## **Project 12: News Article Summarizer**

## **Description:**

This tool takes full news articles and returns a clear, objective summary with the key points and facts. It's designed to cut through the fluff and deliver the headline insights. Perfect for journalists, researchers, or anyone staying informed without reading full articles.

## news\_summarizer.py

```
import openai
import os
import gradio as gr
# Set your OpenAI API key from environment variable
openai.api_key = os.getenv("OPENAI_API_KEY")
# Function that takes a news article and returns a concise summary
def summarize_news(article_text):
    # Prompt the model to act as a professional news summarizer
    messages = [
            "role": "system",
            "content": (
                "You are a news editor. Read full news articles and generate c
                "and outcomes. Keep it objective and professional, suitable fc
        },
            "role": "user",
            "content": f"Summarize the following news article:\n\n{article_tex
    1
    try:
        # Call the OpenAI API for summarization
        response = openai.ChatCompletion.create(
            model="gpt-3.5-turbo", # Can use "gpt-4" for more depth
            messages=messages
```

```
)
        # Return the generated summary
        return response['choices'][0]['message']['content'].strip()
    except Exception as e:
        # Return error message if something goes wrong
        return f"Error: {str(e)}"
# Gradio app interface setup
iface = gr.Interface(
    fn=summarize_news,
                                              # Function to summarize news
    inputs=gr.Textbox(lines=15, placeholder="Paste a news article here..."),
    outputs="text",
                                              # Output summarized text
    title="" News Article Summarizer",
                                            # App title
    description=(
        "Paste a full news article and get a summarized version with key facts
        "Ideal for quick understanding of current events without reading the f
    )
)
# Launch the app in browser
iface.launch()
```