Project 98: Prompt Playground (Tweak and Compare)

Description:

This tool is an open sandbox for testing and comparing multiple prompt variations side by side. It's ideal for understanding how small tweaks in wording, tone, or structure affect model outputs—perfect for refining prompts iteratively.

prompt_playground.py

```
import os
import openai
import gradio as gr
# Load your OpenAI API key
openai.api_key = os.getenv("OPENAI_API_KEY")
# Function to compare two prompt versions
def compare_prompts(prompt1, prompt2):
    try:
        # Get response for prompt 1
        response1 = openai.ChatCompletion.create(
            model="gpt-3.5-turbo",
            messages=[{"role": "user", "content": prompt1}]
        )
        # Get response for prompt 2
        response2 = openai.ChatCompletion.create(
            model="gpt-3.5-turbo",
            messages=[{"role": "user", "content": prompt2}]
        )
        output1 = response1["choices"][0]["message"]["content"].strip()
        output2 = response2["choices"][0]["message"]["content"].strip()
        return output1, output2
    except Exception as e:
        return f"Error: {str(e)}", ""
```

```
# Gradio Interface
iface = gr.Interface(
    fn=compare_prompts,
    inputs=[
        gr.Textbox(label="Prompt 1", lines=4, placeholder="Enter your first ve
        gr.Textbox(label="Prompt 2", lines=4, placeholder="Enter your second v
    ],
   outputs=[
        gr.Textbox(label="Response to Prompt 1", lines=6),
        gr.Textbox(label="Response to Prompt 2", lines=6)
    ],
   title=" Prompt Playground - Tweak & Compare",
    description="Enter two variations of a prompt and see how the model respon
)
# Launch the playground
iface.launch()
```