**Web Scraping :**

**Install npm, install request or axios for fetch URL,**

**Cheerio to get pure HTML code. For e.g.**

let axios = require("axios")

let cheerio = require('cheerio');

axios.get('https://www.worldometers.info/coronavirus/').then((response) => {

    dataCollect(response.data)

  });

function dataCollect(body){

    // console.log(body);

    let seltool = cheerio.load(body);

    // console.log(seltool);

    let contentArr = seltool('div.maincounter-number span')

    // console.log(contentArr);

    for (let i = 0; i < contentArr.length; i++){

        let data = seltool(contentArr[i]).text()

        console.log(data);

    }

}

**Summary:**

1. **by using cheerio we can scrape only initially loaded data.**
2. **How to scrape data from multiple pages from make request.**
3. **Methods: text(), html(), has(),not(),attr(),find(),trim(),split() etc.**
4. **Css class selector (how to select pseudo class,normal class, multiple class in one tag etc….)**

**Project:**

1. **ESPN individually cricket -> batsman,most wickter, player details fetch**
2. **Fetch ipl 2021-22 data(all teams with player)**

**Next Topics: Scraping data save into files(fs, xlsx module)**

1. **File System(read, write) readFileSync(), writeFileSync() method**
2. **Working with JSON data(JSON.parse(), JSON.stringfiy())**
3. **Working with xlsx file(install xlsx module) and learnt how to read xlsx file and write data**
4. **Path module (for working with path, directory)**
5. **Learnt how to make directory**

**Project:**

1. **Fetch ipl 2021-22 data(all teams with player) and make a folder “IPL” then make all “Teams” directory after that make each “player xlsx file” and fetch all details like: name,teamname,run,balls,fours,sixs,venue,strike,rate,date,opponentTeamName etc..**
2. **And all fetched data write in “player xlsx file”.**

**Next Topics: Browser Automation**

**Resources : (**[**https://flaviocopes.com/puppeteer/**](https://flaviocopes.com/puppeteer/)**)**

**(**[**https://nitayneeman.com/posts/getting-to-know-puppeteer-using-practical-examples/**](https://nitayneeman.com/posts/getting-to-know-puppeteer-using-practical-examples/)**)**

1. **Promises, Async, Await Methods**
2. **Puppeteer module(google’s product) help us to automation and another one is selenium .**

**Puppeteer has following classes:** Puppeteer, Browser Fetcher, Browser Context, Page, Keyboard, Mouse, Touchscreen, File chooser, Frame, worker

**Project:**

1. **Hacker rank auto code submission**
2. **Product prize comparisons(flipkart,amazon,paytm)**
3. **Youtube playlist analyzer**