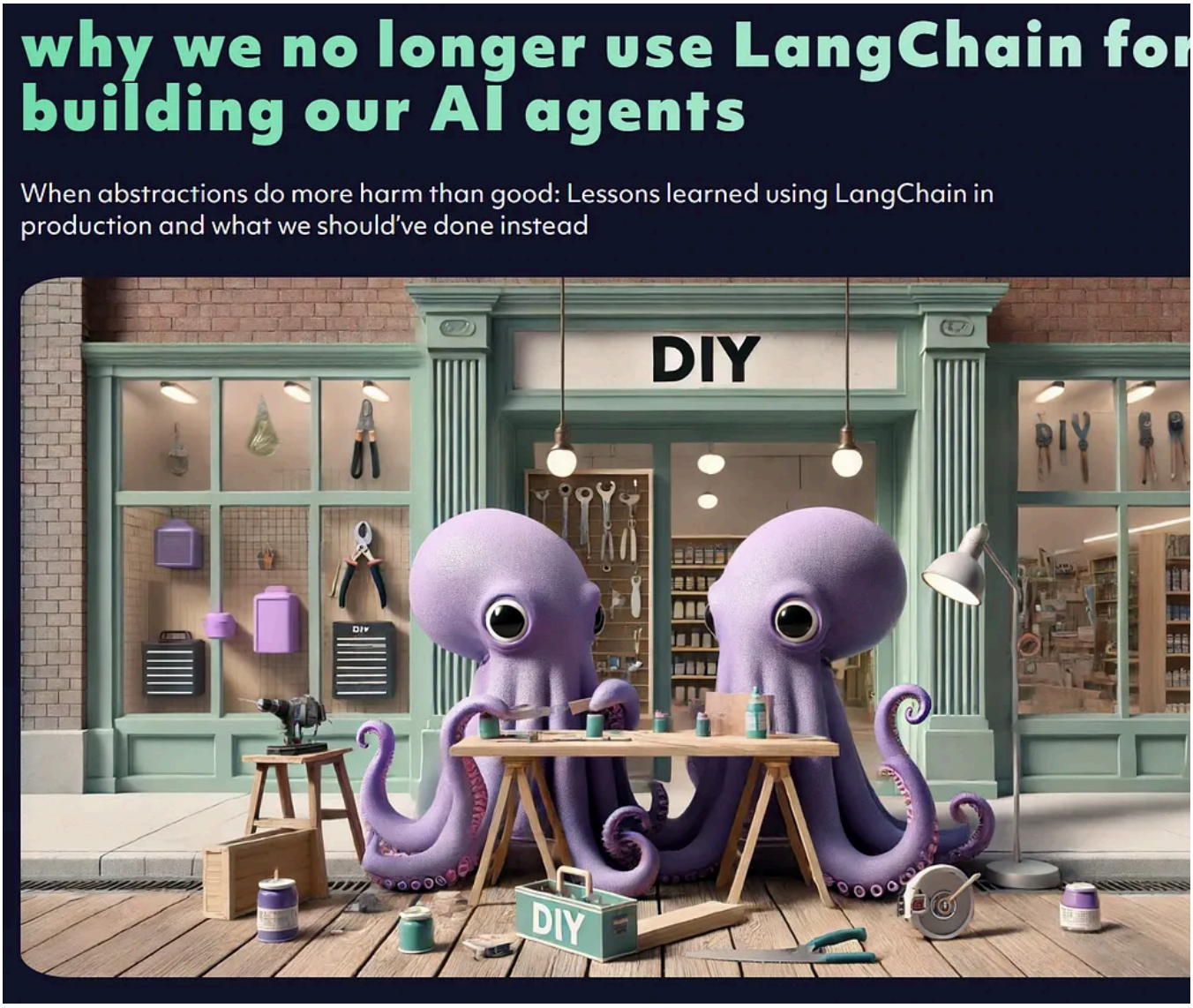


Think of it like building a house — you're the architect drawing the blueprint, and AI is construction crew doing the detailed work. You focus on the vision; AI handles the execu

Why Current AI Building Tools Fall Short

For the past year, I've been trying to build AI apps using existing frameworks like LangChain. The experience has been frustrating for both me and the AI assistants trying to help me:

- **Abstractions upon abstractions** — The fundamental problem with framework like LangChain is *abstraction overload*. As Octomind's engineering team explai *"LangChain was helpful at first when our simple requirements aligned with its usage presumptions. But its high-level abstractions soon made our code more difficult to understand and frustrating to maintain."* These complex layers of code hide simp functionality behind unnecessary complexity.
- **Implementation nightmares** — Beyond unnecessary abstractions, these frameworks burden developers with dependency bloat, version conflicts, and constantly changing interfaces. As developers note: *"It's unstable, the interface constantly changes, the documentation is regularly out of date."* Another developer jokes: *"In the time it took to read this sentence langchain deprecated 4 classes witho updating documentation."*



It's not the AI assistant's fault — many of these frameworks are so complex that even hu developers have trouble using them!

Introducing Pocket Flow: Simple by Design

After a year of strugg es c
code!) that captures e ope
when Pocket Flow's s

- **Crystal clear concepts** — Simple building blocks that any AI agents can understand
- **Zero bloat** — No vendor lock-in or mysterious dependency issues
- **Perfect division of labor** — You design the high-level flow, AI implements th details

My personal journey with frameworks like LangChain taught me that the more complex the framework, the harder it is for AI to help. Pocket Flow was born from realization — designed specifically to create the perfect division of labor between human designers and AI implementers.

When your AI agents aren't fighting to understand a complex framework, they can focus implementing your vision correctly.

> *This tutorial focuses specifically on setting up your environment for Agentic Coding w Pocket Flow. For details on implementation and how to use Pocket Flow, please refer t official documentation.*

Getting Started with Agentic Coding:

> ***The fastest Development Paradigm in 2025***

Whether you're building your first chatbot or a complex system, this guide will he you set up the perfect environment for Agentic Coding with Pocket Flow.

- **For quick questi**
  - Recommend
  - Setup Steps: r coding.
- **For brainstorming or prototyping:**

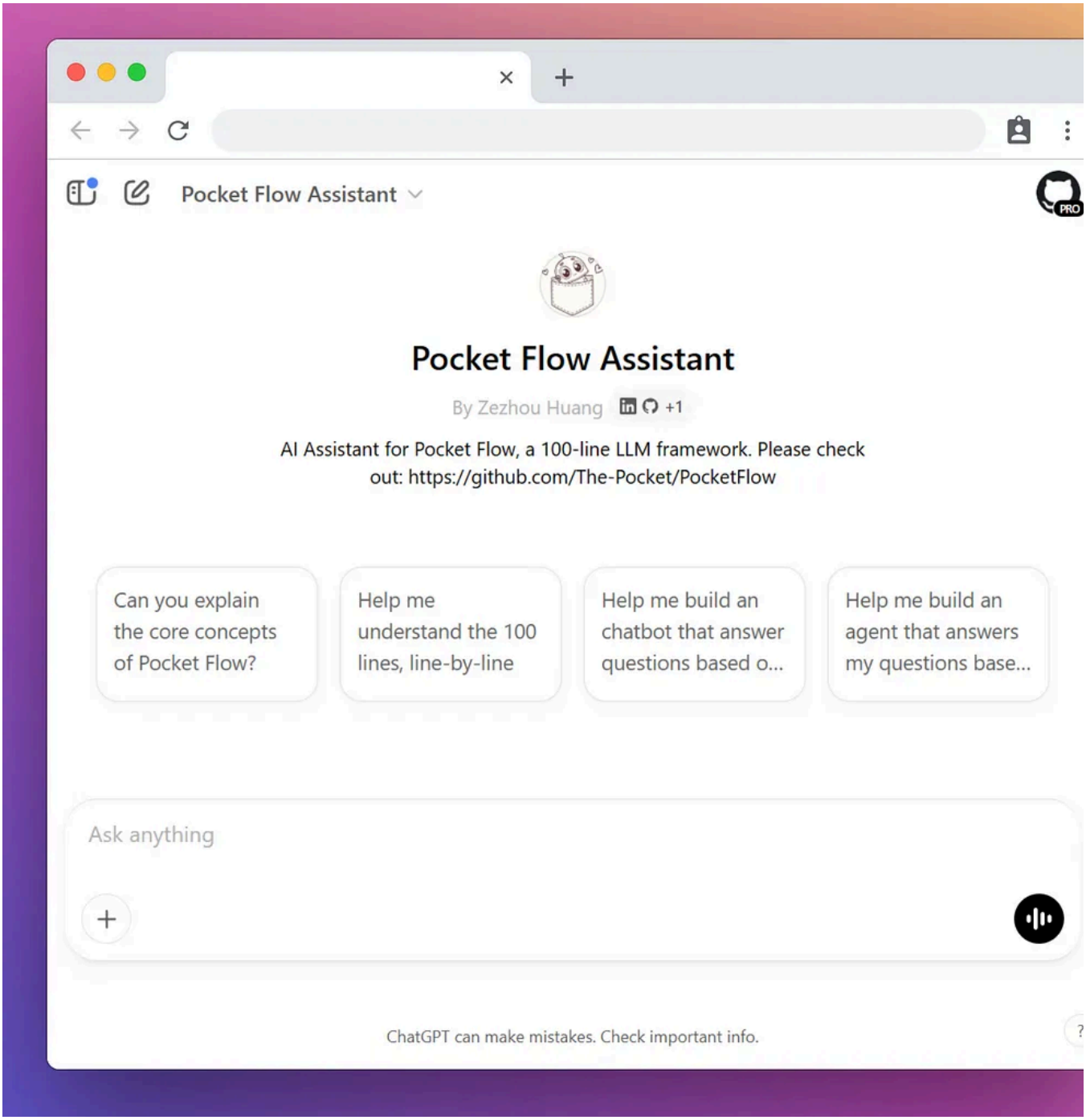
    - Recommended Setup: ChatGPT or Claude Project
    - Setup Steps: Create a ChatGPT Project or a Claude Project, and upload th docs for reference.

