CODE4TEENS

Python Discord Bot

DAY 07

All about Web-scraping

Contents

Exercise 01: $scrape

SOS	Difficulty:	★ ★ ★
💡	Objectives:	Use a command to instruct the discord bot to scrape the **first paragraph** from selected website.
🛠️	Skills required:	➤ Beautiful soup ➤ Inspect Html ➤ Python requests get method
🌐	Resources:	Selected website for web scraping: Talk about Programming For your reference: Beautiful Soup Documentation: Going down
🔍	Search keywords:	➤ Python requests get method ➤ Implementing Web Scraping in Python with BeautifulSoup
🔌	Command required:	**$scrape**

💻 **Code snippet:**

```
Import requests
From bs4 import BeautifulSoup
```

✅ **Output example:**

Code4Teens BOT Today at 00:24
Programming is something vast and rather individual as each developer chooses tools that are most convenient for them.

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Exercise 02: $programming

SOS	Difficulty:	★ ★ ★
💡	Objectives:	Use a command to instruct the discord bot to scrape the **"Designed by"** of the programming language in the table from selected website.
🛠️	Skills required:	➢ Beautiful soup (Find next) ➢ Inspect Html ➢ Python requests get method ➢ Python string format method
🌐	Resources:	Selected website for web scraping: Talk about Programming For your reference: ➢ Beautiful Soup Documentation: find_all_next() and find_next() ➢ Python f-Strings: The Pesky Details
🔍	Search keywords:	➢ Python requests get method ➢ Implementing Web Scraping in Python with BeautifulSoup ➢ BeautifulSoup find next
🔌	Command required:	**$programming**

⌨ Code snippet:

```
Import requests
From bs4 import BeautifulSoup

…


output = f"**__{title}__** \nPython : {gettext_python} \nC :
{gettext_c} \nC++ : {gettext_cpp} \nJava : {gettext_java}
\nJavaScript : {gettext_js} \nR : {gettext_r} \n"

return (output)
```

✅ Output example:

Code4Teens `BOT` Today at 00:37
Designed by
Python : Guido van Rossum
C : Dennis Ritchie
C++ : Bjarne Stroustrup
Java : James Gosling
JavaScript : Brendan Eich
R : Ross Ihaka and Robert Gentlemen

Exercise 03: $currency

SOS	Difficulty:	★ ★ ★ ★
💡	Objectives:	Use a command to instruct the discord bot to scrape the exchange rate of US Dollar from the selected website. ⬡ You must use web scraping to scrape the **Currency Name (USD Big) and the Exchange Rate (We Buy Rate)**.
🛠️	Skills required:	➢ Beautiful soup (Going down & Going sideways) ➢ Inspect Html ➢ Python requests get method ➢ Python string format method ➢ Python Split and Join
🌐	Resources:	Selected website for web scraping: Daily Exchange Rates For your reference: ➢ Beautiful Soup Documentation: Going down ➢ Beautiful Soup Documentation: Going sideways
🔍	Search keywords:	➢ Python requests get method ➢ Implementing Web Scraping in Python with BeautifulSoup ➢ Python BeautifulSoup Navigating tree sideways ➢ String split and join in python
🔌	Command required:	**$currency**

⌨ Code snippet:

```
Import requests
From bs4 import BeautifulSoup

…

output = "Currency: {}\nExchange Rate (MYR):
{}".format(update_currency, rate)
```

✅ Output example:

Code4Teens **BOT** Today at 00:43
Currency: US DOLLAR
Exchange Rate (MYR): 4.1179

Exercise 04: $job

SOS	Difficulty:	★ ★ ★ ★

💡	Objectives:	Part 1:
		Scrape a list of **All Job Title, Company Name and Salary**, print the result on the terminal.
		
		Part 2:
		Use a command to instruct the discord bot to scrape the info below:
		    1. **1st and 2nd Job title, Company name and Salary** in the selected webpage.
		    2. Output the result in an embed message form.
		
		*Please refer to the output example below.

🛠️	Skills required:	➢ Web scraping ➢ For Loops ➢ List in Python ➢ Join function
🌐	Resources:	Selected website for web scraping: Looking for Jobs For your reference: ➢ Beautiful Soup: Build a Web Scraper With Python ➢ Extracting Data from HTML with BeautifulSoup
🔍	Search keywords:	➢ Scraping data with multiple values within same class ➢ Converting list into string
🔌	Command required:	**$job**

💻 Code snippet:

```
Import requests
From bs4 import BeautifulSoup


Part 1:
#Scrape all Jobs, Companies and Salaries using loop


#Put the result into a list and convert them into String



#Print the result in the terminal



Part 2:
#Compile the Joblist


#Send the list out as an embed message on Discord
```

✅ **Output example:**

1️⃣ **Part 1:**

```
Job: Software Engineer
Job: Python Web Development Team Lead
Job: Consulting Analyst
Job: Application Developer / Programmer


Company: Dokonee
Company: iZyoo Platform Sdn Bhd
Company: Strella Consulting
Company: Plentisoft Sdn Bhd


Salary: RM6000 - RM12000
Salary: RM6000 - RM10000
Salary: RM2500 - RM3000
Salary: RM4000 - RM7000
```
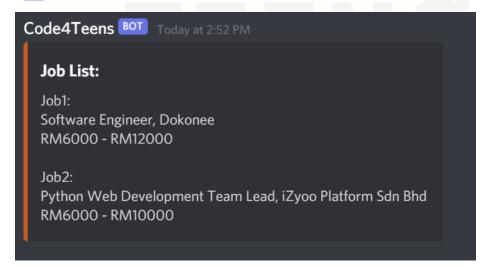
2️⃣ **Part 2:**

Code4Teens `BOT` Today at 2:52 PM

Job List:

Job1:
Software Engineer, Dokonee
RM6000 - RM12000

Job2:
Python Web Development Team Lead, iZyoo Platform Sdn Bhd
RM6000 - RM10000

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🚩 Bonus 01: $movie

SOS	Difficulty:	⚠️ ⚠️ ⚠️ ⚠️ ⚠️
💡	Objectives:	Use a command to instruct the discord bot to scrape the **storyline** of the movie.
🛠️	Skills required:	➢ String split or String slice ➢ Python requests get method ➢ Python string format method ➢ Beautiful soup (Extract URL & Going down) ➢ Inspect Html ➢ Error Handling
🌐	Resources:	Selected website for web scraping: https://www.imdb.com/find?q={}&s=tt&ttype=ft&ref=fn_ft For your references: ➢ Beautiful Soup Documentation: Quick Start ➢ Beautiful Soup Documentation: Going down
🔍	Search keywords:	➢ Python requests get method ➢ Python string format method ➢ Implementing Web Scraping in Python with BeautifulSoup ➢ Extract links from webpage using BeautifulSoup
🔌	Command required:	**$movie [name]** a) Your bot must able to handle the error handling part: response when no movie name was inserted.

▶_ Code snippet:

```
Import requests
From bs4 import BeautifulSoup

…

# Error Handling

…

# Search movie name via the search URL

…

# Extract link of the first movie from the results

…

# Scrape the storyline by using the new movie link

…

output = f"Movie Name: {movie_name} \nStoryline: {storyline}"
```

✅ Output example:

Code4Teens **BOT** Today at 00:05
Movie Name: Girl From Nowhere
Storyline: A mysterious, clever girl named Nanno transfers to different schools, exposing the lies and misdeeds of the students and faculty at every turn.

🔁 Error Handling Example:

Code4Teens **BOT** Today at 01:48
Please enter a movie name.

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