Bug Bounty:
A Hunter's Perspective

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~$ Whoami

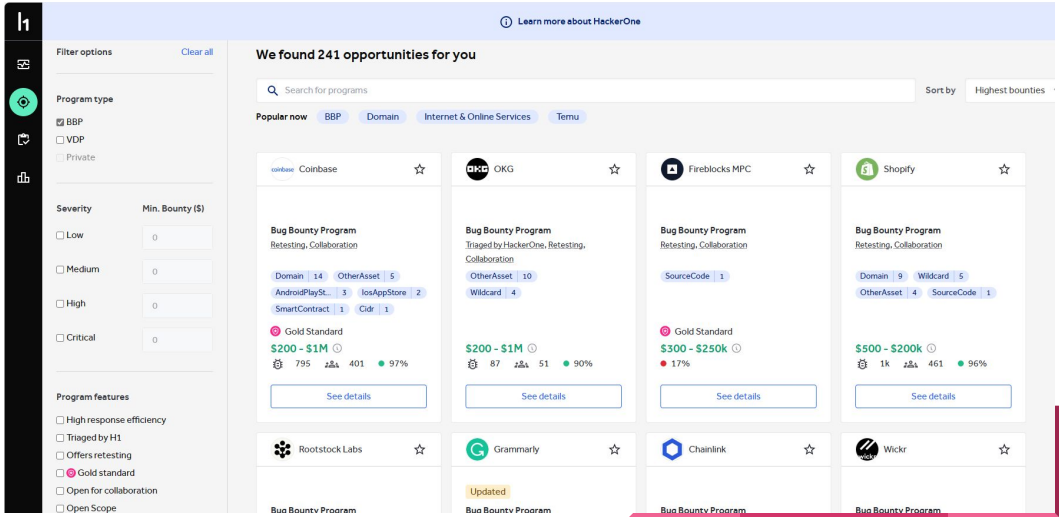
- Miftahul Huq
- 4th yr, BS/MS Cybersecurity Student @ RIT
- Part-time bug hunter (3 months)
- Hobby: videography

What is Bug Bounty Program (BBP)?

- A program where bug bounty hunters earn compensation, or bounty, for revealing security gaps of a company.

- **Types of Bug Bounties:**
  - Web App
  - Mobile App
  - Network infrastructure
  - Hardware
  - API Security

- Hosted via a BBP platform



Top BBP Platforms

Why hunt for bugs?

- Source of income
- Hack legally
- Recognition, prestige, and competition

Types of bug hunters

- All these methods works successfully.

Fully automated and unauthenticated

Fully manual

50/50

0-day all day

How to get started

Just like any other things in life, you just gotta start doing it:

- Create an account on a BBP platform.
- Pick a BBP from a company of your choice.
- Use a hunter’s method to start hunting for bugs.

Learning the basics

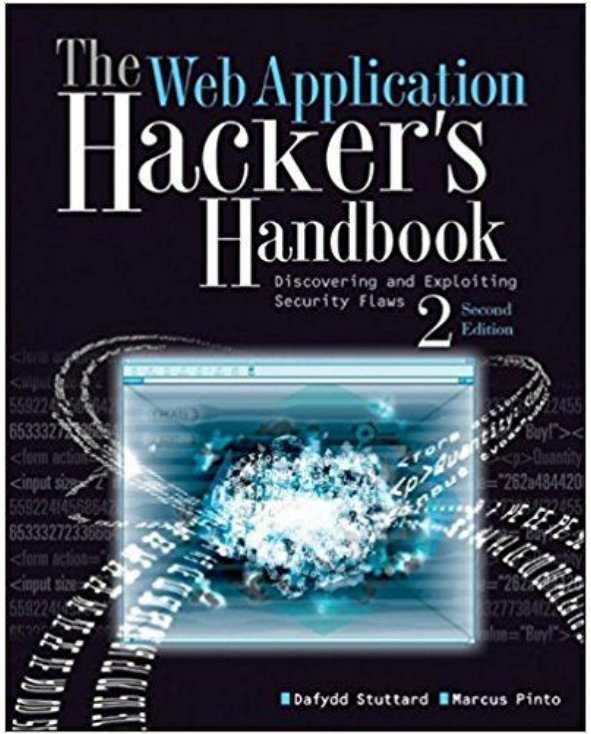
Top platform to learn from:

