Hacking Your Way Into Cyber Security :

- Achint : 24th January 2024

Plan For Today

- Introduction to Cyber Security
- Skills Required
- Hacking Your Friend's Account
- Conclude



- A hacker ? Oh no ! a security professional.
- Certifications : CEH, OSCP, eJPT
- Write Tools : github.com/A3h1nt
- Blog : a3h1nt.github.io
- I play basketball

Disclaimer

Opinions are my own and not the views of my employer.

Chapter 1 : Introduction to Cyber Security

What is hacking exactly (?)?

"If you can't explain it simply, you don't understand it well enough?"

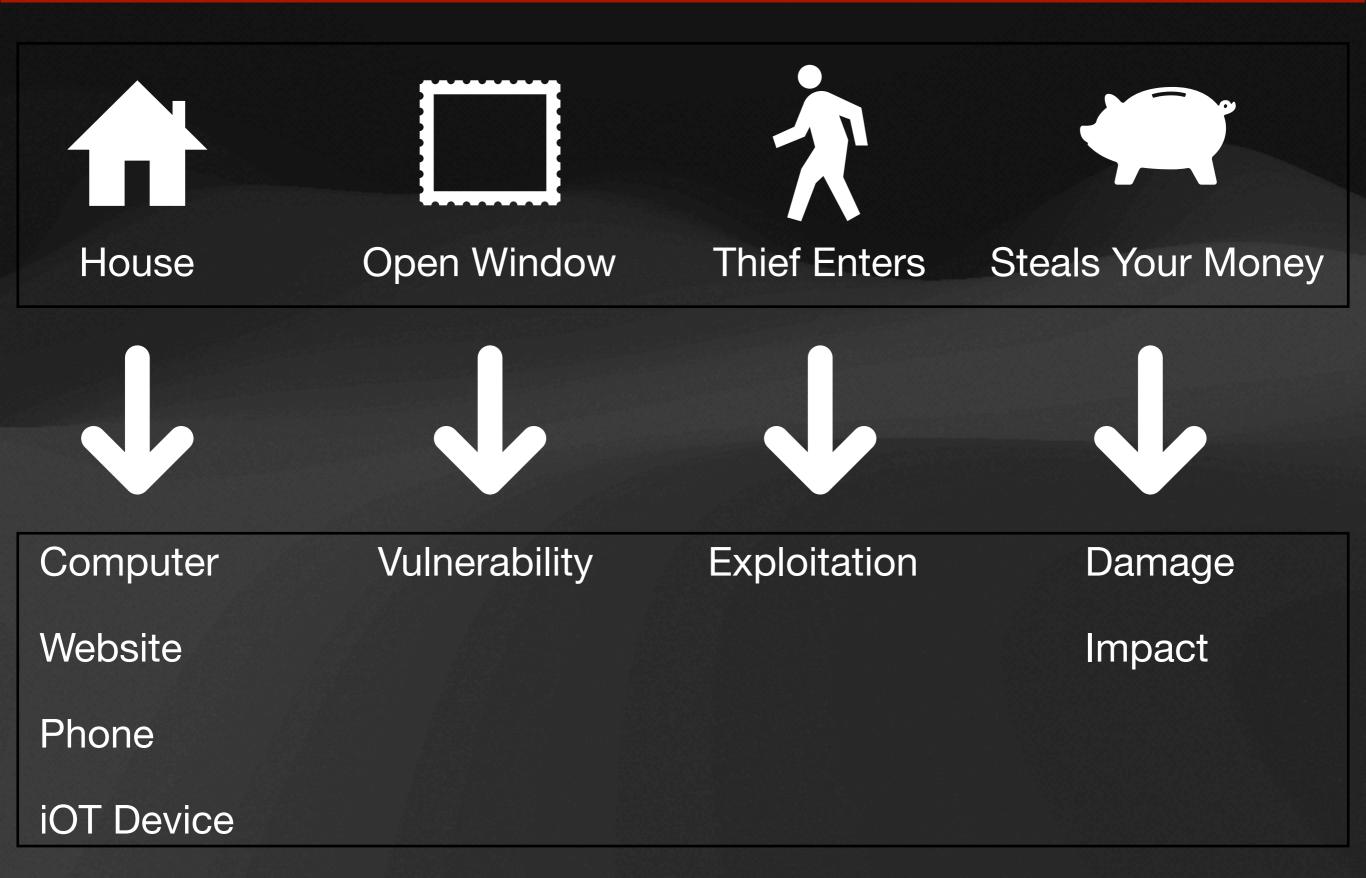
Albert Einstein

The Analogy





The Analogy



What is Cyber Security ?

