

# Major Project

## Bug Bounty Reconnaissance Assignment : (Shivam Sahu)

Target Company : X (twitter)

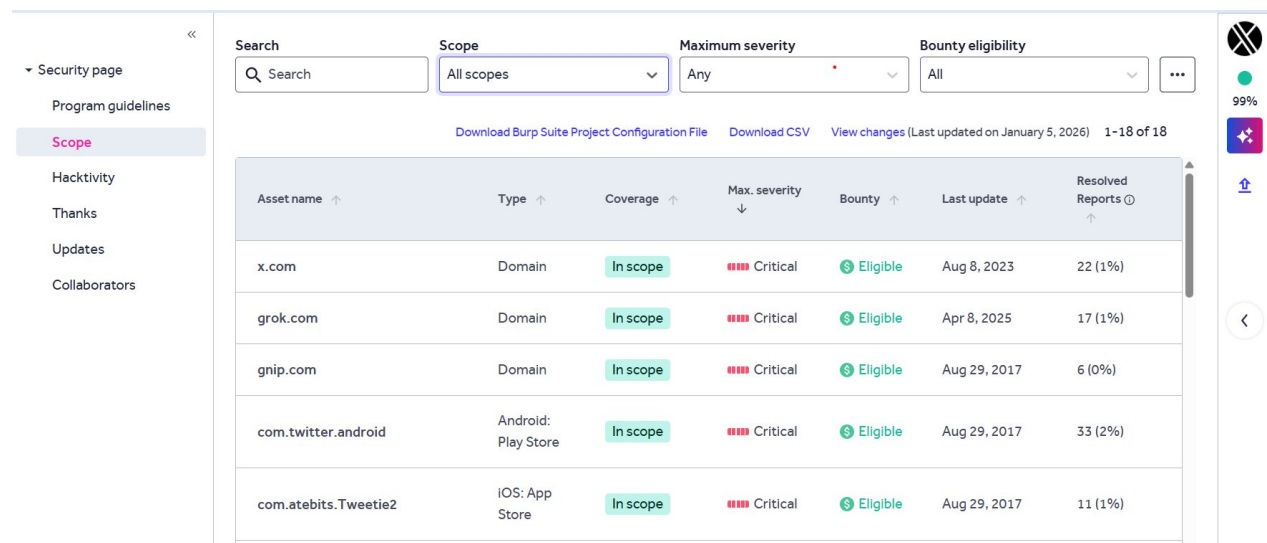
### ➤ Identify the Company's Main Domain :

The official main domain of **X (formerly Twitter)** is **x.com** .

The old domain twitter.com is still active but now redirects to x.com .

### ➤ Locate the Bug Bounty / Vulnerability Disclosure Program :

Link of the page : <https://hackerone.com/x>



Asset name ↑	Type ↑	Coverage ↑	Max. severity ↓	Bounty ↑	Last update ↑	Resolved Reports ⓘ
x.com	Domain	In scope	Critical	Eligible	Aug 8, 2023	22 (1%)
grok.com	Domain	In scope	Critical	Eligible	Apr 8, 2025	17 (1%)
gnip.com	Domain	In scope	Critical	Eligible	Aug 29, 2017	6 (0%)
com.twitter.android	Android: Play Store	In scope	Critical	Eligible	Aug 29, 2017	33 (2%)
com.atebits.Tweetie2	iOS: App Store	In scope	Critical	Eligible	Aug 29, 2017	11 (1%)

Hacktivity		Filter	Sort
56	<p>X / xAI</p> <p>• <a href="#">Bypassing x profile verification to receive instant blue checkmark and unlimited profile changes</a></p> <p>Bug reported by <a href="#">itsdavid</a> was disclosed 2 years ago Business Logic Errors</p> <p>The vulnerability allowed users to bypass the profile verification process on X by upgrading and downgrading their plan immediately after changing their profile picture. This permitted continuous profile picture changes without review. This summary was automatically generated.</p>	Low	\$250 Resolved
52	<p>X / xAI</p> <p>• <a href="#">Open Redirect on https://www.twitterflightschool.com/widgets/experience?destination_url=https://evil.com</a></p> <p>Bug reported by <a href="#">nagli</a> was disclosed 5 years ago Open Redirect</p> <p>An open redirect vulnerability was discovered on the subdomains flightschool.twitter.com and takeflight.twitter.com. This vulnerability allowed attackers to craft URLs that could redirect users to a site of their choosing, potentially leading to phishing scams. This summary was automatically generated.</p>	Low	Resolved
37	<p>X / xAI</p> <p>• <a href="#">Bypass Password Authentication to Update the Password</a></p> <p>Bug reported by <a href="#">a13h1</a> and <a href="#">root_a13h1</a> was disclosed 5 years ago Collaboration Improper Authentication - Generic</p> <p>A security vulnerability allowed hackers to bypass the old password screen on Twitter and update a victim's password by using unrestricted rate limiting or brute forcing. This could lead to a complete takeover of the victim's account. This summary was automatically generated.</p>	Medium	Resolved
123	<p>X / xAI</p> <p>• <a href="#">XSS via referrer parameter</a></p> <p>Bug reported by <a href="#">keer0k</a> was disclosed 5 years ago Cross-site Scripting (XSS) - Reflected</p>	Medium	Resolved

Hacktivity		Filter	Sort
1231	<p>X / xAI</p> <p>• <a href="#">Potential pre-auth RCE on Twitter VPN</a></p> <p>Bug reported by <a href="#">orange</a> was disclosed 6 years ago OS Command Injection</p>	Critical	\$20,160 Resolved
9	<p>X / xAI</p> <p>Bug reported by <a href="#">neex</a> and <a href="#">serverinspector</a> was resolved 8 months ago Collaboration</p>		\$15,000
67	<p>X / xAI</p> <p>Bug reported by <a href="#">supernatural</a> was resolved 8 years ago</p>		\$10,080
8	<p>X / xAI</p> <p>Bug reported by <a href="#">avicodeur_</a> was resolved 10 years ago</p>		\$10,080
12	<p>X / xAI</p> <p>Bug reported by <a href="#">0xbastion</a> was resolved 9 years ago</p>		\$10,080
7	<p>X / xAI</p> <p>Bug reported by <a href="#">kishanbagaria</a> was awarded a bounty 5 years ago</p>		\$7,700
1	<p>X / xAI</p> <p>Bug reported by <a href="#">max</a> was resolved 10 years ago</p>		\$7,560
-	<p>X / xAI</p>		\$7,560

List of vulnerabilities reported on Hackerone for X (twitter) by security Experts under Bug Bounty / Vulnerability Disclosure Program.

## ➤ Identify Bug Bounty Scope (In-Scope & Out-of Scope)

### ◆ In-scope :-

Based on the Rules of Engagement and Report Eligibility defined on X's HackerOne program, the following are considered in scope:

- Security vulnerabilities affecting assets owned and operated by X
- Issues that demonstrate a clear and verifiable security impact on X's websites or applications
- Vulnerabilities discovered using test accounts without violating user privacy
- Issues that do not negatively impact X users (e.g., no spam, no denial of service)
- Vulnerabilities that comply with X's disclosure and reporting guidelines
- Reports submitted manually after proper verification

Note:

X does not provide a fixed list of in-scope assets. Scope is determined by eligibility rules and engagement guidelines published on the HackerOne program page.

### ◆ Out-of-Scope / Ineligible Issues :-

The following issues are outside the scope of X's vulnerability rewards program:

- Attacks requiring physical access to a user's device
- Physical attacks against X property or data centers

- Forms missing CSRF tokens without proven exploitability
- Logout CSRF
- Password and account recovery policy issues
- Invalid or missing SPF records
- Content spoofing or text injection
- Issues related to software or protocols not under X's control
- Spam reports
- Bypass of URL malware detection
- Vulnerabilities affecting only outdated or unpatched browsers or platforms
- Social engineering of X staff or contractors
- Issues without clear security impact (e.g., clickjacking on static pages, missing headers)
- Denial of Service (DoS/DDoS) attacks
- Cache poisoning affecting service availability
- Broken hyperlinks without security impact
- Client-side feature unlocking on modified, rooted, or jailbroken devices
- Open redirects without significant security risk
- Manipulation of likes/follows/views due to caching behavior
- Homoglyph URL attacks without broader platform impact
- Rate-limit bypass reports on Grok or xAI APIs

