# **Bug Bounty Methodology**

## 1. Program Choose

- ▼ Beginners
  - ▼ Fame
    - ▼ Choose a Less Popular platfrom
      - HackerOne
        - HackerOne | #1 Trusted Security Platfo...
      - BugCrowd
        - #1 Crowdsourced Cybersecurity Platfo...
      - Open Bug Bounty
        - Free Bug Bounty Program and Coordin...
      - Intigriti
        - Bug Bounty & Samp; Agile Pentesting Pl...
      - Yes We Hack
        - YesWeHack #1 Bug Bounty Platform in...
      - Safe Hats
        - <u>safehats</u>
      - CyberArmy
        - Bug Bounty Program | Cyber Army Ind...
    - ▼ VDPs
      - FireBounty
        - FireBounty | The Ultimate Vulnerability...
    - Choose point only program
    - Program should be big scoop
    - Hunt it 1 month untill find a valid bug
  - ▼ Money
    - Use google dorking to find platfromless program
      - Bug Bounty Dorking Google Docs
    - Program should be big scoop

- Hunt it 1 month untill find a valid bug
- ▼ Avoid Program
  - ▼ Read Writeup
    - Pentester Land WriteUp
      - Writeups Pentester Land
    - Vulnerability labs
      - VULNERABILITY LAB SECURITY VULN...
  - Have a Bad Reputation and Review
  - Delay in reply
- ▼ Advance
  - ▼ Private Program
    - Synack Red Team
      - https://www.synack.com/red-team/
    - Detectify
      - <u>Detectify Crowdsource | Hack the planet</u>
    - Cobalt
      - Cobalt: Offensive Security Services
    - Yogosha
      - Yogosha | Offensive Security Testing Pl...
  - ▼ Web v3
    - HackenProof
      - HackenProof | Web3 Bug Bounty platf...
    - Immunefi
      - <u>Immunefi</u>

# **▼ 2. Application Analysis**

- ▼ Site Surfing
  - Surfing site with burp proxy
  - Surfing using VPN
- ▼ Purchase Paid Plan
  - If program have a paid plan then purchase paid plan and create a free plan also

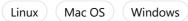
- ▼ Search Engine
  - Change detection
  - Comapany Job Post for Engineer
  - Comapny Blog
  - Employees blog
  - Terget newsletter
  - Mail List Subscribe
  - Affliate program
  - QNA Forum
  - Conference talk
  - Monitoring the domain for code change
  - Github Issue
  - Terms and Condition
  - Privacy Policy text
  - Copyright text
  - Pastebin
  - PasteHunter
    - GitHub kevthehermit/PasteHunter: S...
  - Google Calender
  - Stackshare
  - SlideShare
  - BugBounty Writeup
  - Stack Overflow
  - Quora
- Make a Checklist
  - You can make your own by site structure
  - Owasp top 10 checklist
    - GitHub tanprathan/OWASP-Testing-...
- ▼ Testing layers
  - Open port and service

- Web hosting softwareApp framwork
- App: Custom code or cots
- App library
- Integration
- ▼ Big Q
  - #1 How does app pass data?
  - #2 How/Where does app talk about users?
    - ▼ Users
      - ▼ Where
        - Cookies
        - API Call
      - ▼ How
        - UID
        - UUID
        - email
        - username
  - ▼ #3 Does the site have multi-tenancy or user level?
    - ▼ Users
      - App is designed for multiple customers
      - App has multiple user level
  - #4 Does the site have a unique threat model?
  - #5 There been past security research and vulnerabilities?
  - #6 How does app handle : XSS? , CSRF?, and more?
- ▼ Parameter Analysis
  - Hunt
  - XSSed
  - Hackerone Public Disclosure
  - Tomnomnom's GF Tool
  - SUS-Params

- BurpBounty
- BurpSuite
- ▼ Heat Mapping
  - Note Down all heat mapping

#### → 3. Recon

- ▼ Root (Aquasition)
  - Crunchbase
    - Crunchbase: Discover innovative comp...
  - Search Engine
  - BugBounty Platfrom
  - Al
- **▼** DNS Record
  - ▼ Whois
    - whoisLinux Mac OS Windows
  - ▼ Reverse Whois
    - ViewDnsInfo
      - Reverse Whois Lookup ViewDNS.info
  - ▼ A Record (IPv4 addresses)
    - nslookup -type=A DOMAIN\_NAME / SERVER\_IP



dig SERVER\_IP / DOMAIN\_NAME A



- ▼ AAAA Record (IPv6 addresses)
  - nslookup -type=AAAA DOMAIN\_NAME / SERVER\_IP



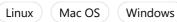
dig SERVER\_IP / DOMAIN\_NAME AAAA



▼ CNAME Record

<ul> <li>nslookup -type=CNAME DOMAIN_NAME / SERVER_IP</li> </ul>
Linux Mac OS Windows
<ul> <li>dig SERVER_IP / DOMAIN_NAME CNAME</li> </ul>
Linux Mac OS Windows
▼ MX Record
<ul> <li>nslookup -type=MX DOMAIN_NAME / SERVER_IP</li> <li>Linux Mac OS Windows</li> </ul>
<ul> <li>dig SERVER_IP / DOMAIN_NAME MX</li> <li>Linux Mac OS Windows</li> </ul>
▼ TXT Record
<ul><li>nslookup -type=TXT DOMAIN_NAME / SERVER_IP</li><li>Linux Mac OS Windows</li></ul>
<ul><li>dig SERVER_IP / DOMAIN_NAME TXT</li><li>Linux Mac OS Windows</li></ul>
▼ SSL certificate
<ul><li>Certificate Search</li><li><a href="https://crt.sh/">https://crt.sh/</a></li></ul>
▼ Tools
■ DNS Dumper  DNSDumpster.com - dns recon and re
<ul><li>ViewDNS</li></ul>
<u>ViewDNS.info - Your one source for D</u>
ARIN Whois Whois-RWS
<ul> <li>Hurricane Electric Internet Services</li> <li>Hurricane Electric BGP Toolkit</li> </ul>
<ul> <li>MXToolBox</li> </ul>
https://mxtoolbox.com/
<ul> <li>MXToolBox Super Tools</li> </ul>
https://mxtoolbox.com/SuperTool.aspx

- Domain Tools
   Whois Lookup, Domain Availability & I...
   IP Address Guide
   Free IP address tools for IPv4 and IPv6 ...
- Whoxy
  - WHOIS API | WHOIS Lookup API | Do...
- ▼ ASN to CIDR
  - bgn.he.net
    - http://bgn.he.net
  - ASN Lookup
    - https://mxtoolbox.com/asn.aspx
  - Metabigor
    - <u>GitHub j3ssie/metabigor: OSINT tool</u>...
  - Amass
    - GitHub owasp-amass/amass: In-dept...
- ▼ CIDR to IP
  - MapCIDR
    - GitHub projectdiscovery/mapcidr: Uti...
- ▼ Networking
  - ▼ Ping
    - ping MACHINE\_IP / HOSTNAME



IP Address Guide

Linux Mac OS

- Free IP address tools for IPv4 and IPv6 ...
- ▼ Traceroute
  - traceroute MACHINE\_IP / HOSTNAME
  - tracert MACHINE\_IP / HOSTNAME

Windows

- IP Address Guide
  - Free IP address tools for IPv4 and IPv6 ...
- ▼ Technology and Services Footprinting
  - ▼ Port Scan
    - Rust Scan
      - GitHub RustScan/RustScan: 😈 The ...
    - Naabu
      - <u>GitHub projectdiscovery/naabu: A fas...</u>
    - Nmap
      - GitHub nmap/nmap: Nmap the Net...
  - ▼ Service Footprinting
    - Try Telnet and Netcat
    - wafw00f
      - GitHub EnableSecurity/wafw00f: WAF...
    - Brutesprey
      - GitHub x90skysn3k/brutespray: Brute...
  - ▼ Tech Profiling
    - Whatruns
      - WhatRuns Discover Website Technol...
    - Wappalyzer
      - Find out what websites are built with ...
    - WebAnalyzer
      - webanalyzer free seo tool
    - BuildWith
      - <u>quote-left</u>
    - StacksShare
      - <u>StackShare Tech Stack Intelligence</u>
- ▼ Cloud
  - ▼ Cloud Recon
    - <u>GitHub g0ldencybersec/CloudRecon</u>

