Project 21: Movie Recommender

Description:
This app gives users personalized movie recommendations based on their mood, favorite genres, or recent watches. It acts like a friendly AI film buff—perfect for date nights, weekend binges, or just finding something new to watch.

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movie_recommender.py

```
import openai
import os
import gradio as gr

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

# Function to generate personalized movie recommendations
def recommend_movies(user_input):
    # System message instructs the model to act like a film recommendation eng
    messages = [
        {
            "role": "system",
            "content": (
                "You are a friendly and knowledgeable movie recommendation eng
                "Based on the user's preferences, mood, genre interests, or pr
                "Include a short description for each and keep the tone fun an
            )
        },
        {
            "role": "user",
            "content": f"Here's what I'm in the mood for: {user_input}"
        }
    ]

    try:
        # Make a request to the OpenAI API
        response = openai.ChatCompletion.create(
            model="gpt-3.5-turbo",   # GPT-4 can be used for deeper personaliz
```

```
            messages=messages
        )

        # Return movie suggestions from the assistant
        return response['choices'][0]['message']['content'].strip()

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

# Gradio UI for the movie recommender
iface = gr.Interface(
    fn=recommend_movies,                                # Function to run
    inputs=gr.Textbox(lines=2, placeholder="e.g. I want a feel-good comedy or
    outputs="text",                                     # Display recommendations
    title="🎬 Movie Recommender Bot",                   # App title
    description=(
        "Tell me what you're in the mood for and I'll suggest movies! "
        "Try: 'I like sci-fi thrillers', 'Feel-good rom-coms', or 'Something l
    )
)

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