LLM App Collection

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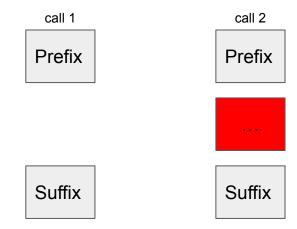
Openai API call

- `openai.ChatCompletion.create`
- Useful resources
 - official documentation
 - o <u>playground</u>, not chatgpt
 - prompt engineering guide

```
import os
import openai
openai.api_key = os.getenv("OPENAI_API_KEY")
response = openai.ChatCompletion.create(
 model="gpt-3.5-turbo",
 messages=[
  temperature=1,
 max_tokens=256,
  top_p=1,
  frequency_penalty=0,
 presence_penalty=0
```

Ultimate Goal: Prompt Reusing

- Naive example:
 - call 1: Hello, GPT! My name is Jiayi.
 - call 2: Hello Translation GPT! My name is Jiayi.
 - only "values" corresponding to suffix are reusable



Ultimate Goal: Prompt Reusing

Real world example

App Collection

- Goal
 - collect github repos that contain "openai.ChatCompletion.create"
- Tool
 - Github RestAPI
 - Scraper
- Problem
 - The RestAPI only returns the top 1000 results
- Method
 - `path` restriction
 - other keyword restrictions
- Current implementation

App Collection - Filtering

- Goal
 - filter out "uninteresting" repos
 - o "uninteresting": repos that do not use any prompt template
 - tutorials
 - vector database
- Method
 - same as prompt collection

Prompt Collection

- Goal
 - Extract prompt template
- Methods
 - static analysis
 - instrumentation + dynamic
- Current implementation

What you guys can do...

- Improve app collection
 - o as many as possible
- Improve prompt collection
 - as accurate as possible
- Reimplement 0-GPT on other open-source Ilms
 - o current implementation: <u>llama-2</u> (most popular)
 - other open-source llms: opt, qpt-neox*