- ▼ Make a DB using this tool
  - ▼ Parse out Subs
    - grep -F'.DOMAIN.com' 12\_11\_2023\_DB.txt | awk -F[I]' '{print \$2}' | sed 's# #\n#g' | grep ".DOMAIN.com" | sort -fulcut -d','-f1| sort -u
  - ▼ Parse out all domains (potential apexes)
    - grep -F'.DOMAIN.com' 12\_11\_2023\_DB.txt | awk -F'[I]' '{print \$2}' | sed 's# #\n#g'l Sort -fu | cut -d','-f1|sort -u
      Linux
- Kaeferjaeger gay DB
  - Home Directory Lister
- ▼ IP to SubDomain
  - dnsx
    - GitHub projectdiscovery/dnsx: dnsx i...
- ▼ SubDomain
  - ▼ Linked and JS discovery
    - Burp Suite Pro
      - <u>Burp Suite Professional PortSwigger</u>
    - Gobuster
      - GitHub OJ/gobuster: Directory/File,\_...
    - Hakrawler
      - GitHub hakluke/hakrawler: Simple, fa...
    - SubDomainizer
      - GitHub nsonaniya2010/SubDomainiz...
    - OneForAll
      - OneForAll/docs/en-us/README.md at ...
  - ▼ SubDomain Scrapping
    - Amass
    - Github Subdomains
    - <u>GitHub gwen001/github-subdomain...</u>

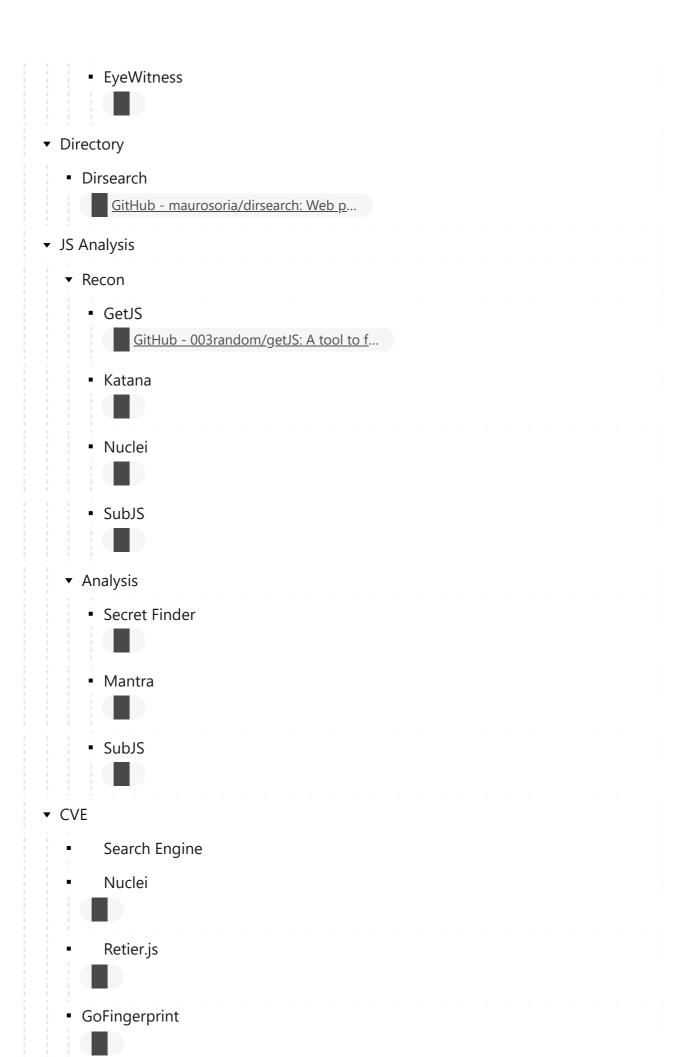
- Subfinder
  - GitHub projectdiscovery/subfinder: F...
- Shosubgo
  - GitHub incogbyte/shosubgo: Small t...
- Cloud Ranges
  - GitHub pry0cc/cloud-ranges: A list of...
- OneForAll



- ▼ Manually
  - ▼ Search Engine source
    - Yahoo
    - Google
    - Baidu
    - bing
    - Ask
    - Dogpile
  - ▼ Infrastructure Source
    - Censys
    - Robtex
    - Wayback Machine
    - Netcraft
    - DnsDB Search
    - Passive total
    - PTRarchive
    - DNSDumper
  - ▼ Certificate Sources
    - crt.sh
    - sslmate cert spotter
    - CertDB
  - ▼ Security Source