IS IT JUST HACKING ?

What is Cyber Security ?

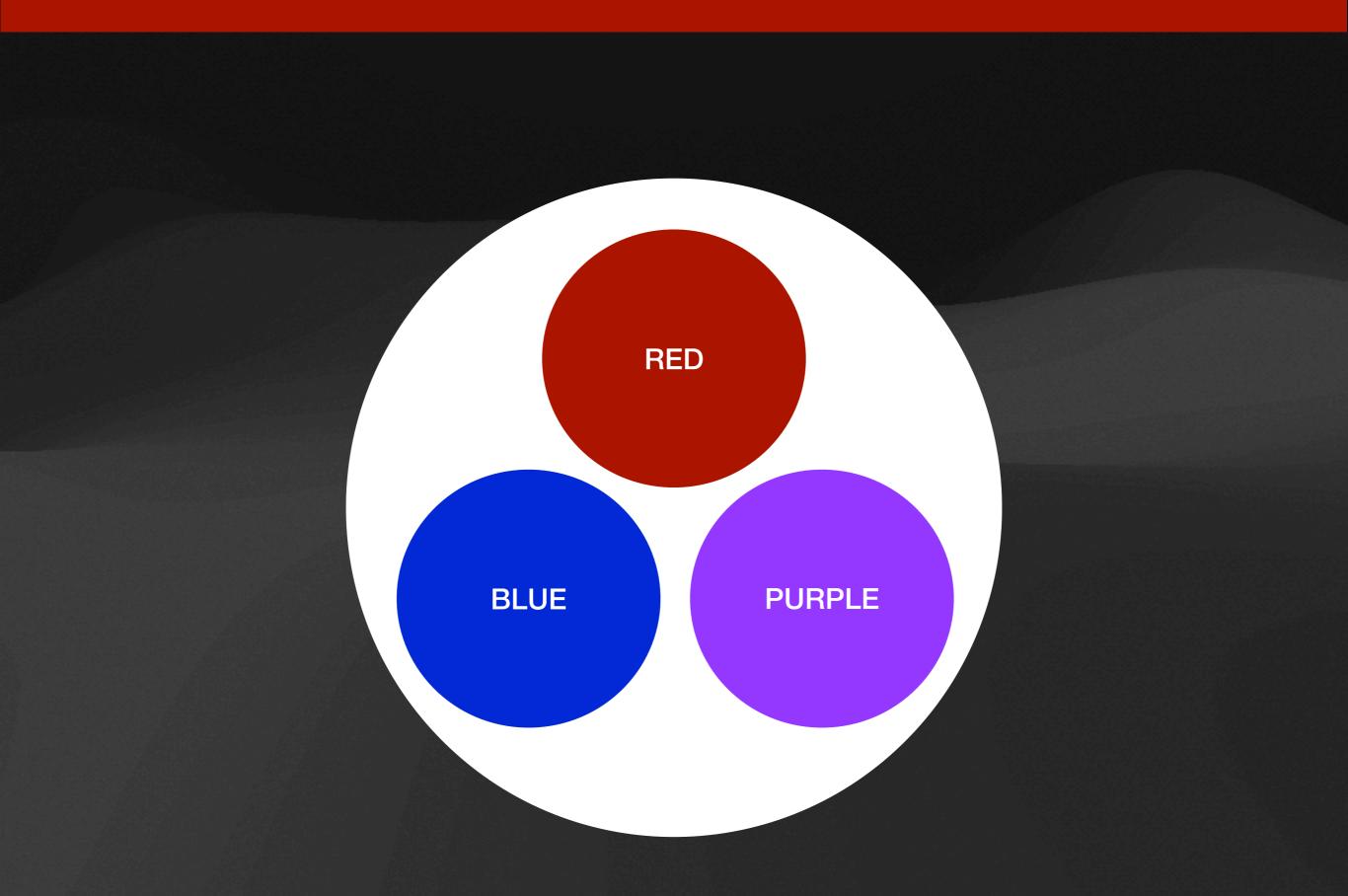
WHO WILL SECURE IT?

What is Cyber Security ?

