Project 37: Poem Generator

Description:

This poetic AI writes original poems based on your theme, emotion, or inspiration. Whether it's romantic, funny, deep, or sad—you'll get a unique, creative poem written in the style you choose.

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poem_generator.py

```
import openai
import os
import gradio as gr

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

# Function to generate poems based on theme and style
def generate_poem(theme, style):
    # System prompt tells AI to act as a poet
    messages = [
        {
            "role": "system",
            "content": (
                "You are a creative and thoughtful poet. Write an original poe
                "The poem should have depth, flow naturally, and be emotionall
            )
        },
        {
            "role": "user",
            "content": f"Theme: {theme}\nStyle: {style}"
        }
    ]

    try:
        # Request a poem from OpenAI
        response = openai.ChatCompletion.create(
            model="gpt-3.5-turbo",  # GPT-4 works beautifully too
            messages=messages
```

```
        )

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

    except Exception as e:
        return f"Error: {str(e)}"

# Gradio interface for poem generation
iface = gr.Interface(
    fn=generate_poem,
    inputs=[
        gr.Textbox(label="Theme (e.g. love, loss, nature, freedom)"),
        gr.Radio(["romantic", "sad", "funny", "deep", "haiku", "rhymed", "free
    ],
    outputs="text",
    title="🌸 Poem Generator",
    description="Enter a theme and pick a style, and I'll craft a custom poem
)

# Launch your poetry bot
iface.launch()
```