- **For full application development:**
    - Recommended Setup: Cursor AI, Windsurf, Cline
    - Setup Steps: Create a new project using the project template. The .cursorr file teaches AI agents how to use Pocket Flow.

> ***Note:*** *This list covers the most common setup, but options are changing frequently as n AI coding agents emerge. The core principle remains the same: because Pocket Flow is simple and minimal, any AI agent can quickly understand it just by reading the documentation. Simply share the Pocket Flow docs with your preferred AI agent to get started!*

GPT Assistant: Instant Answers at Yo Fingertips

Looking for the fastest way to learn about Pocket Flow? The Pocket Flow GPT Assistant is your instant knowledge companion! With zero setup required, you car immediately ask questions about Pocket Flow and receive thoughtful answers witl seconds. It's like having a Pocket Flow expert on standby 24/7.



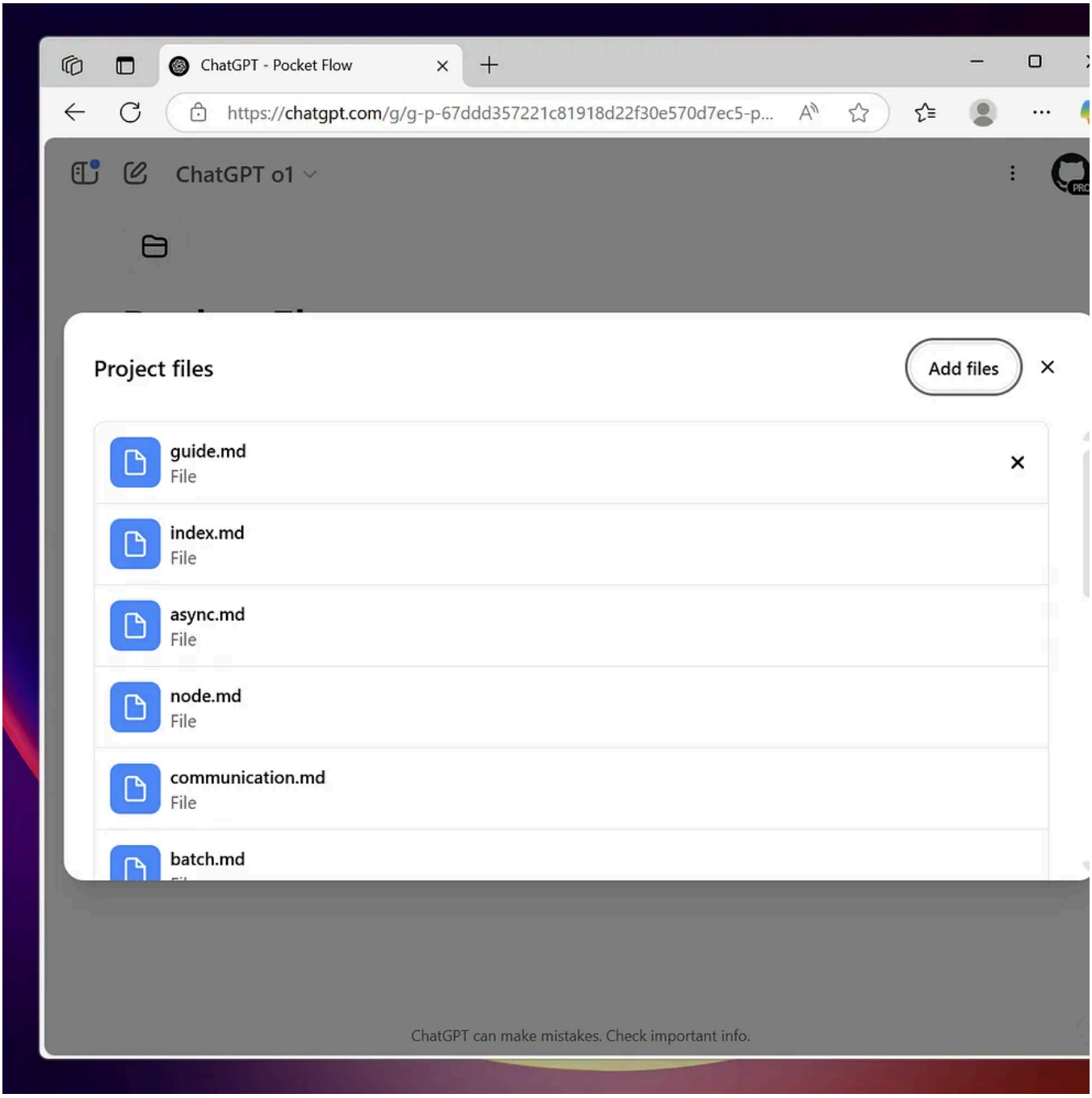
Keep in mind that while perfect for learning and quick questions, the GPT Assista isn't ideal for implementation work as it's using an older model (likely GPT-4o). Fo actual coding and building, you'll want to explore the more powerful development options below.

For One-t Prototype

Have a quick idea that you want to brainstorm or prototype, but aren't ready for fu implementation? ChatGPT and Claude Projects are good options!

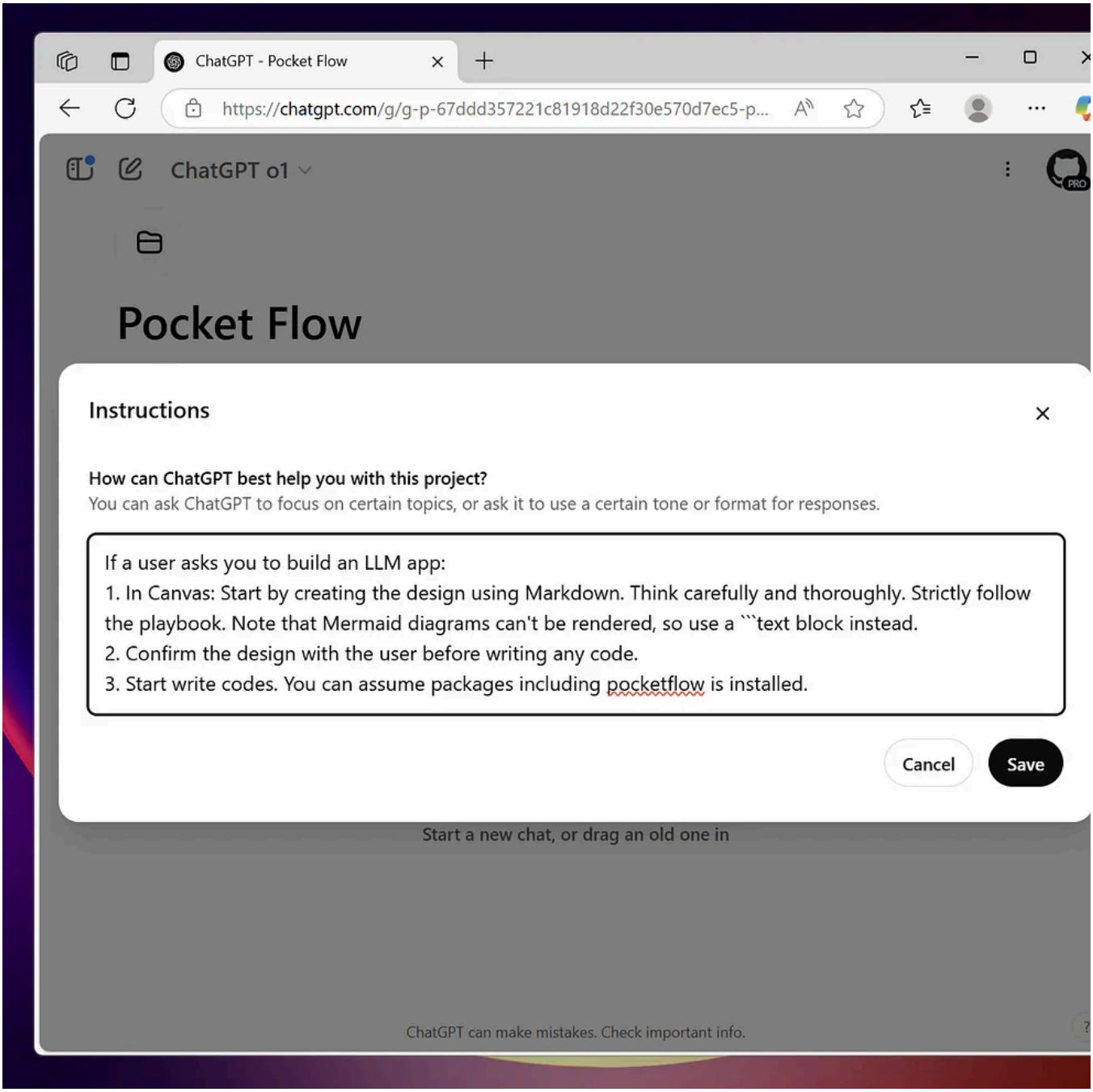
With ChatGPT:

1. Open ChatGPT and create a Project
2. Feed it knowledge by uploading the md files in Pocket Flow docs.
    a. ChatGPT Project allows at most 20 files. Please exclude *_config.yml*, *utility_function/index.md*, *design_pattern/index.md*, *utility_function/index.md* a under *utility_function/*, only upload *utility_function/llm.md*.



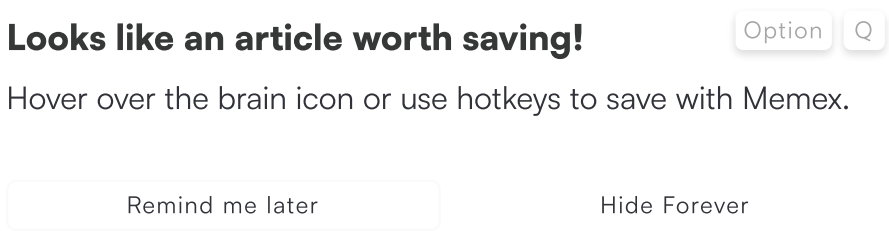
3. Set the system prompt to be something like:

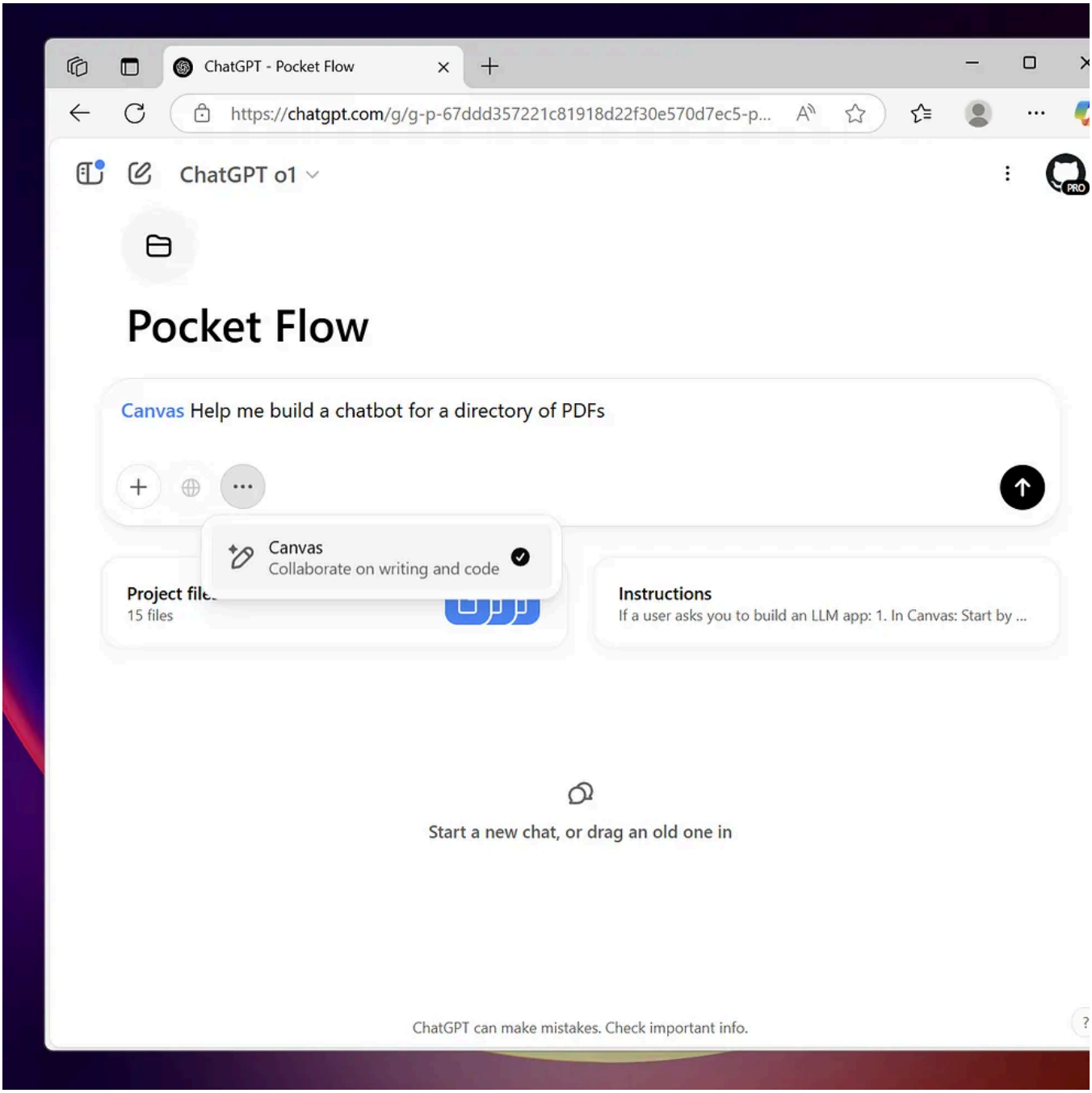
```
If a user asks you to build an AI app:
1. In Canvas: Start by creating the design using Markdown. Think
carefully and th
Mermaid diagrams
2. Confirm the d
3. Start writing
installed.
```



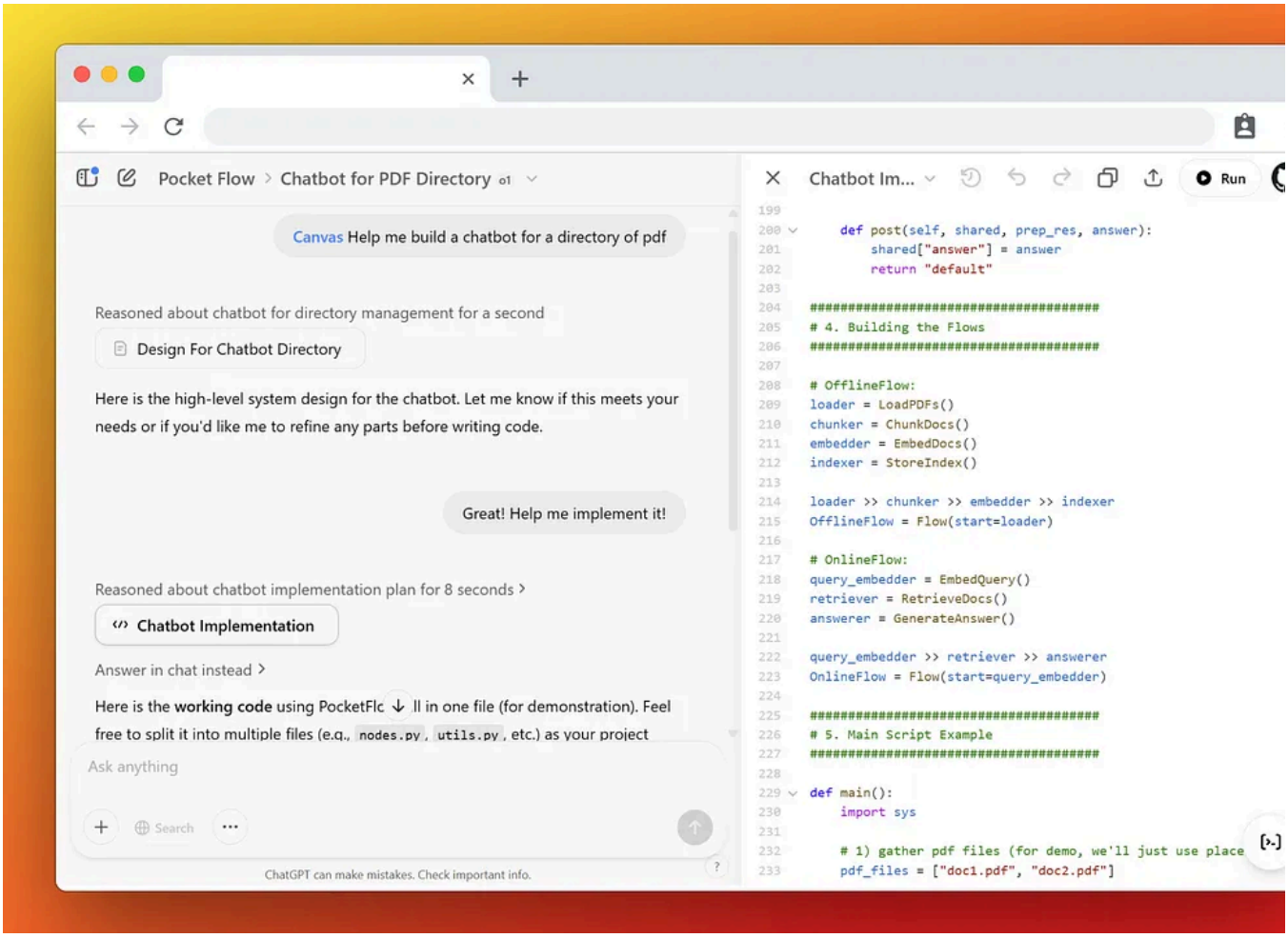
4. Start a conversation! For example: “Help me build a chatbot for a directory of Pl

- For the best result, please choose the best model like O1.
- It is highly recommended to enable [Canvas]



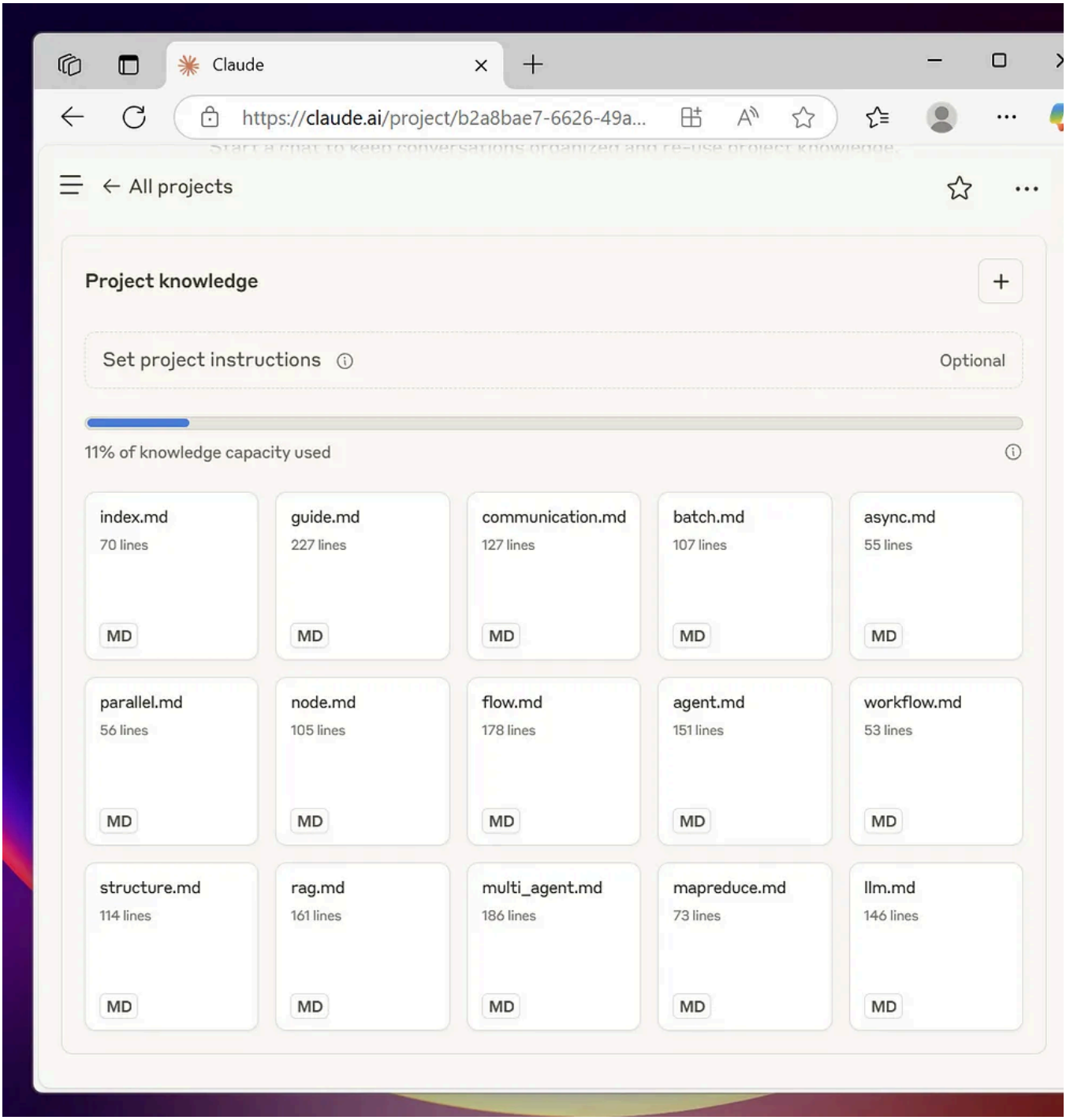


5. Verify and improve the high-level system design, then ask it to implement the c



With Claude:

1. Head to Claude and start a new Project
2. Feed it knowledge by uploading the md files under Pocket Flow docs. Please exclude *_config.yml*, *utility_function/index.md*, *design_pattern/index.md*, and *utility_function/index.md*.