## ➤ Ping the Main Domain :-

```

Session Actions Edit View Help
(kali@kali)-[~]
$ ping x.com
PING x.com (172.66.0.227) 56(84) bytes of data.
64 bytes from 172.66.0.227: icmp_seq=1 ttl=128 time=67.2 ms
64 bytes from 172.66.0.227: icmp_seq=2 ttl=128 time=47.8 ms
64 bytes from 172.66.0.227: icmp_seq=3 ttl=128 time=46.4 ms
64 bytes from 172.66.0.227: icmp_seq=4 ttl=128 time=120 ms
64 bytes from 172.66.0.227: icmp_seq=5 ttl=128 time=48.8 ms
64 bytes from 172.66.0.227: icmp_seq=6 ttl=128 time=65.4 ms
64 bytes from 172.66.0.227: icmp_seq=7 ttl=128 time=60.2 ms
64 bytes from 172.66.0.227: icmp_seq=8 ttl=128 time=63.3 ms
64 bytes from 172.66.0.227: icmp_seq=9 ttl=128 time=52.3 ms
64 bytes from 172.66.0.227: icmp_seq=10 ttl=128 time=60.9 ms
64 bytes from 172.66.0.227: icmp_seq=11 ttl=128 time=46.1 ms
64 bytes from 172.66.0.227: icmp_seq=12 ttl=128 time=62.0 ms

```

Returned IP Address : 172.66.0.227

## ➤ Technology Stack Identification (Main Domain) :-

Tool used: Wappalyzer (Browser Extension)

Target: Main Domain homepage

### **Detected Technologies**

#### **Frontend / JavaScript Framework**

- React – Used for building the user interface of the website.

#### **Web Framework (Backend)**

- Express – Node.js web framework used for server-side routing and APIs.

#### **UI Framework**

- Tailwind CSS

#### **Programming language**

- Node.js

#### **Content Delivery & Hosting**

- Cloudflare
- Amazon S3

Note: No analytics tools , CMS were detected on the main domain using Wappalyzer during passive reconnaissance.

## Ecommerce



## JavaScript frameworks



## Security



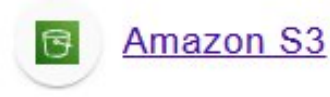
## Web frameworks



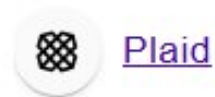
## Programming languages



## CDN



## Payment processors



## JavaScript libraries



## Miscellaneous



[Plaid](#)



[PWA](#)



[Open Graph](#)

## Web servers



[Express](#)

## Caching



[Varnish](#)

## PaaS



[Amazon Web Services](#)

## Reverse proxies



[Envoy](#)

## UI frameworks



[Tailwind CSS](#)

## Authentication



[Google Sign-in](#)



[Apple Sign-in](#)



## ➤ ASN Number and Organization IP Ranges :-

**ASN(Autonomous System Number):** AS13335

**Organization Name:** Cloudflare,Inc.(CLOUDFLARENET)

**IP Ranges (Netblocks) :** 172.66.0.0/22

**Commands used :** whois -h whois.cymru.com " -v 172.66.0.27"

```
(kali㉿kali)-[~]
$ whois -h whois.cymru.com " -v 172.66.0.227"
AS      | IP      | BGP Prefix      | CC | Registry | Allocated | AS Name
13335   | 172.66.0.227 | 172.66.0.0/22   | US | arin      | 2015-02-25 | CLOUDFLARENET, US
```

### **Observation :-**

The identified IP range belongs to Cloudflare, Inc. and represents Cloudflare's CDN infrastructure. The actual backend IP range of the target organization is hidden due to Cloudflare protection.

