

Scraping dynamic web page

1. Dynamic website :

A dynamic web page is a web page that displays different content each time it's viewed. That means the content of the page may change with the time of the day.

Ex. those websites in which we can log in, uploading photos, make shopping, or selling.

There are two types of web pages-

(i) client-side scripting :

(ii) server-side scripting :

(i) client-side scripting :-

Web pages that change in response to action within that web page, such as a mouse or a keyboard action, use client-side scripting.

Ex. Client-side scripts generate client-side content. Client-side content is content that's generated on the user's computer rather than the server. In these cases, the user's web browser would download the web page content from the server, process the code that's embedded in the web page and then display the updated content to the user.

(ii) server-side scripting :-

Web pages that change when a web page is loaded or visited use server-side scripting. Server-side content is content that's generated when a web page is loaded.

For example, login pages, forums, submission forms, and shopping carts, all use server-side scripting since those web pages change according to what is submitted to it.

2. Static website:-

Those websites which contain some information only like any website that contains the information of a company and that cannot be changed or that become fix after updating once. And the client cannot make a change in it. It needs a web developer to make update it.

3. Selenium:-

Selenium is a free (open source) automated testing suite for web applications across different browsers and platforms.

It was first framed in the year of 2004 by Jason Huggins by developing a javascript library that interacts with the pages and tests automatically. This library then evolved into the Selenium core. It acts as the underlying foundation for RC and IDE. It allows users to choose their own language which is not possible in other tools.

This is my code on Github [zomato scraper](#)

I need chrome web browser in which I have browsed my code and for it I have to install chrome web-driver.

Raw syntax :-

```
driver = webdriver.Chrome();
driver.get("https://www.zomato.com/ncr")
page = driver.execute_script("return document.documentElement.outerHTML")
driver.quit()
soup = BeautifulSoup(page, 'html.parser')
main_div = soup.find('div', class_='ui segment row')
```

In this whole project of scraping, I have divided the project into two tasks-. In the first task, we have to scrape the name of the localities of Delhi NCR and the number of restaurants in particular localities. And in the second task, we have to find the detail of all the restaurants of the particular locality. For which I took input from the user to select the locality. And then request the locality URL and then find all the URLs of different categories and make a list of that in task 1 and in task 2 I iterated a loop on the URL list and requested one by one and scraped the details of all the restaurants of the first page of each category.

And task 1 gives output like this [task1](#)

And its output looks I have stored in the [dictionary](#). And it looks like-

```
{'Id': '18658316',
 'locality': 'Connaught Place',
 'name': 'Biryani By Kilo',
 'price': '₹800',
 'rating': '4.3',
 'review': '140 votes'}
```

I will also explain my code from Github.