

Project 28: Workout Plan Generator

Description:

This virtual fitness coach creates personalized workout routines based on your fitness goals, available equipment, time commitment, and experience level. Whether you're bulking, cutting, or just starting out—it gives you a plan that fits your lifestyle.

workout_plan_generator.py

```
import openai
import os
import gradio as gr

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

# Function to create a personalized workout plan
def generate_workout_plan(user_input):
    # System prompt for AI to act like a fitness trainer
    messages = [
        {
            "role": "system",
            "content": (
                "You are a certified fitness trainer. Based on the user's fitness goals, available equipment, time commitment, and experience level, create a personalized workout plan. Break it down by day, including exercises, sets, and reps. Be supportive, clear, and flexible with substitutions."
            )
        },
        {
            "role": "user",
            "content": f"Here's what I need: {user_input}"
        }
    ]

    try:
        # Call OpenAI API to generate the plan
        response = openai.ChatCompletion.create(
            model="gpt-3.5-turbo", # Can be upgraded to GPT-4
```

```

        messages=messages
    )

    # Return the workout plan
    return response["choices"][0]["message"]["content"].strip()

except Exception as e:
    # Return any error messages
    return f"Error: {str(e)}"

# Gradio interface for the workout plan generator
iface = gr.Interface(
    fn=generate_workout_plan,                # Function to create
    inputs=gr.Textbox(lines=3, placeholder="e.g. I want to build muscle at home"),
    outputs="text",                          # Output the custom
    title="🏋️ Personalized Workout Plan Generator",    # App title
    description=(
        "Tell me your fitness goals and schedule, and I'll generate a custom p
        "Try: 'Lose weight with 30-min daily workouts', 'Build muscle with dur
    )
)

# Launch the app
iface.launch()

```