Attacking

Defending





Red Team : The Attackers

- The guys who attack / hack
- Roles :
 - Penetration Tester
 - Ethical Hacker



Blue Team : The Defenders

- The guys who defend / prevent
- Roles :
 - Incident Response
 - Forensics

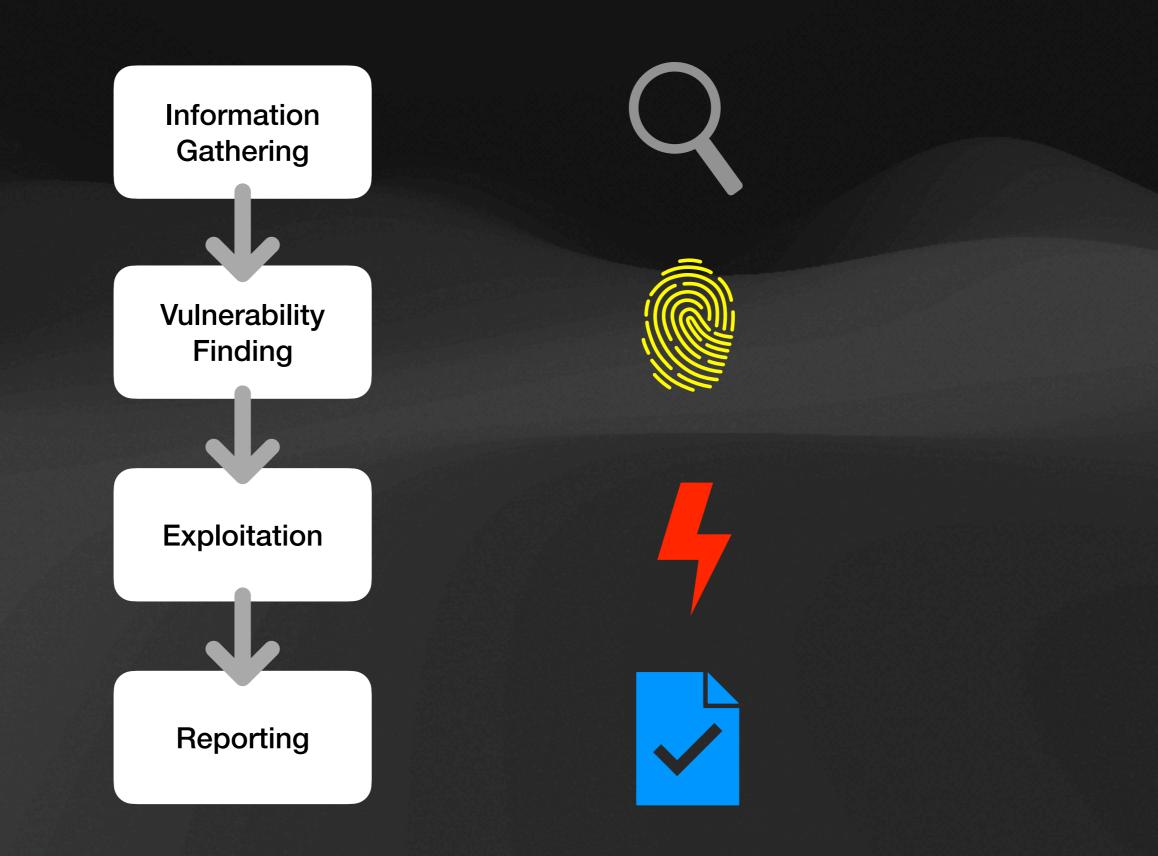


Purple Team : The Duo

The guys who attack & defend



Methodology Simplified



Chapter 2 : Skills Required

Skills Required

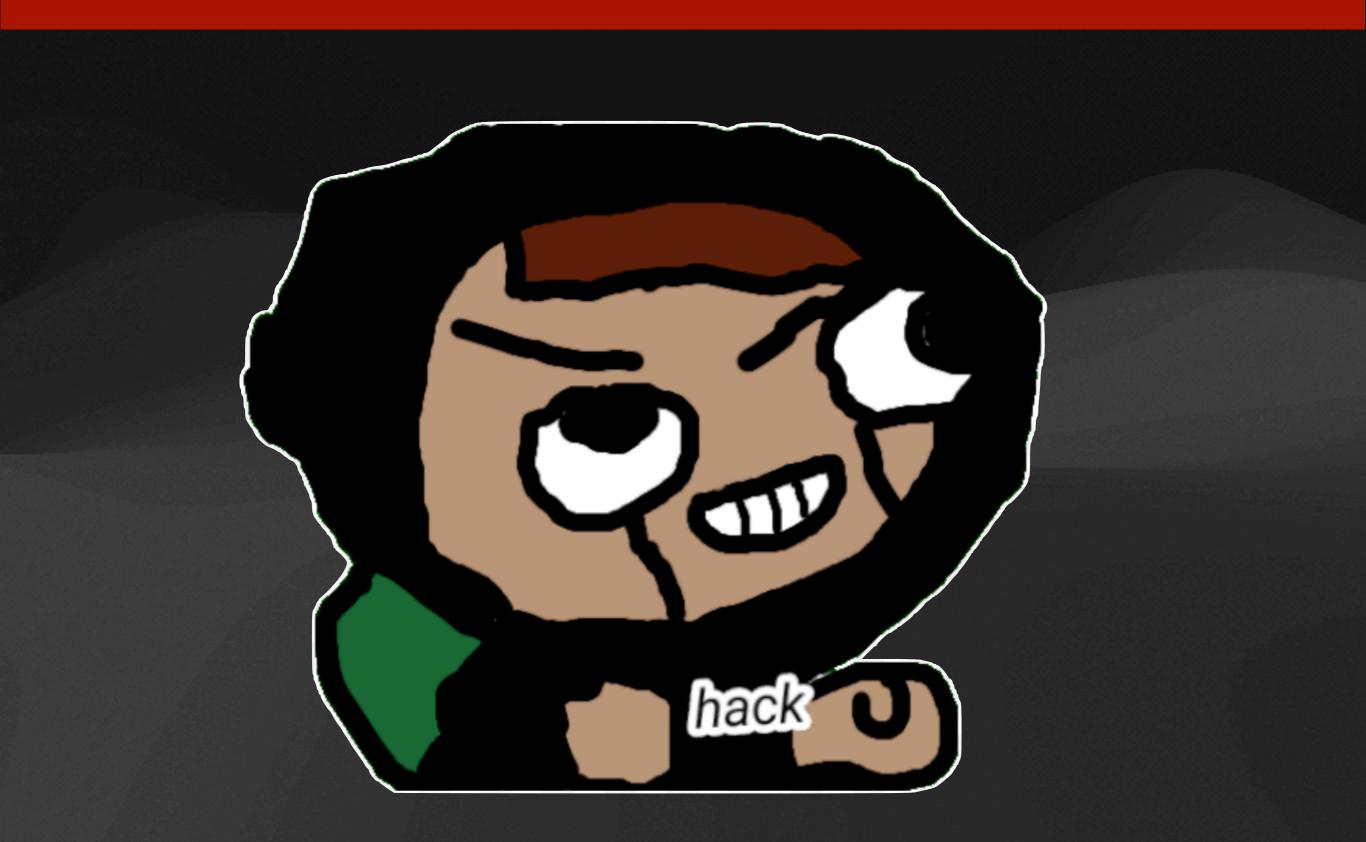


Skills Required

- Computer Science Basics
- GNU Linux
- Networking Basics
- Basic Programming
- Security Concepts (CompTIA Security+)

Chapter 3 : Hacking Your Friend's Account





Phishing Email

New WIFI for Students Inbox ×

IT Department <IT.Department@glbitm.publicvm.com> to me • 7:23 AM (O minutes ago) 🕁 🙂 🕤 🚦

읍

7

NEW WIFI FOR STUDENTS

As part of our commitment to providing a seamless and efficient learning environment, we have launched a new and improved WiFi network exclusively for students. Due to the increasing demand and the growing number of devices connected to our previous WiFi network, we have upgraded to a more robust and high-speed infrastructure to ensure a smooth online experience for all students.

