

Project 52: Language Translator

Description:

This multilingual translator lets you convert any sentence into another language with clarity and cultural tone. Great for travelers, language learners, or global communication. It even adapts to formality and slang!

language_translator.py

```
import openai
import os
import gradio as gr

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

# Function to translate text
def translate_text(text, target_language, style):
    # Prompt the assistant to act as a fluent translator
    messages = [
        {
            "role": "system",
            "content": (
                f"You are a professional language translator. Translate the fo"
                f"in a {style} tone. Ensure it's grammatically accurate and na"
            )
        },
        {
            "role": "user",
            "content": text
        }
    ]

    try:
        # Call OpenAI API to translate
        response = openai.ChatCompletion.create(
            model="gpt-3.5-turbo",
            messages=messages
```

```

    )

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

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

# Gradio interface
iface = gr.Interface(
    fn=translate_text,
    inputs=[
        gr.Textbox(label="Text to Translate"),
        gr.Textbox(label="Target Language (e.g. French, Japanese, Spanish)",
        gr.Radio(["formal", "casual", "slang", "professional"], label="Tone/St
    ],
    outputs="text",
    title="🌐 Language Translator",
    description="Type a sentence, choose the target language and tone, and I'll
)

# Launch the app
iface.launch()

```