# Using the Chat Completions API



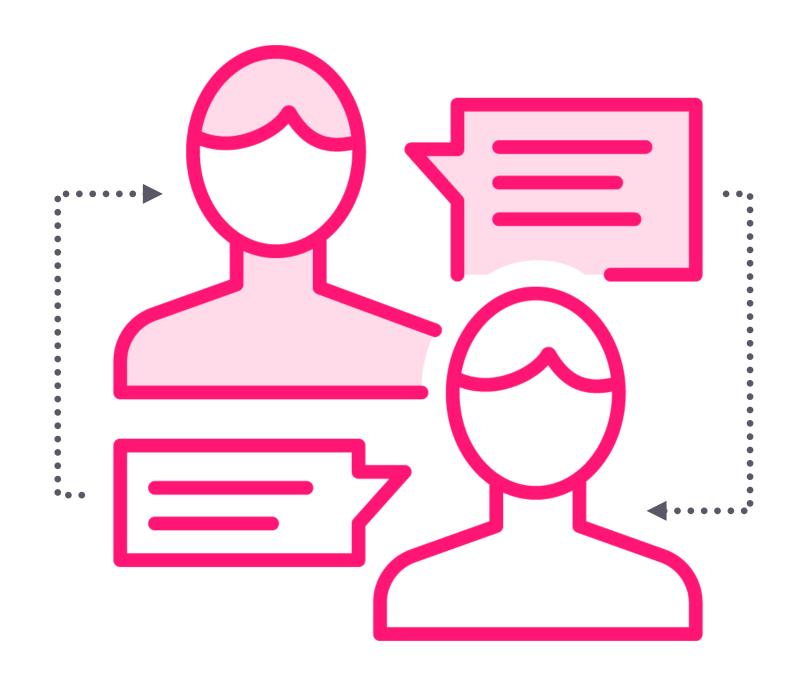
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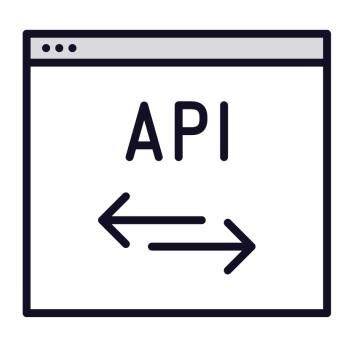


## **Multi-step Prompt**





## **Demo Application**



#### A command-line application

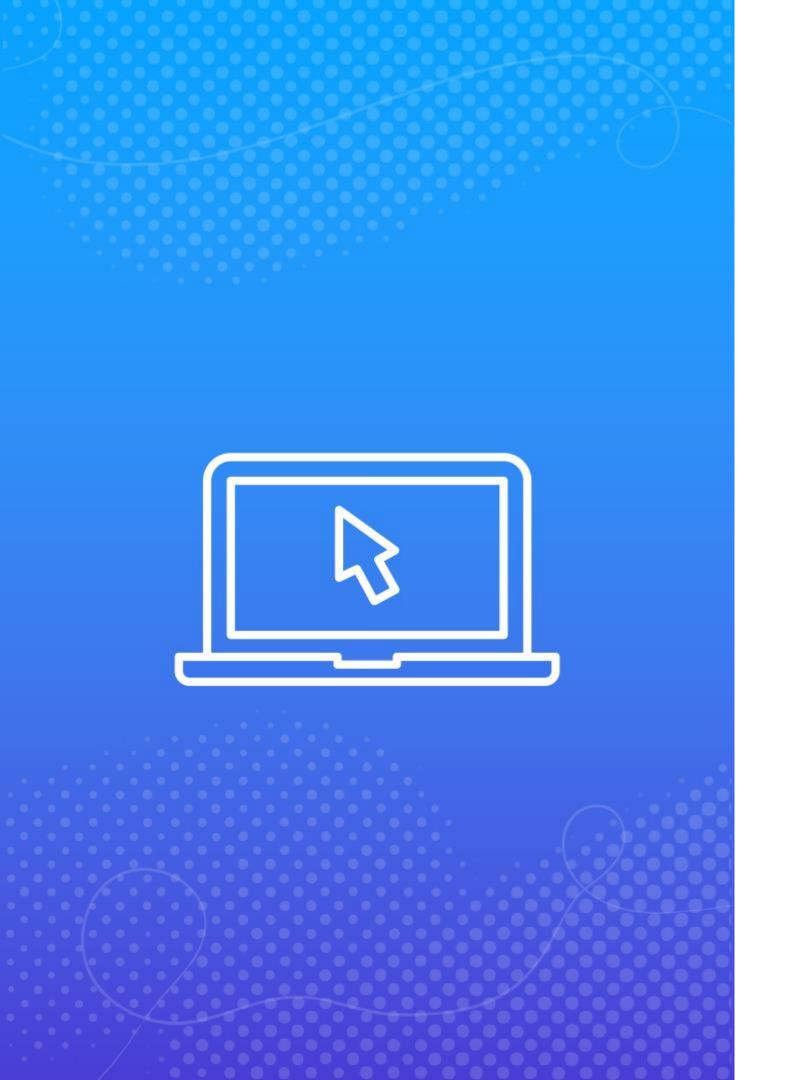
- It analyzes job interview transcriptions
- It reads the transcriptions from a TXT file
- First prompt extracts information from the interview, storing it in a JSON object
- Second prompt analyzes the information
- Function calling
  - Schedule a follow-up call

## Designing the First Prompt



## Designing the Second Prompt





**Building the application** 

## Calling External Functions



## **Function Calling**

#### **GPT** model



```
"role": "assistant",
"tool_calls": [
    "id": "call_id",
    "type": "function",
    "function": {
      "name": "send_email",
      "arguments": {
        "to": "john@example.com",
        "body": "Hi!"
```

### Step 1. Describe the Function

```
"type": "function",
"function": {
   "name": "send_email",
    "description": "Sends an email",
    "parameters": {
        "type": "object",
        "properties": {
            "to": {
                "type": "string",
                "description": "The email address of the recipient.",
            },
            "body": {
                "type": "string",
                "description": "The content or message to be sent in the email.",
            },
        "required": ["to", "body"],
   },
```

### Step 2. The Model Generates a JSON Object to Call the Function

```
Send an email to

John to say hi
```

```
"role": "assistant",
"tool_calls": [
    "id": "call_id",
    "type": "function",
    "function": {
      "name": "send_email",
      "arguments": {
        "to": "john@example.com",
        "body": "Hi!"
```



### Step 3. (You) Call the Function

```
"role": "assistant",
"tool_calls": [
   "id": "call_id",
    "type": "function",
                                                      send_email(
    "function": {
                                                        to = "john@example.com",
      "name": "send_email",
                                                        body = "Hi!"
      "arguments": {
        "to": "john@example.com",
        "body": "Hi!"
```



### Step 4. Send the Model the Result of the Function

```
"tool_call_id": "call_id",
"role": "tool",
"name": "send_email",
"arguments": "Email sent successfully"
}
```



## Error Handling



### Summary



#### The Chat Completions API demo

- Refine a multi-step prompt using the Playground
- First prompt extracts relevant information
- Second prompt analyzes the information
- Integrating the API code
- Using function calling
- Adding error handling

**Up Next:** 

## Optimizing API Usage