<ul> <li>Hacker Target</li> </ul>
<ul><li>SecurityTrails</li></ul>
<ul><li>VirusTotal</li></ul>
<ul> <li>F-security Riddler</li> </ul>
<ul><li>ThreadCrowd</li></ul>
<ul><li>ThreatMiner</li></ul>
▼ SubDomain Bruteforcing
<ul><li>Subfinder</li></ul>
<ul><li>Amass</li></ul>
• FFUF
GitHub - ffuf/ffuf: Fast web fuzzer writt
<ul><li>Shuffledns</li></ul>
<u>GitHub - projectdiscovery/shuffledns:</u>
<ul><li>OneForAll</li></ul>
▼ Peramutation
<ul> <li>AltDNS</li> </ul>
GitHub - infosec-au/altdns: Generates
<ul> <li>DNSGen</li> </ul>
GitHub - AlephNullSK/dnsgen: Genera
<ul><li>OneForAll</li></ul>

- **▼** HTTP and Screenshots
  - ▼ HTTP
    - httpx
      - GitHub projectdiscovery/httpx: httpx ...
  - ▼ Screenshots



- Sn1perIntrigue coreVulners
  - CVE Database Security Vulnerabilities...
- Jaeles Scanner



- ▼ IOT Search Enging and Dorking
  - ▼ Shodan
    - Shodan Search Engine
    - Karma v2



- ▼ Third Party Hosting
  - BUCKET.s3.amazonaws.com
  - s3.amazonaws.com/BUCKET
  - AWSCli
    - Command Line Interface AWS CLI A...
  - Lazys3



S3Scanner



- GrayHat Warfare
  - https://buckets.grayhatwarfare.com/
- ▼ Github Recon and Code Analysis
  - ▼ Github Recon
    - Manually check Issue and Commit
    - Manually Dorking
    - TruffleHog



- Gitrob
- Gitgraber
- GitDorker
- Code Analysis
  - KeyHacks



- ▼ Check Importent things in code
  - Veriable
  - ▼ Function
    - authentication
    - password reset
    - private info read
    - user input
  - Configuration File
- Source2url



APKleaks



## 4. Post Exploitation

- ▼ Vulnerability Chaining
  - Always Try to Chain Small Vulnerability To RCE or Another Big Vulnerabilities
- ▼ Low Hanging Fruit
  - If a low hanging fruit vulnerabilities in out of scope then always try to chain it.
     Or try to show a big impact
  - Find low hanging fruit in web analysis area
- ▼ SubDomain TakeOver
  - ▼ Recon

- Can I takeover xyz
- dig [server] [name] [type]

Linux

- ns lookup
  - NS Lookup
- ▼ Hunt
  - Subzy



SubOver



SubJack



Nuclei



- ▼ Owasp Top Ten
  - A01:2021-Broken Access Control
  - A02:2021-Cryptographic Failures
  - A03:2021-Injection
  - A04:2021-Insecure Design
  - A05:2021-Security Misconfiguration
  - A06:2021-Vulnerable and Outdated Components
  - A07:2021-Identification and Authentication Failures
  - A08:2021-Software and Data Integrity Failures
  - A09:2021-Security Logging and Monitoring Failures
  - A10:2021-Server-Side Request Forgery
- ▼ Under-Rated Bug
  - ▼ Prototype pollution
    - Server-side parameter pollution
    - HTTP Parameter Pollution

- Log4J
- HTTP request smuggling
- DOM-based vulnerabilities

## Note Taking

- Obsidian
- XMind

### ▼ Reference

- Jason Haddix Methodology
- Zseano's Methodology
  - https://www.bugbountyhunter.com/m...
- OWASP Web Security Testing Guide
  - OWASP Web Security Testing Guide | ...
- OWASP Code Review Guide
  - OWASP Code Review Guide | OWASP F...

### - CTF

- Hacker101
- TryHackMe
- HackTheBox
- PortSwigger Labs
- Proving Ground
- OWASP Juice Box
- HackThisSite
- CTFChallenge
- PenTesterLab
- XSSGame
- BugBountyHunter
- W3Challs
- Metasploitable 2
- BWAPP

- OVWA
- PicoCTF