Project 20: Twitter Thread Summarizer

Description:

This tool takes a long Twitter thread and condenses it into a short, readable summary. It's especially useful for summarizing viral threads, educational explainers, or commentary across multiple tweets.

---

twitter_thread_summarizer.py

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

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

# Function to summarize a Twitter thread
def summarize_thread(thread_text):
    # Define the assistant's role using a system prompt
    messages = [
        {
            "role": "system",
            "content": (
                "You are a Twitter thread summarizer. Your task is to take lor
                "Capture the main message, key ideas, and takeaways without co
                "Format it like a TL;DR or key points list."
            )
        },
        {
            "role": "user",
            "content": f"Summarize this Twitter thread:\n\n{thread_text}"
        }
    ]

    try:
        # Send the conversation to OpenAI's model
        response = openai.ChatCompletion.create(
            model="gpt-3.5-turbo",   # You may also use GPT-4 for deeper nuanc
```

```python
        messages=messages
    )

    # Extract and return the summary
    return response["choices"][0]["message"]["content"].strip()

    except Exception as e:
        # Return error message if API call fails
        return f"Error: {str(e)}"


# Gradio app interface
iface = gr.Interface(
    fn=summarize_thread,                          # Core summarization functi
    inputs=gr.Textbox(lines=15, placeholder="Paste a full Twitter thread here.
    outputs="text",                               # Display summarized output
    title="🐦 Twitter Thread Summarizer",         # App title
    description=(
        "Paste a full Twitter thread (copy/paste all tweets) and get a short,
        "Great for educational, business, or viral threads."
    )
)


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