Project 2: Customer Support Bot for FAQs

Description:
This project builds a simple chatbot that answers frequently asked questions based on a predefined knowledge base. It uses OpenAI's GPT model with a system prompt that guides the model to act like a helpful support agent. This is perfect for simulating a basic customer service interface.

Implementation

Here's a version using **Gradio** for a simple web UI:

faq_support_bot.py

```
import openai
import os
import gradio as gr

# Set your OpenAI API key
openai.api_key = os.getenv("OPENAI_API_KEY")  # or paste your key directly

# FAQ knowledge base (optional: load from file)
faq_context = """
FAQs:
Q: What are your business hours?
A: We are open Monday to Friday, 9 AM to 6 PM.

Q: How can I reset my password?
A: Click on 'Forgot Password' on the login page and follow the instructions.

Q: Where do you ship to?
A: We ship to all 50 U.S. states and select international locations.

Q: How can I contact support?
A: Email us at support@example.com or call 1-800-123-4567.
```

```
"""

def get_faq_response(user_input):
    messages = [
        {"role": "system", "content": "You are a helpful customer support ager
        {"role": "user", "content": user_input}
    ]
    try:
        response = openai.ChatCompletion.create(
            model="gpt-3.5-turbo",
            messages=messages
        )
        return response.choices[0].message.content.strip()
    except Exception as e:
        return f"Error: {str(e)}"

# Create a simple Gradio interface
iface = gr.Interface(
    fn=get_faq_response,
    inputs="text",
    outputs="text",
    title="Customer Support FAQ Bot",
    description="Ask any frequently asked question. Example: 'What are your bu
)

iface.launch()
```

How to Run:

1. Save as `faq_support_bot.py`
2. Install dependencies:

   ```
   pip install openai gradio
   ```

3. Set your API key:

```
export OPENAI_API_KEY=your_key_here
```

4. Run it:

```
python faq_support_bot.py
```

It will launch a local web page where you can type in your question and get a customer-service-style response.