TECNOLÓGICO NACIONAL DE MÉXICO
CAMPUS COLIMA

MAESTRÍA EN SISTEMAS COMPUTACIONALES

Asignatura:
Bases de Datos y Bases de Conocimientos

Catedrático:
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Presenta:
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Tema:
S11-U3-AC-01 Web Scraping using Python, Jupyter Notebook and ChatGPT

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In [ ]:
```python
import requests
from bs4 import BeautifulSoup
import csv

def scrape_products(url):
    # Send a GET request to the URL
    response = requests.get(url)

    # Check if request was successful
    if response.status_code == 200:
        # Parse the HTML content of the page
        soup = BeautifulSoup(response.content, 'html.parser')

        # Find all the product containers
        product_containers = soup.find_all('div', class_='ui-search-result__content

        # Open CSV file in write mode
        with open('products.csv', 'w', newline='', encoding='utf-8') as csvfile:
            # Create CSV writer object
            writer = csv.writer(csvfile)
            # Write header row
            writer.writerow(['Product', 'Price'])
```

```python
        # Iterate through each product container
        for container in product_containers:
            # Extract product name
            product_name = container.find('h2', class_='ui-search-item__title')

            # Extract product price
            product_price = container.find('span', class_='ui-search-price__par

            # Write data to CSV file
            writer.writerow([product_name, product_price])

        print("CSV file generated successfully.")
    else:
        print("Failed to retrieve data.")

# URL of the website to scrape
url = 'https://listado.mercadolibre.com.mx/alexa_Tienda_nuvitu-electronics_NoIndex_
scrape_products(url)
```

CSV file generated successfully.

Conclusions

Web scraping is a useful technique to extract data from different websites, allowing data
scientist to gather information for several topics automatically and use this information to
analyze and detect trends, new business opportunities, monitor market competitors and
other benefits, these are inportant inputs during the decision-making process in
organizations or a companies. However, we must consider and respect websites terms and
follow legal regulations for each website to avoid copyright and data protection law
conflicts.