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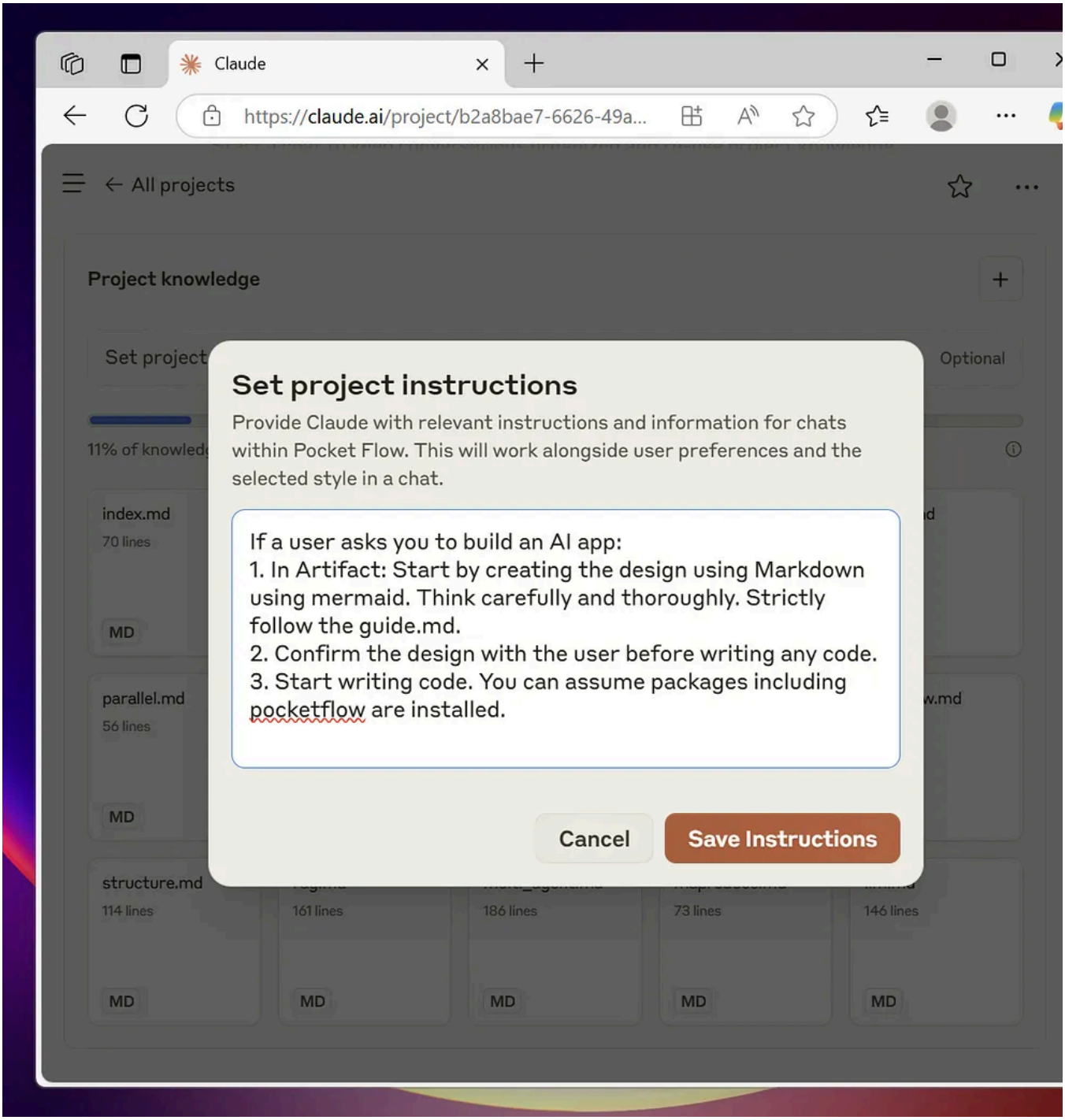
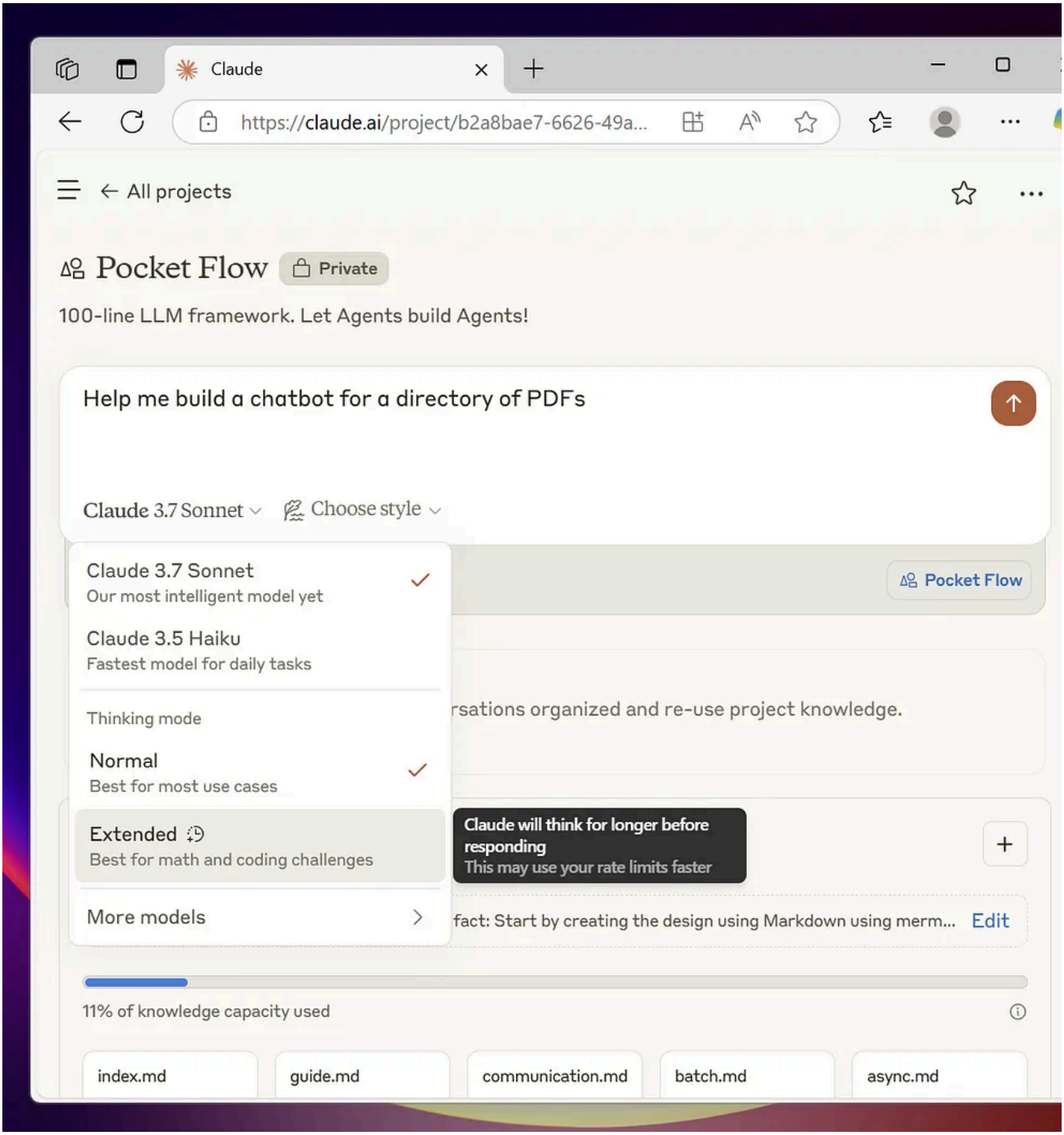


4. Start a conversation! For example: “Help me build a chatbot for a directory of Pl
For the best result, please choose the best model like Sonnet-3.7 with extended thinking.