WIFI Connection process is given below :

<u>STEP-1</u>: Turn on your device's WIFI <u>STEP-2</u>: Select the network named **GL-Bajaj-Student** <u>STEP-3</u>: When prompted, enter your college email address and password

Regards

...

IT Department GL Bajaj Institute Of Technology & Management

[Message clipped] View entire message



Connecting....



Wi-Fi

AirDrop, AirPlay, Notify When Left Behind, and improved location accuracy require Wi-Fi.

Capturing Credentials

___/ / __ \| |_> > Y \/ __ \| YY \ YY \ __/| | // __/| | \/ ___ > ___ / __/|__| (___ /_|_| /__| /__| /__ >__|

Now with more fast travel than a next-gen Bethesda game. >:D

Version: 1.14.0
Codename: Final Frontier
Author: @s0lst1c3
Contact: gabriel<<at>>transmitengage.com

[?] Am I root?

- [*] Checking for rootness...
- [*] I AM R00000000000
- [*] Root privs confirmed! 8D
- [*] Saving current iptables configuration...
- [*] Reticulating radio frequency splines...
- [*] Using nmcli to tell NetworkManager not to manage wlx08ea35e1b4ea...

100%

1/1 [00:01<00:00, 1.00s/it]

[*] Success: wlx08ea35e1b4ea no longer controlled by NetworkManager.