## ➤ Subdomain Enumeration :-

Command executed : subfinder -d x.com

```
(kali㉿kali)-[~]
$ subfinder -d x.com -o subfinder_x.com.txt
subfinder -d x.com
projectdiscovery.io
[INF] Current subfinder version v2.6.0 (outdated)
[INF] Loading provider config from /home/kali/.config/subfinder/provider-config.yaml
[INF] Enumerating subdomains for x.com
mobile-api.payments-prod.x.com
preferencecenter.x.com
api.x.com
blog.x.com
marketing.x.com
p.payments-prod.x.com
mobile-api.payments-staging.x.com
web-api.payments-staging.x.com
support.x.com
autodiscover.x.com
```

(Saved the output in a .txt file as subfinder\_x.com.txt)

```
~/subfinder_x.com.txt - Mousepad
File Edit Search View Document Help
1 pro.x.com
2 cloud.x.com
3 web-api.lab.money-dev.x.com
4 p.payments-dev.x.com
5 sdn.payments-prod.x.com
6 privacy.x.com
7 publish.x.com
8 create.x.com
9 preprod.xmidm.x.com
10 appreview.x.com
11 sdn.money-staging.x.com
12 blog.x.com
13 marketing.x.com
```

Total number of subdomains found is 150.

```
sdn.money-staging.x.com
preprod.xmidm.x.com
appreview.x.com
[INF] Found 150 subdomains for x.com in 2 seconds 918 milliseconds
```

## ➤ Technology Stack on Subdomains :-

Technologies	Programmin g Languages	CDN	Java Script Libaries	Security
blog.x.com	Java	Cloudflar e	core-js	Cloudfl Bot Managemen t ,HSTS, Arkose Labs
developer.x.co m	Java	Cloudflar e	LazySize s , core-js	Cloudfl Bot Managemen t ,HSTS, Arkose Labs
career.x.com		Cloudflar e	Framer Motion	Cloudfl Bot Managemen t , HSTS
shop.x.com		Cloudflar e	core-js	Cloudfl Bot Managemen t , HSTS
help.x.com	Java	Cloudflar e	Swiper, LazySize s , core-js	Cloudfl Bot Managemen t ,HSTS, Arkose Labs

## ➤ Hidden Files & Directories on Main Domain:-

### **Tool Used :**

Dirb v2.22

### **Command Executed :**

dirb -d <https://x.com/> -o dirb\_x.com.txt

### **Wordlist Used :**

/usr/share/dirb/wordlists/common.txt

(Output saved to dirb\_x.com.txt file)

### **Scan Summary :**

Total Words tested: 4612

Target: Main Domain only (https://x.com/)

Reconnaissance only (No exploitation)

```
3 DIRB v2.22
4 By The Dark Raver
5 _____
6
7 OUTPUT_FILE: dirb_x.com.txt
8 START_TIME: Thu Jan 15 00:50:13 2026
9 URL_BASE: https://x.com/
10 WORDLIST_FILES: /usr/share/dirb/wordlists/common.txt
11
12 _____
13
14 GENERATED WORDS: 4612
15
16 — Scanning URL: https://x.com/ —
17 + https://x.com/.config (CODE:200|SIZE:232681)
18 + https://x.com/.cvs (CODE:200|SIZE:232681)
```

## **Observations:**

During the scan, the server responded with HTTP 200 status codes for a large number of paths, including numeric, dot-prefixed, and random strings. Most responses had identical content sizes, indicating dynamic routing behavior rather than the presence of actual directories or files.

Example patterns observed:

- Numeric paths (/100, /403, /2004)
- Dot-prefixed paths (/cvs, /.mysql\_history)
- Random strings (/abc, /2g)

This behavior suggests that the application returns a default page for non-existent paths.

## **Valid Public Endpoints Identified**

Some known public paths were observed, such as:

- /about (301 redirect)
- /accessibility
- /accounts
- /accountsettings

These endpoints are publicly accessible and expected for a production web application.

## **Conclusion :**

No sensitive hidden directories or files were identified on the main domain. The scan was intentionally stopped to avoid unnecessary noise and false positives. This behavior indicates strong routing controls and protection mechanisms on the target application.