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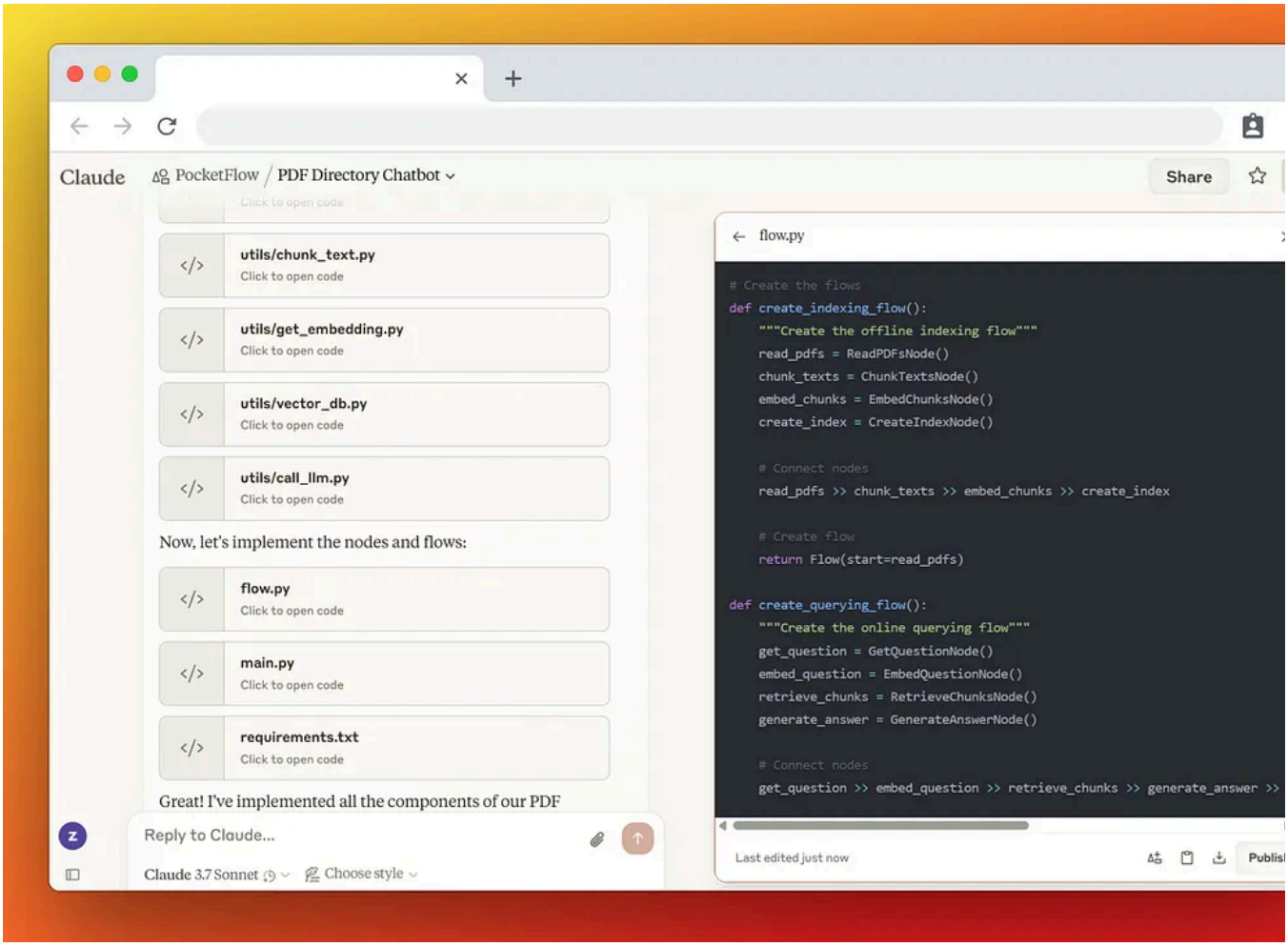
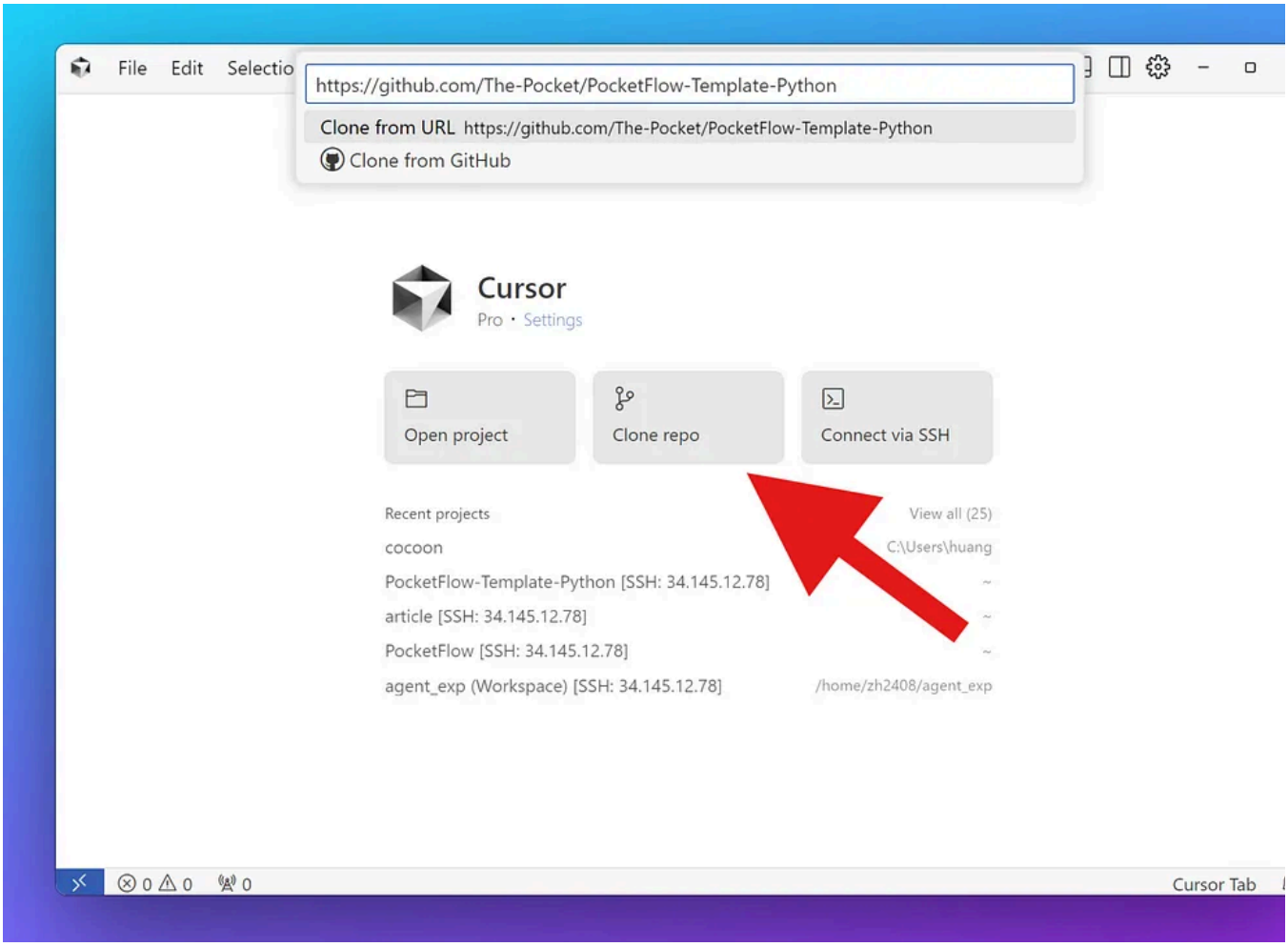


For Serious Development: The Full Agentic Coding Experience

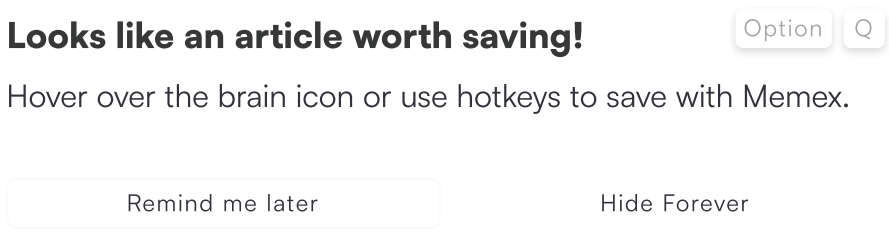
Ready to build a production-ready application? This is where the real magic of Ag Coding happens:

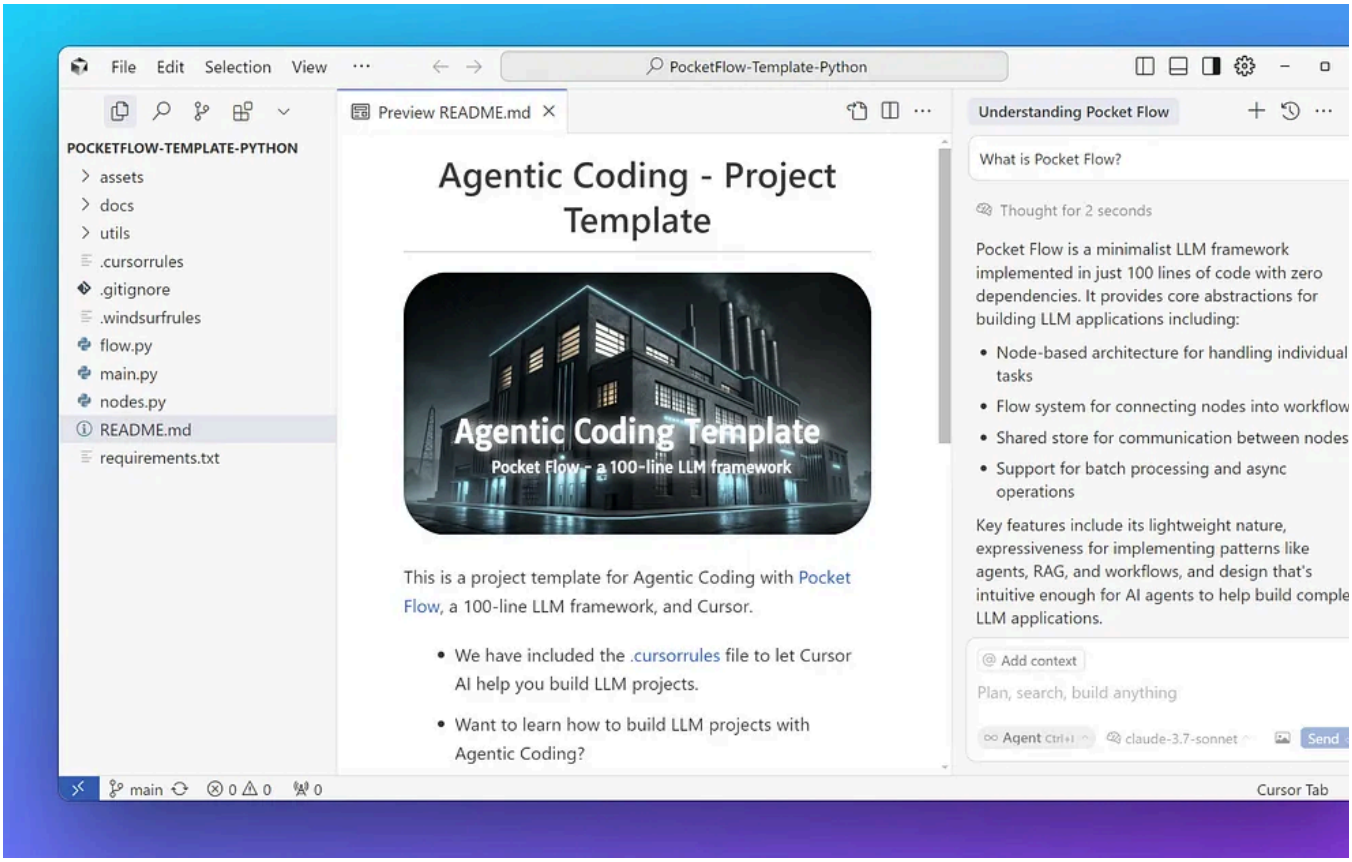
Cursor AI:

1. Create a `New Window`, and click on the `Clone Repo`.
2. Enter the URL fo
   https://github.co
   This template in
   work with Pocke



