**WEB SCRAPING**

**Intro of web scraping:**

## What is Web Scraping?

Web scraping is an automated technique used to collect large amounts of data from websites. Instead of manually copying and pasting data, web scraping uses scripts or software to extract the required information efficiently.

**For example**, suppose you want to collect product prices from an e-commerce website. Instead of checking each product manually, web scraping can extract all product names, prices, and reviews in seconds.

**Beautifulsoup vs selenium:**

### **When to Use What?**

* **Use BeautifulSoup** if the website has static content and does not require interaction.
* **Use Selenium** if the website loads content dynamically or requires user actions (like clicking buttons or logging in).

**How to generate API key** [google cloud console]:

Go to Google cloud console click manage API key and click go to credentials

Create a project and click credential in navi bar and generate API key

Now click Enable APIs &Services and search your scrping platform (eg: YouTube Data API v3)

**Google YouTube API documentation**

Go to YouTube data api and click references

under overview(it is in left side) click channels and select list

select list(by channel ID)

if you need to see a lang. in python set it

**Scrap channel statics from youTube**

See in colab

To take a ID means go to chatgpt and past the link of that channel and give a prompt for grtting a ID

**Analyze and visualize the YT channels**

Using seaborn we visualize the datas - See in colab

**Hands -on**

**Task 1:**

Beautifulsoup and selenium web scrap learn and practice in web scraping in ecommerce

**Task 2:**

Scrap vedio details for a YT channels

(each vedio playlist count how many vedio in that)