Lablab.ai Stable Diffusion AI Hackathon submission overview

PromptChef

AI App Platform for Everyone

Available at promptchef.oxen.dev

Summary

Product Justification and Market Demand

I will use the term "GP-AI" when referring to General Purpose AI tools like Chat-GPT, Dreamstudio, or Midjourney. They are primarily used as "input text, output text/image".

General Purpose

Midjourney
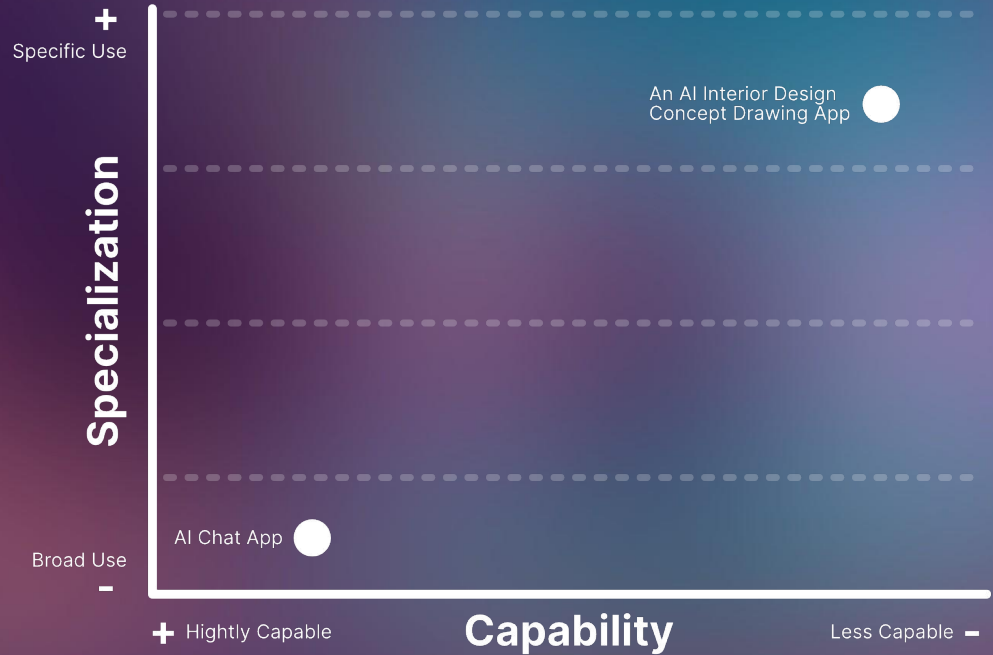
Chat-GPT

DreamStudio

Specialized

Jasper.ai

Github Copilot

Product Justification and Market Demand

Platforms like Chat-GPT and Midjourney will hold dominant as GP-AI platforms. This is useful in the broad sense, but falls short for specialized tasks.

Specialized tools are easier to understand, but are less capable.

Specialization

+ Specific Use

An AI Interior Design Concept Drawing App ⬤

Broad Use -

AI Chat App ⬤

Capability

+ Hightly Capable

Less Capable −

Product Justification and Market Demand

Prompt Engineering for GP-AI is too complicated. The barrier to entry is too unknown/daunting for newcomers. People often input bad prompts and are disappointed when given poor or unexpected results.

"Forest house"

"mesmerizing, painterly, masterpiece, secluded forest house nestled among the trees, volumetric lighting, enchantment and wonder, inviting, cozy, extremely detailed, sharp, trending artstation, realistic, digital art" bla bla bla
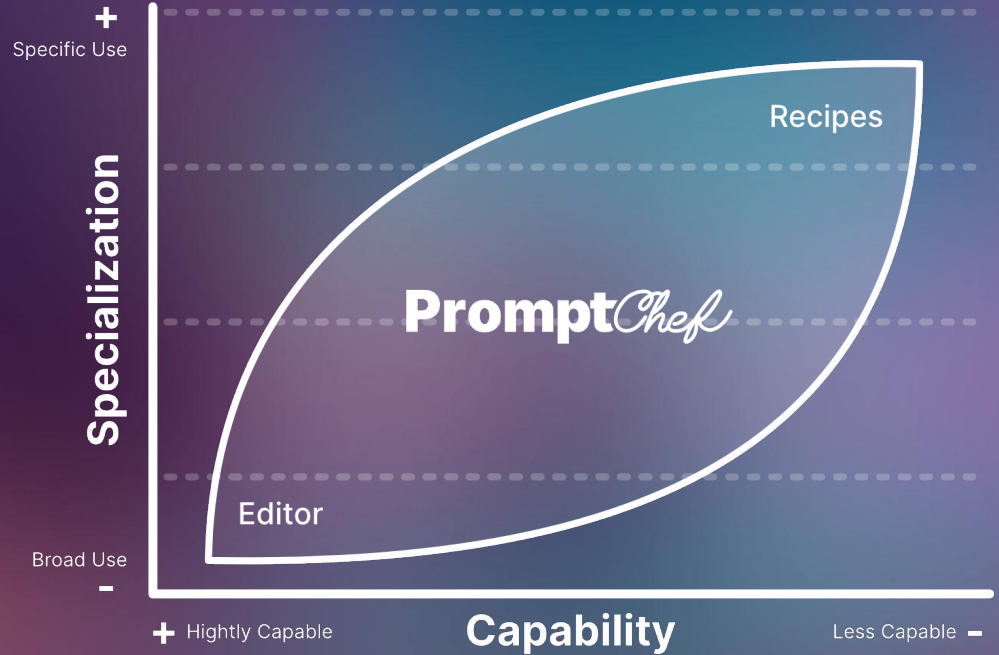
Product Solution

There are limitless uses for GP-AI in everyday lives. This offers developers an opportunity to build specialized apps for each individual scenario. Such as an AI Blogging app, AI essay writer, AI Interior Design illustrator.

