

Day-1 Practice

Running LLM Model(Ollama) Locally On Host Machine And Summarize The Website Content

```
import os
from dotenv import load_dotenv
import requests
from openai import OpenAI
from scraper import fetch_website_contents
from IPython.display import Markdown, display

requests.get("http://localhost:11434").content
b'Ollama is running'

OLLAMA_BASE_URL="http://localhost:11434/v1"
ollama=OpenAI(base_url=OLLAMA_BASE_URL, api_key='ollama')

response=ollama.chat.completions.create(model="llama3.2",messages=[
    {"role":"user","content":"Tell me a Fun fact"}
])
response.choices[0].message.content

'Did you know that there is a species of jellyfish that is immortal? The Turritopsis dohrnii, also known as the "immortal jellyfish," can transform its body into a younger state through a process called transdifferentiation. This means it can essentially revert back to its polyp stage and grow back into an adult again, making it theoretically immortal!'

ss=fetch_website_contents("https://www.scrapethissite.com/pages/simple/")
print(ss)

Countries of the World: A Simple Example | Scrape This Site | A public sandbox for learning web scraping

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```

Scrape This Site
Sandbox

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Countries of the World: A Simple Example 250 items

A single page that lists information about all the countries in the world. Good for those just get started with web scraping.

Practice looking for patterns in the HTML that will allow you to extract information about each country. Then, build a simple web scraper that makes a request to this page, parses the HTML and prints out each country's name.

There are
4 video lessons
that show you how to scrape this page.

Data via
<http://peric.github.io/GetCountries/>

Andorra

Capital:
Andorra la Vella

Population:
84000

Area (km²):
468.0

United Arab Emirates

Capital:
Abu Dhabi

Population:
4975593

Area (km²):
82880.0

Afghanistan

Capital:
Kabul

Population:
29121286

Area (km²):
647500.0

Antigua and Barbuda

Capital:
St. John's

Population:
86754

Area (km²):
443.0

Anguilla

Capital:
The Valley

Population:
13254

Area (km²):
102.0

Albania

Capital:
Tirana

Population:
2986952

Area (km²):

):
28748.0

Armenia

Capital:
Yerevan

Population:
2968000

Area (km
2
):
29800.0

Angola

Capital:
Luanda

Population:
13068161

Area (km
2
):
1246700.0

Antarctica

Capital:
None

Population:
0

Area (km²):
1.4E7

Argentina

Capital:
Buenos Aires

Population:
41343201

Area (km²):
2766890.0

American Samoa

Capital:
Pago Pago

Population:
57881

Area (km²):
199.0

Austria

Capital:
Vienna

Population:
8205000

Area (km²):
83858.0

Australia

Capital:
Canberra

Population:
21515754

Area (km²):
7686850.0

Aruba

Capital:
Oranjestad

Population:
71566

```
Area (km  
2  
):  
193.0
```

Åland

Capital:
Mariehamn

Population:

```
messages=[  
    {"role":"system","content":"Knowledgeable Assistant"},  
    {"role":"user","content":"Who is Stronger Roronoa Zoro Or Sanji?  
From One piece"}  
]  
response=ollama.chat.completions.create(model="llama3.2",messages=messages)  
response.choices[0].message.content
```

'A popular debate among One Piece fans!\\n\\nBoth Roronoa Zoro and Sanji are incredibly skilled and powerful characters in the series, but their strengths lie in different areas.\\n\\n**Roronoa Zoro:**\\n\\nAs a master swordsman and first mate of Monkey D. Luffy\\'s Straw Hat Pirates, Zoro is known for his exceptional speed, agility, and overall combat prowess. He wields the Three Sword Style, which allows him to attack with multiple swords simultaneously.\\n\\nZoro\\'s greatest strength is his absolute physical skill and hand-eye coordination. He can dodge attacks with ease and deliver devastating blows that leave opponents reeling. His swordsmanship is unmatched among the Straw Hats, and he has taken down numerous powerful enemies, including some of the strongest foes in the One Piece universe.\\n\\n**Sanji:**\\n\\nAs a cook and member of the Straw Hat Pirates, Sanji\\'s strength lies not in physical combat but in his culinary skills, athleticism, and unorthodox fighting style. He is known as the "Pork King" for his incredible cooking abilities and speed.\\n\\nSanji\\'s main strengths include:\\n\\n1. **Rage Powder:** A unique form of martial arts that allows him to explode with intense energy when enraged.\\n2. **Physical Strength:** Sanji possesses surprising strength, considering his relatively small stature.\\n3. **Speed and Agility:** Despite his physical limitations, Sanji can dodge attacks quickly and move at impressive speeds.\\n\\n**Conclusion:**\\n\\nWhile both Zoro and Sanji are formidable warriors, their strengths lie in different areas. If we consider raw combat skills and pure physical strength, Roronoa Zoro

might have a slight edge over Sanji. However, if we factor in skill, speed, agility, and unorthodox fighting styles, Sanji's abilities become equally impressive.\n\nIt ultimately comes down to personal preference: do you prefer the swift and deadly precision of Zoro or the cunning, explosive power of Sanji?'

```
system_prompt = """
You are a snarky assistant that analyzes the contents of a website,
and provides a short, snarky, humorous summary, ignoring text that
might be navigation related.
```

```
Respond in markdown. Do not wrap the markdown in a code block -
respond just with the markdown.
```

```
"""
```

```
user_prompt_prefix = """
Here are the contents of a website.
Provide a short summary of this website.
If Country names, then summarize these too.
```

```
"""
```

```
def messages_for(website):
    return [
        {"role": "system", "content": system_prompt},
        {"role": "user", "content": user_prompt_prefix + website}
    ]

def summarize(url):
    website=fetch_website_contents(url)

response=ollama.chat.completions.create(model="llama3.2",messages=messages_for(website)
)
    return response.choices[0].message.content

summarize("https://www.scrapethissite.com/pages/simple/")
```

```
**Summary**\nThis website is a public sandbox for web scraping,
featuring a simple example of collecting country information from a
webpage.\n\n**Countries**\n\n* Afghanistan: capital Kabul, population
29121286, area 647500km2\n* Albania: capital Tirana, population
2986952, area 28748km2\n* Algeria is not listed (typo?)\n* Angola:
capital Luanda, population 13068161, area 1246700km2\n* Antigua and
Barbuda: capital St. John's, population 86754, area 443km2\n*
Argentina: capital Buenos Aires, population 41343201, area 2766890km2\
\n* Armenia: capital Yerevan, population 2968000, area 29800km2\n*
Australia: capital Canberra, population 21515754, area 7686850km2\n*
Austria: capital Vienna, population 8205000, area 83858km2\n* Åland:
capital Mariehamn, (population not listed)\n* Andorra: capital Andorra
la Vella, population 84000, area 468.0km2\n* American Samoa: capital
```

```
Pago Pago, population 57881, area 199.0km2\n* Antarctica: no capital  
or population given"  
  
def display_summary(url):  
    summary=summarize(url)  
    display(Markdown(summary))  
  
display_summary("https://www.scrapethissite.com/pages/simple/")  
  
<IPython.core.display.Markdown object>
```