

Project 69: Shopping List Creator

Description:

This handy assistant creates a detailed shopping list based on your meal plan, dietary needs, or general preferences. It can categorize items (e.g. produce, dairy, pantry), estimate quantities, and even suggest budget swaps.

shopping_list_creator.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 shopping list
def generate_shopping_list(meal_ideas_or_diet, for_how_many_days):
    # Prompt to behave like a smart grocery planner
    messages = [
        {
            "role": "system",
            "content": (
                f"You are a smart shopping list generator. Based on the user's "
                f"create a shopping list categorized by type (Produce, Protein "
                f"Estimate quantities needed and avoid unnecessary items."
            )
        },
        {
            "role": "user",
            "content": f"Meal Preferences or Diet: {meal_ideas_or_diet}\nShopping "
        }
    ]

    try:
        # Get shopping list from OpenAI
        response = openai.ChatCompletion.create(
            model="gpt-3.5-turbo",
```

```

        messages=messages
    )

    # Return organized shopping list
    return response["choices"][0]["message"]["content"].strip()

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

# Gradio interface for the shopping list generator
iface = gr.Interface(
    fn=generate_shopping_list,
    inputs=[
        gr.Textbox(label="Meal Plan / Dietary Preference (e.g. vegetarian, wee
        gr.Slider(1, 14, step=1, label="Number of Days")
    ],
    outputs="text",
    title="🛒 Shopping List Creator",
    description="Enter your meals or dietary style, and I'll give you a categor
)

# Launch the list builder
iface.launch()

```