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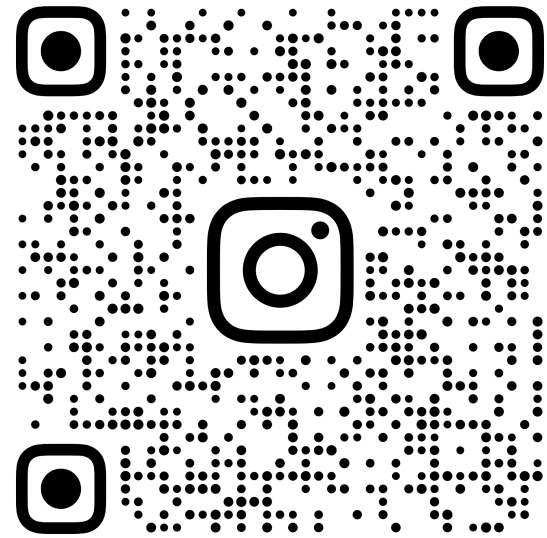


# Web Scrapping with Playwright & HAR Files

By Tom Day



# InstaGram Giveaway!



BEARDEDBOARBBQ



# Playwright

“an open-source framework for *reliable* end-to-end testing for modern web apps” - Microsoft

<https://playwright.dev>

[https://2023.stateofjs.com/en-US/libraries/testing/#testing\\_ratios](https://2023.stateofjs.com/en-US/libraries/testing/#testing_ratios)

<https://learn.microsoft.com/en-us/training/modules/build-with-playwright/>



# Playwright Navigation

<https://playwright.dev/docs/navigations>

```
const browser = await playwright.chromium.launch();  
const context = await browser.newContext();  
const page = await context.newPage();  
  
await page.goto('https://kcbs.us/');
```

The code above loads the page and waits for the web page to fire the load event. The load event is fired when the whole page has loaded, including all dependent resources such as stylesheets, scripts, iframes, and images.



# Playwright Locators

<https://playwright.dev/docs/locators>

```
await page.getByLabel('User Name').fill('John');  
await page.getByLabel('Password').fill('secret-password');  
await page.getByRole('button', { name: 'Sign in' }).click();  
await expect(page.getByText('Welcome, John!')).toBeVisible();
```



# Playwright Locators

```
▼ <div class="login-join-wrap hidden-xs">
  ▼ <div id="login-wrap">
    ▼ <a href="#" data-toggle="modal" data-target="#myModal">
      ▶ <svg id="login-icon" xmlns="http://www.w3.org/2000/svg" viewBox="0 0 12 12"> ⋮ </svg>
        <span>Log in</span>
      </a>
    </div>
    ▶ <div class="join-free-wrap dropdown"> ⋮ </div>
  </div>
```

```
await page.locator('#login-wrap > a').click();
```





# Playwright Locators Example

scrape-kcbs-toy.ts Walkthrough



# Playwright Forms

```
await page.getByLabel('User Name').fill(`${username}`);  
await page.getByLabel('Password').fill(`${password}`);  
await page.getByRole('button', { name: 'Sign in' }).click();
```

```
await page.fill("[name=username]", `${username}`);  
await page.fill('[type="password"]', `${password}`);  
await page.click("[type=submit]");
```



# Playwright Forms Example

scrape-kcbs-events.ts Walkthrough



# Playwright Scroll Example

```
// Locate with RegEx
const followersLink = page.getByText(/[0-9,.KM]+ followers/i);

await followersLink.click();

// Locate the second dialog
const followersDialog = page.getByRole('dialog').nth(1);

// Locate within another locator
await followersDialog
    .locator('div:visible')
    .last()
    .hover();

// Scroll down (x, y)
await page.mouse.wheel(0, 100);
```



# Playwright Interaction Example

scrape-ig-followers.ts Walkthrough



# It Really Works!

We suspect automated behavior  
on your account

To prevent your account from being temporarily restricted or permanently disabled, ensure that no other users or tools have access to your account and that you're following our [Terms of Use](#). Also consider changing your password to a stronger one to prevent unauthorized access to your account by third parties.

Dismiss



# Playwright Connect Through CDP

<https://playwright.dev/docs/api/class-browsertype#browser-type-connect-over-cdp>

- Attaches Playwright to an existing browser instance using the Chrome DevTools Protocol.
- Must start browser with debugger enabled.



# Playwright CDP Example

scrape-ig-followers-cdp.ts Walkthrough





# HAR Files

“The **HTTP Archive** format, or **HAR**, is a JSON-formatted archive file format for logging of a web browser's interaction with a site. The common extension for these files is **.har**.” - Wikipedia

[https://en.wikipedia.org/wiki/HAR\\_\(file\\_format\)](https://en.wikipedia.org/wiki/HAR_(file_format))



# HAR File Example

Capture IG followers interaction.



# Questions

