Project 36: Grammar Corrector

Description:

This tool takes any block of text and corrects spelling, grammar, and punctuation mistakes. It also improves clarity and flow—making your writing polished, professional, and easy to read. Perfect for emails, essays, or social posts.

`grammar_corrector.py`

```python
import openai
import os
import gradio as gr

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

# Function to correct grammar
def correct_grammar(input_text):
    # System prompt makes the assistant act like a proofreader
    messages = [
        {
            "role": "system",
            "content": (
                "You are an expert grammar editor. Review the following text a
                "Keep the meaning and tone intact while making it polished and
            )
        },
        {
            "role": "user",
            "content": input_text
        }
    ]

    try:
        # API call to OpenAI for grammar correction
        response = openai.ChatCompletion.create(
            model="gpt-3.5-turbo",  # GPT-4 optional for deeper edits
            messages=messages
```

```python
    )

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

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


# Gradio interface
iface = gr.Interface(
    fn=correct_grammar,                              # Grammar correction
    inputs=gr.Textbox(lines=6, label="Your Text"),   # User input
    outputs="text",                                  # Output the correct
    title="✍ Grammar Corrector",
    description="Paste any paragraph or message to fix grammar, spelling, and
)


# Launch the tool
iface.launch()
```