3. You can verify the setup by asking Cursor AI: “What is Pocket Flow?”



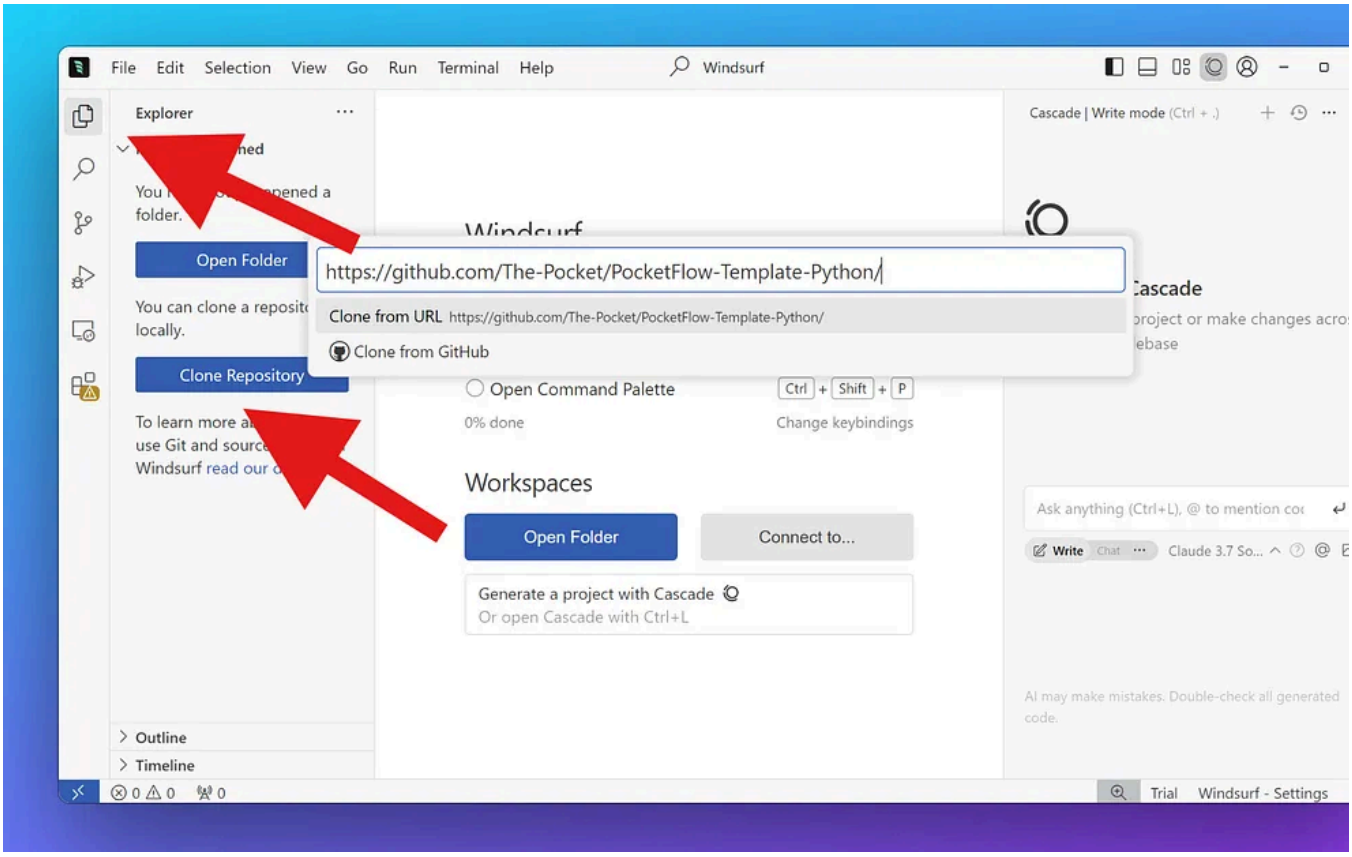


4. Start building LLM systems!

Pro Tip: Use `Chat` mode during the design phase to avoid the AI getting ahead of itself, then switch to `Agent` mode during implementation.

Windsurf:

1. Create a `New Window`, click on the `Explorer` side bar icon, then `Clone Repository`.
2. Enter the URL for the ready-to-use Pocket Flow Template: https://github.com/The-Pocket/PocketFlow-Template-Python.
   This template includes a special .windsurfrules file that teaches Windsurf hov work with Pocket Flow



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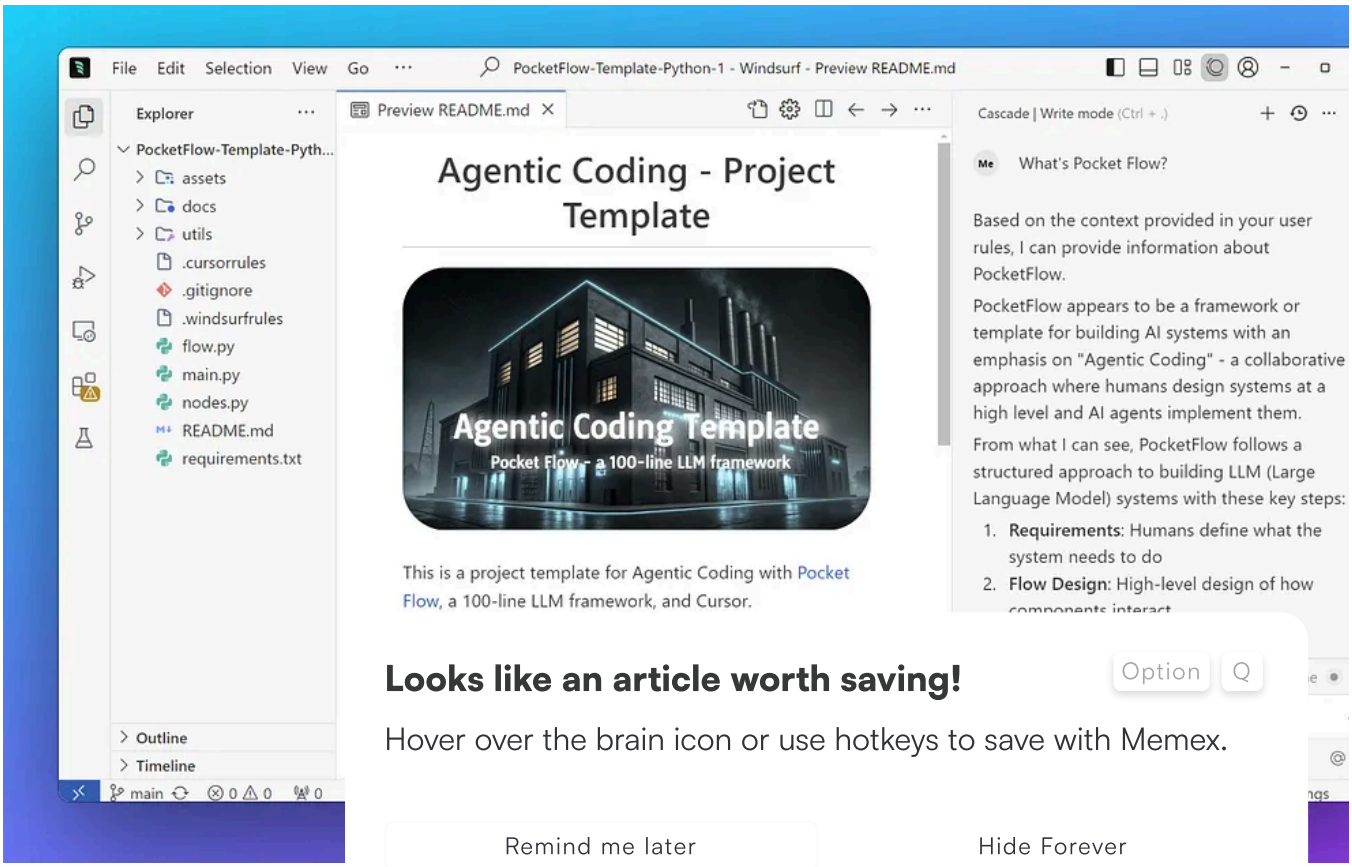