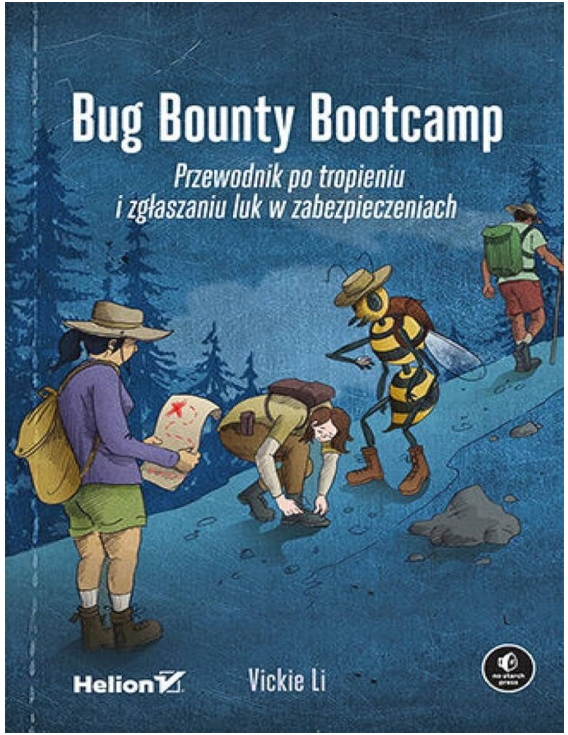
- Hackerone capture the flag
  - Private invitation after completion
- WebSecurity academy (by Portswigger)
- PentesterLab

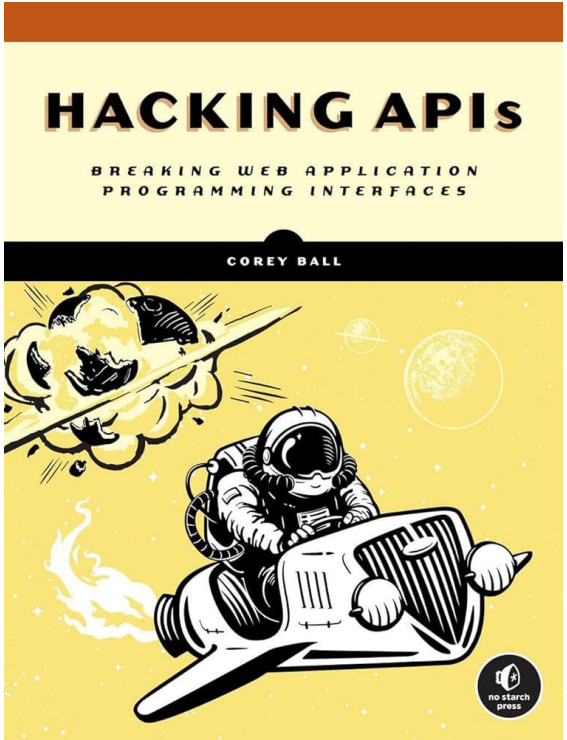
Others:

- HackTheBox
- TryHackMe

Some books to consider are…



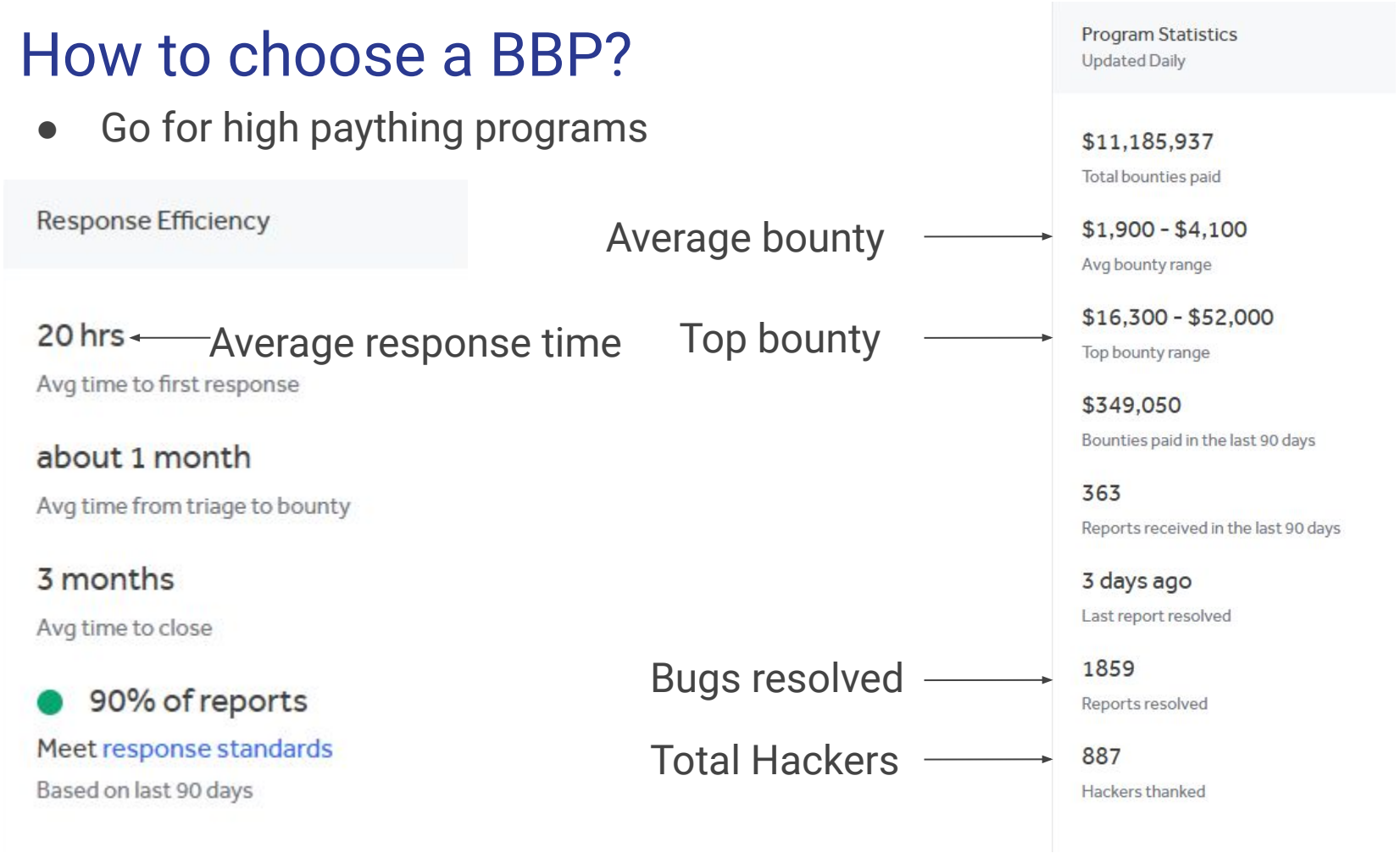




Tips for bug hunting

How to choose a BBP?

