

Python Discord Bot

DAY 07

All about Web-scraping

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Exercise 01: \$scrape

SOS	Difficulty:	***
~	Objectives:	Use a command to instruct the discord bot to scrape the first paragraph from selected website.
涔	Skills required:	 Beautiful soup Inspect Html Python requests get method
(1)	Resources:	Selected website for web scraping: Talk about Programming For your reference: Beautiful Soup Documentation: Going down
P	Search keywords:	 Python requests get method Implementing Web Scraping in Python with BeautifulSoup
N	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.



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.
突	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
٩	Search keywords:	 Python requests get method Implementing Web Scraping in Python with BeautifulSoup BeautifulSoup find next
N	Command required:	\$programming

```
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
P	Search keywords:	 Python requests get method Implementing Web Scraping in Python with BeautifulSoup Python BeautifulSoup Navigating tree sideways String split and join in python
N	Command required:	\$currency

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

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

Output example:





Exercise 04: \$job

SOS	Difficulty:	***
<u>.</u>	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
Q	Search keywords:	 Scraping data with multiple values within same class Converting list into string
U	Command required:	\$job

```
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:

1 Part 1:

Job: Software Engineer

Job: Python Web Development Team Lead

Job: Consulting Analyst

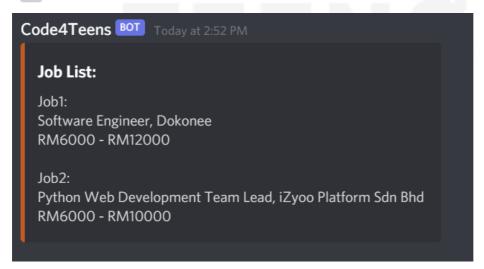
Job: Application Developer / Programmer

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

2 Part 2:



P Bonus 01: \$movie

!! This is a BONUS question.

SOS	Difficulty:	<u> </u>
Ÿ	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
P	Search keywords:	 Python requests get method Python string format method Implementing Web Scraping in Python with BeautifulSoup Extract links from webpage using BeautifulSoup
N#	Command required:	\$movie [name] a) Your bot must able to handle the error handling part: response when no movie name was inserted.

```
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:



