

## Code for banking

```
from flask import Flask, request, jsonify

import openai

app = Flask(name)

# OpenAI API key setup

openai.api_key = "your_openai_api_key"

# Dummy data to simulate banking information

user_data = {
    "12345": {
        "name": "John Doe",
        "balance": 2500.00,
        "recent_transactions": [
            {"date": "2025-01-01", "description": "Grocery Store", "amount": -50.00},
            {"date": "2025-01-02", "description": "Salary Deposit", "amount": 2000.00},
        ]
    }
}

def fetch_account_details(account_number):
    """Fetch user account details."""
    return user_data.get(account_number, None)

@app.route('/chat', methods=['POST'])
def chatbot():
    user_input = request.json.get('message', '')
    account_number = request.json.get('account_number', '')

    if not account_number or account_number not in user_data:
```

```
return jsonify({"response": "Invalid account number. Please try again."})
```

```
user_account = fetch_account_details(account_number)
```

```
# Generate a response using GPT model
```

```
response = openai.ChatCompletion.create(
```

```
    model="gpt-4",
```

```
    messages=[
```

```
        {"role": "system", "content": "You are a helpful banking assistant."},
```

```
        {"role": "user", "content": user_input},
```

```
        {"role": "assistant", "content": f"Account Holder: {user_account['name']}.",
```

```
    ],
```

```
reply = response['choices'][0]['message']['content']
```

```
return jsonify({"response": reply})
```

```
if name == 'main':
```

```
    app.run(port=5000, debug=True)
```