Project 5: Study Buddy Bot

Description:

This bot acts as a friendly study partner. It can quiz you on topics, explain concepts in simple terms, or help summarize your notes. It's great for students who want a quick, interactive way to review material or learn new topics on the fly.

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study_buddy_bot.py

```
import openai
import os
import gradio as gr

# Set your OpenAI API Key
openai.api_key = os.getenv("OPENAI_API_KEY")

# Function to handle conversation with the study buddy bot
def study_buddy(user_input):
    # Define how the bot should behave using the system prompt
    messages = [
        {
            "role": "system",
            "content": (
                "You are a helpful and friendly study buddy. "
                "You help users understand difficult topics, quiz them with qu
                "or summarize content they provide. Always respond clearly and
            )
        },
        {
            "role": "user",
            "content": user_input  # Input from the student
        }
    ]

    try:
        # Make a request to the OpenAI Chat API
        response = openai.ChatCompletion.create(
            model="gpt-3.5-turbo",  # Language model used
```

```
            messages=messages       # Provide conversation context
        )

        # Return the assistant's reply
        return response["choices"][0]["message"]["content"].strip()

    except Exception as e:
        # Handle any API or request errors
        return f"Error: {str(e)}"

# Gradio interface for the study buddy bot
iface = gr.Interface(
    fn=study_buddy,                    # Function to handle responses
    inputs="text",                     # Text input box
    outputs="text",                    # Text output box
    title="📚 Study Buddy Bot",        # App title
    description=(
        "Ask me to explain a topic, quiz you, or summarize something you're le
        "Examples: 'Explain Newton's laws simply', 'Quiz me on world history',
    )
)

# Launch the Gradio app in the browser
iface.launch()
```