Project 49: "Explain Like I'm 5" App

Description:

This tool explains complex topics in a way even a 5-year-old could understand. Whether it's quantum physics, inflation, or blockchain—it breaks it down into simple, fun, and friendly language. Great for kids, beginners, or curious minds!

explain_like_5.py

```python
import openai
import os
import gradio as gr

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

# Function to simplify a complex topic
def explain_eli5(topic):
    # Prompt AI to act like a fun, patient teacher for a 5-year-old
    messages = [
        {
            "role": "system",
            "content": (
                "You are a kind and fun teacher explaining things to a 5-year-
                "Break down complex topics into very simple explanations using
            )
        },
        {
            "role": "user",
            "content": f"Explain: {topic}"
        }
    ]

    try:
        # Ask OpenAI for a simplified explanation
        response = openai.ChatCompletion.create(
            model="gpt-3.5-turbo",  # GPT-4 works great too
            messages=messages
```

```python
        )

        # Return the ELI5 explanation
        return response['choices'][0]['message']['content'].strip()

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


# Gradio interface for ELI5 explanations
iface = gr.Interface(
    fn=explain_eli5,
    inputs=gr.Textbox(label="Enter a Topic (e.g. black holes, AI, inflation)")
    outputs="text",
    title="🧠 Explain Like I'm 5 (ELI5)",
    description="Type any complex topic and I'll explain it in a way a 5-year-
)


# Launch the ELI5 explainer
iface.launch()
```