

Project 46: Riddle Generator

Description:

This brainy bot generates original riddles based on themes you choose—like logic, animals, numbers, or wordplay. It's great for kids, quizzes, escape rooms, or just for a fun mental workout.

riddle_generator.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 a themed riddle
def generate_riddle(theme):
    # Prompt the AI to act like a riddle master
    messages = [
        {
            "role": "system",
            "content": (
                f"You are a clever riddle master. Create a short, original riddle about {theme}."
                "The riddle should be clear, solvable, and fun. Provide the riddle and its answer."
            )
        },
        {
            "role": "user",
            "content": "Please give me a riddle."
        }
    ]

    try:
        # Request a riddle from OpenAI
        response = openai.ChatCompletion.create(
            model="gpt-3.5-turbo", # GPT-4 gives richer wordplay
            messages=messages
```

```

    )

    # Return riddle
    return response["choices"][0]["message"]["content"].strip()

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

# Gradio interface for riddle generation
iface = gr.Interface(
    fn=generate_riddle,
    inputs=gr.Radio(["logic", "math", "animal", "wordplay", "mystery", "random"],
                    outputs="text",
                    title="🧩 Riddle Generator",
                    description="Pick a theme and I'll give you a clever riddle with its answer")
)

# Launch the app
iface.launch()

```