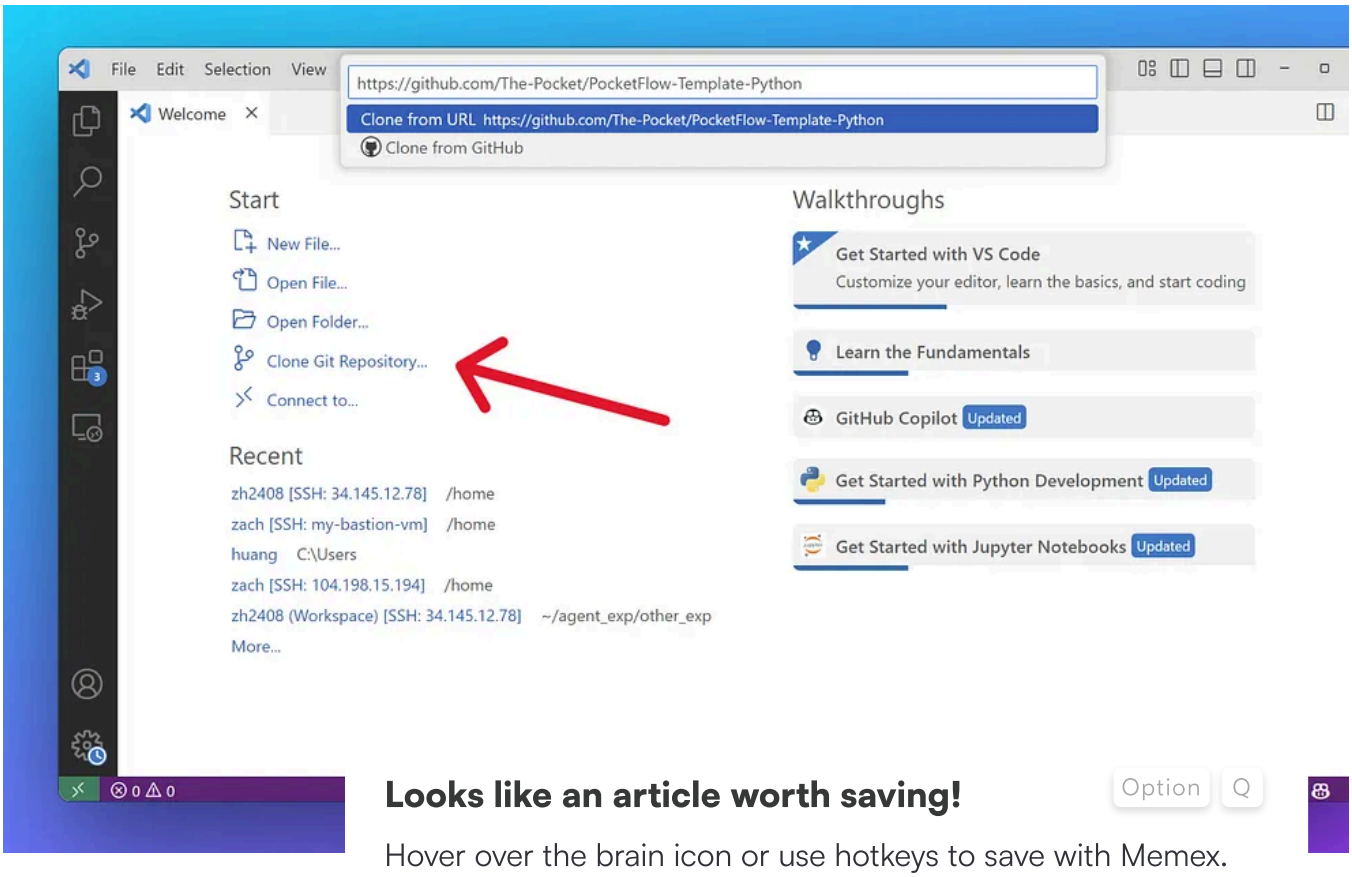
4. Start building LLM systems!

Pro Tip: Use `Chat` mode during the design phase to avoid the AI getting ahead of itself, then switch to `Write` mode during implementation.

Cline:

> ***Note:*** *As of March 2025, Cline's Agent doesn't work that well with rule files. This secti will be updated as compatibility improves.*

1. Create a `New Window`, and click on the `Clone Git Repository...`.
2. Enter the URL for the ready-to-use Pocket Flow Template: https://github.com/The-Pocket/PocketFlow-Template-Python.
   This template includes a special .clinerules file that teaches Cline how to wor with Pocket Flow



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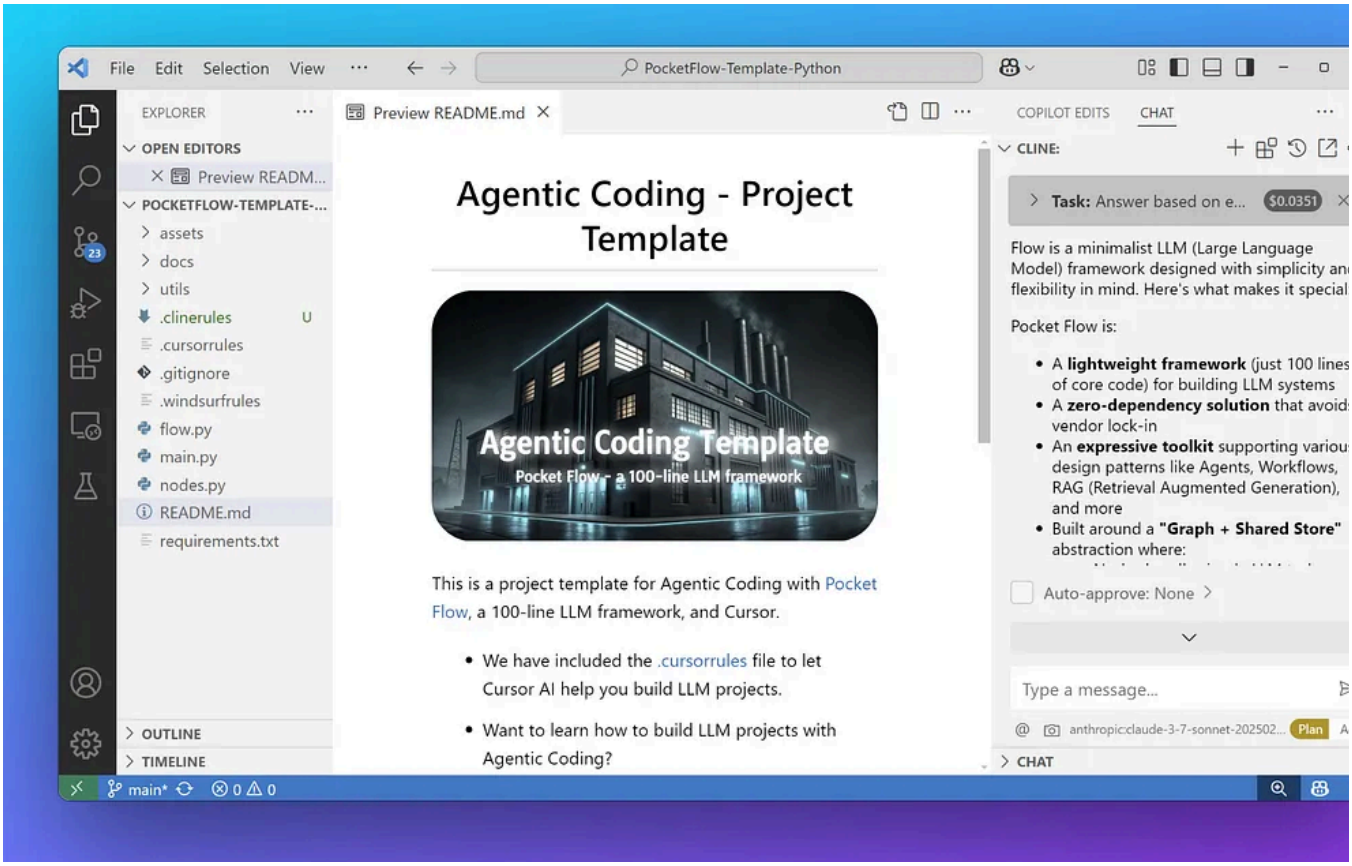

4. Start building LLM systems!

Pro Tip: Use `Chat` mode during the design phase to avoid the AI getting ahead of itself, then switch to `Write` mode during implementation.

What's Next?

Once you've set up your environment, the next step is understanding the Agentic Coding workflow.

More tutorials coming soon! Stay tuned! In the meanwhile, check out these resour

- Agentic Coding Guidance — Official documentation
- The Pocket GitH
- Pocket Flow You

For more examples and detailed documentation, visit the [Pocket Flow GitHub](#).

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Comments Restacks

Write a comment...

Solaris Mar 22 *Edited*

Liked by Zachary Huang

Pocket Flow examples design documents are really detailed. As a software engineer, writing an important best practice that helps understand and consider the implementation thoroughl this approach is especially needed for critical thinking / productive reviews of what the LLM developing, so its great to see them as part of Pocket's workflow. Thank you for the exceller 🙏

LIKE (2) REPLY

1 reply by Zachary Huang

G K May 11

Liked by Zachary

Hey, great post a

I just started to work with pocketflow and it seems to be really easy to maintain consistency

I do have a quick question, though:

How does Pocketflow differ from LangGraph, aside from LangGraph having extra features lil LangGraph Platform?

Other than being easy to maintain, what are some other advantages of using Pocketflow ove

LIKE (1) REPLY

2 replies by Zachary Huang and others

10 more comments...