But I believe there is a **better** opportunity to provide a single platform to host GP-AI apps like these.
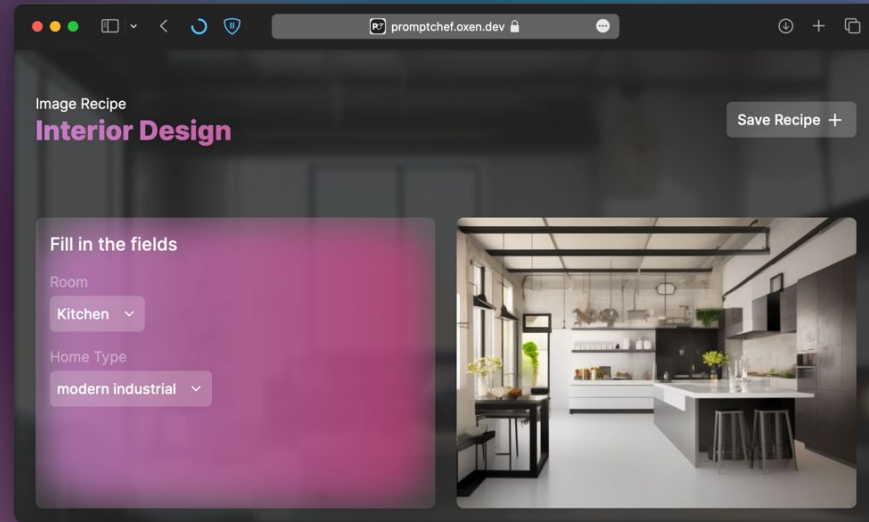
Product Solution

This is where Prompt Chef provides a platform for AI apps.

With Prompt Chef, you can build GP-AI apps ("recipes") with the easy-to-use interface, and share these simple recipes with the public. Users can choose to only use published content too, without needing to build their own.
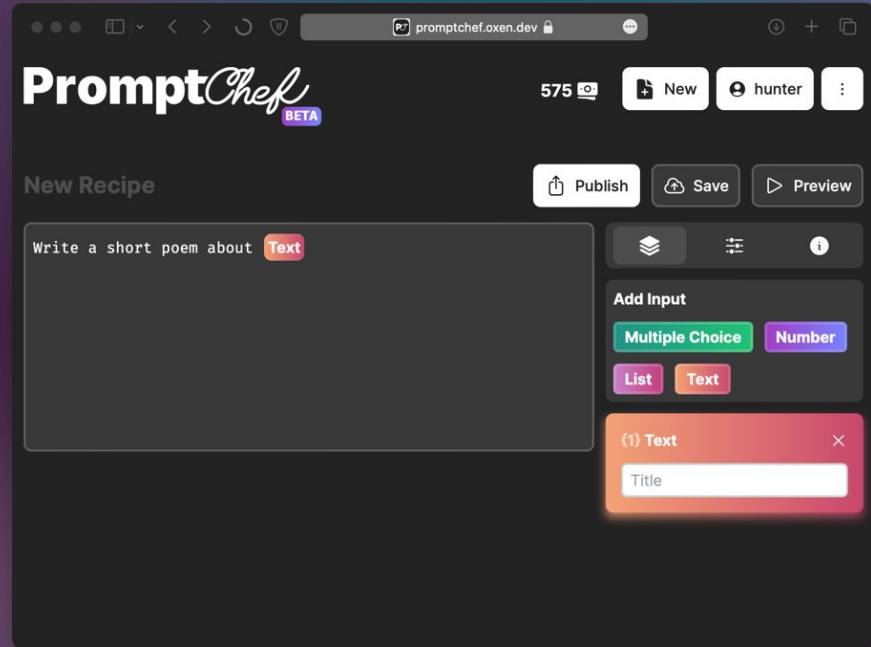
Run a Recipe Example

1. Sign up at promptchef.oxen.dev. You will be given free generator tokens.
2. Find a recipe under "Collections". For example, the Interior Design recipe.
3. Fill in the fields.
4. Press the generate button
5. A unique image will be generated. (Or text, if it is a text recipe)

Build a Recipe

1. Press the New Recipe button in the top right
2. Start typing in a prompt. For example: "Write a short poem about "
3. Drag or click one of the input option to use as a variable.
4. Write a descriptive title for the input
5. Press preview to view your new recipe

Required Technologies Used

Vercel is used to host the web app. This provides the app with fast loading speeds, and an extraordinarily enjoyable developer experience. Cron Jobs offer an interesting opportunity to build an Auto-GPT service in the future also.

StabitIty.ai is the sole provider for Image generation. Stable Diffusion XL offers great image quality and believability, and models like Stable Diffusion 1.5 offers fast and affordable image generation.

Side Quests Tech Used

Redis is being used to store published recipe data. This provides the capability for the blazingly fast search features and a better user experience when discovering new recipes.

Additional Tech Used

Next.js - For frontend and frontend related APIs

Tailwind CSS - All the frontend styling

Firebase - Authentication, user data, image storage, functions, security, analytics

Cloudflare - Security, domain management, cache

Stripe - Payment system

OpenAI - For GPT-3, GPT-4, Chat-GPT

...and many more.

Conclusion

Thank you Lablab.ai for the fun experience in this Hackathon. I appreciate the above-and-beyond work the team has done to make this hackathon possible.

As the sole builder on this project entry, I hope you all enjoy it!

-Hunter