Project 25: Recipe Suggestion Tool

Description:

This AI-powered tool suggests tasty recipes based on your ingredients, dietary preferences, or cravings. Whether you're working with leftovers, eating vegan, or just want something quick and healthy—this bot serves up fresh ideas in seconds.

---

recipe_suggester.py

```
import openai
import os
import gradio as gr

# Load the OpenAI API key
openai.api_key = os.getenv("OPENAI_API_KEY")

# Core function to suggest recipes
def suggest_recipes(user_input):
    # Set system instructions to guide AI as a creative cook
    messages = [
        {
            "role": "system",
            "content": (
                "You are a creative recipe developer. Based on the user's inpu
                "suggest 2-3 recipes. For each, include the name, a short desc
                "Make the tone warm, fun, and helpful like a friendly chef!"
            )
        },
        {
            "role": "user",
            "content": f"I want to cook something with: {user_input}"
        }
    ]

    try:
        # Send the prompt to the OpenAI ChatCompletion API
        response = openai.ChatCompletion.create(
            model="gpt-3.5-turbo",  # GPT-4 works too for more detailed recipe
```

```
            messages=messages
        )

        # Return the recipe suggestions
        return response["choices"][0]["message"]["content"].strip()

    except Exception as e:
        # Handle and display any errors
        return f"Error: {str(e)}"

# Gradio interface to take input and show recipes
iface = gr.Interface(
    fn=suggest_recipes,                                  # Function that handles re
    inputs=gr.Textbox(lines=2, placeholder="e.g. chicken, rice, spinach | or '
    outputs="text",                                      # Output area for recipes
    title="🍽️ AI Recipe Suggestion Tool",                # App title
    description=(
        "Tell me what you have or what you're craving, and I'll give you 2-3 r
        "Try: 'I have eggs, tomatoes, and cheese' or 'Give me a gluten-free de
    )
)

# Launch the app
iface.launch()
```