- Go for high paything programs



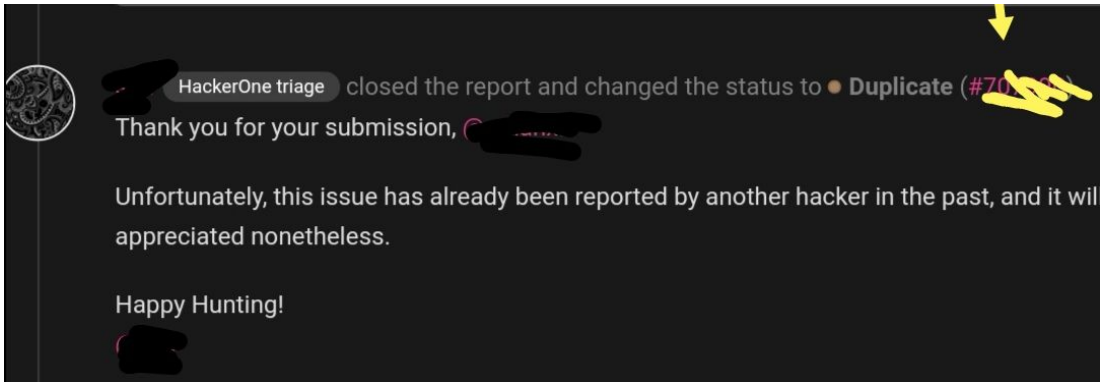
Go big or go home!

- Focus on high severity security vulnerabilities:

P1 - Critical	P2 - High
❖ Remote Code Execution (RCE) ❖ SQL Injection (SQLi) ❖ Server-Side Request Forgery (SSRF) ❖ Authentication Bypass ❖ Disclosure of Secrets ❖ Command Injection	❖ Stored XSS ❖ Admin privilege escalation ❖ OAuth misconfiguration ❖ Sensitive information disclosure ❖ Insecure Direct Object Reference (IDOR)

Why?

- Avoid duplicates and related frustration
- High bounty or reward
- Quick resolution by the company



Go above and beyond

- Create accounts
- Subscribe to paid plans
- Complete any setup complexity
- Order hardware devices
- Read the documentation
- etc…

Security Impact

- More impact means higher bounty

XSS - Hijacking user's session token ✓

vs

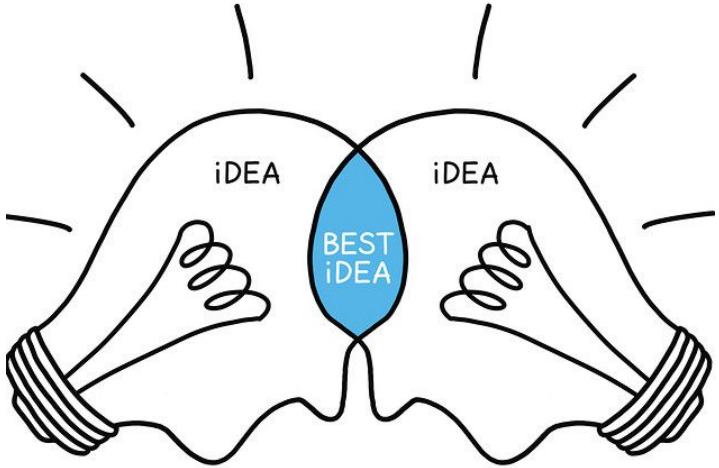
XSS - SImple alert popup ✗

Other tips

- Automate reconnaissance or information gathering
- Automation should not replace manual testing
- Chain vulnerabilities for higher impact
- Save the low hanging fruits for future chain attack

Collaboration

- Find higher impact bugs
- Different skill set
- Get help if your stuck
- Upfront agreement on bounty or resources
- BBP platforms helps with bounty split and collab



Reality of bug hunting

- Requires time, consistency, persistence and patience.
- Depending on the person, it might be steep learning curve.
- Drain mental health, and affect physical health if you don’t exercise.

Recommendation

- Have a set time when you can do bug hunting
- Take regular breaks
- Eat healthy
- Exercise
- Sleep

References

- HackerOne. “What Are Bug Bounties and How Do They Work?” *HackerOne*, 25 Mar. 2024, www.hackerone.com/vulnerability-management/what-are-bug-bounties-how-do-they-work-examples.
- https://hackerone.com/paypal
- HackerOne. “Quality Reports.” *HackerOne Help Center*, 14 Apr. 2024, docs.hackerone.com/en/articles/8475116-quality-reports.
- Nahamsec. “How to Pick Your Targets // How to Bug Bounty.” *YouTube*, YouTube, 27 Feb. 2023, www.youtube.com/watch?v=vbXpRHcKIr0

Any Questions or Comments?