[*] WPA handshakes will be saved to /opt/eaphammer/loot/wpa_handshake_capture-2024-01-21-06-59-46-fxapF7WZ52jL9nKoxju9JYl7U8gXnknI.hccapx Configuration file: /opt/eaphammer/tmp/hostapd-2024-01-21-06-59-46-9Y1tFBGlzvWSgSC8ePj0yvMFZ9sPaBFY.conf

[hostapd] AP starting...

wlx08ea35e1b4ea: interface state UNINITIALIZED->COUNTRY_UPDATE Using interface wlx08ea35e1b4ea with hwaddr 00:11:22:33:44:00 and ssid "GJ-Bajaj-Student" wlx08ea35e1b4ea: interface state COUNTRY_UPDATE->ENABLED wlx08ea35e1b4ea: AP-ENABLED

Press enter to quit...

wlx08ea35e1b4ea: STA 76:9c:ee:e3:b1:a8 IEEE 802.11: authenticated wlx08ea35e1b4ea: STA 76:9c:ee:e3:b1:a8 IEEE 802.11: associated (aid 1) wlx08ea35e1b4ea: CTRL-EVENT-EAP-STARTED 76:9c:ee:e3:b1:a8 wlx08ea35e1b4ea: CTRL-EVENT-EAP-PROPOSED-METHOD vendor=0 method=1 wlx08ea35e1b4ea: CTRL-EVENT-EAP-STARTED 76:9c:ee:e3:b1:a8 wlx08ea35e1b4ea: CTRL-EVENT-EAP-PROPOSED-METHOD vendor=0 method=1 wlx08ea35e1b4ea: CTRL-EVENT-EAP-PROPOSED-METHOD vendor=0 method=1 wlx08ea35e1b4ea: CTRL-EVENT-EAP-PROPOSED-METHOD vendor=0 method=25 wlx08ea35e1b4ea: CTRL-EVENT-EAP-RETRANSMIT 76:9c:ee:e3:b1:a8

[0] 0:sudo*Z

Capturing Credentials

Using interface wlx08ea35e1b4ea with hwaddr 00:11:22:33:44:00 and ssid "GJ-Bajaj-Student" wlx08ea35e1b4ea: interface state COUNTRY_UPDATE->ENABLED wlx08ea35e1b4ea: AP-ENABLED

Press enter to quit...

wlx08ea35e1b4ea: STA 76:9c:ee:e3:b1:a8 IEEE 802.11: authenticated wlx08ea35e1b4ea: STA 76:9c:ee:e3:b1:a8 IEEE 802.11: associated (aid 1) wlx08ea35e1b4ea: CTRL-EVENT-EAP-STARTED 76:9c:ee:e3:b1:a8 wlx08ea35e1b4ea: CTRL-EVENT-EAP-PROPOSED-METHOD vendor=0 method=1 wlx08ea35e1b4ea: CTRL-EVENT-EAP-STARTED 76:9c:ee:e3:b1:a8 wlx08ea35e1b4ea: CTRL-EVENT-EAP-PROPOSED-METHOD vendor=0 method=1 wlx08ea35e1b4ea: CTRL-EVENT-EAP-PROPOSED-METHOD vendor=0 method=1 wlx08ea35e1b4ea: CTRL-EVENT-EAP-PROPOSED-METHOD vendor=0 method=25 wlx08ea35e1b4ea: CTRL-EVENT-EAP-RETRANSMIT 76:9c:ee:e3:b1:a8 wlx08ea35e1b4ea: CTRL-EVENT-EAP-RETRANSMIT 76:9c:ee:e3:b1:a8

GTC: Sun Jan 21 07:02:02 2024

usernam	ne: csaiews2203@glb	lbitm.ac.in
passwor	d: notsosecurepass	sswprd@123!
wlx08ea35e1b4ea:	CTRL-EVENT-EAP-FAILURE	RE 76:9c:ee:e3:b1:a8
wlx08ea35e1b4ea:	STA 76:9c:ee:e3:b1:a8	3 IEEE 802.1X: authentication failed - EAP type: 0 (unknown)
wlx08ea35e1b4ea:	STA 76:9c:ee:e3:b1:a8	3 IEEE 802.1X: Supplicant used different EAP type: 25 (PEAP)
wlx08ea35e1b4ea:	STA 76:9c:ee:e3:b1:a8	3 IEEE 802.11: disassociated

[0] 0:sudo*Z

Chapter 4 : Conclude



- What is hacking ?
- What is cyber security ?
- What are different teams/roles in cyber security ?
- What skills are required to get started ?

Something To Start With

- Study : <u>Tryhackme</u>
- Watch : <u>Mr.Robot</u>

Connect With Me

- Twitter : @A3h1nt
- My Blog : <u>a3h1nt.github.io</u>
- LinkedIn : <u>https://www.linkedin.com/in/</u> <u>achint-54895817a/</u>



