

What is ethical hacking?



- WHAT IS HACKING AND IT'S INTENT?
- WHAT DETERMINES IF A PERSON IS A HACKER?
- WHAT IS ETHICAL HACKING?



- IN WHAT WAYS CAN HACKERS GAIN UNAUTHORIZED ACCESS INTO SYSTEM?
- COMMON TOOLS USED BY MALICIOUS HACKERS
- ETHICAL HACKING AND HOW IT PLAYS A ROLE IN COMBATING UNAUTHORIZED ACCESS BY MALICIOUS HACKERS?



- SOME KEY VULNERABILITIES DO ETHICAL HACKERS LOOK FOR
- COMMON TOOLS THAT MOST ETHICAL HACKERS USE AND THE STEPS TAKE TO SECURE A SYSTEM

Some of the most common Tools used by Malicious Hackers

- Malware
- Viruses
- Phishing
- Spoofing
- Logic bombs
- Ransomware
- □ Etc..



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▶ The Hacker's Mind

What is Hacking and its intent?

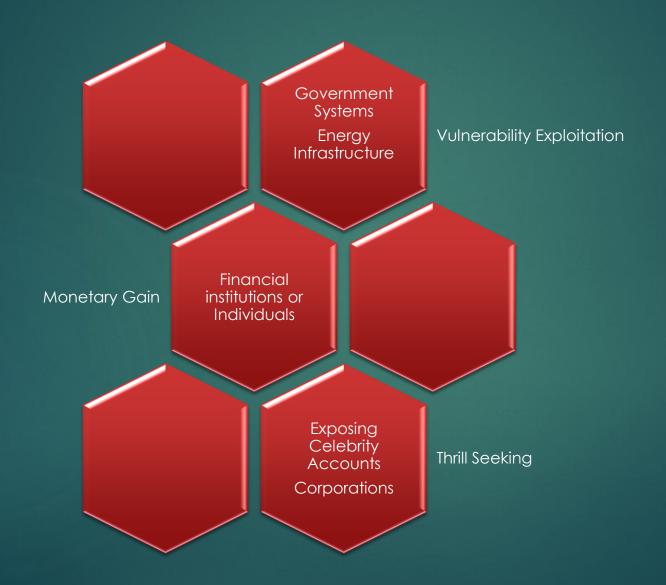
- The purpose
- Who can be a hacker?
- Types of Hackers

(Zampanti, 2019)



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The purpose



Who can be a hacker?

Can we be sure?

Potential hackers often do not look like we think



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Types of Hackers

- Black Hat
- Gray Hat
- White Hat
- State-sponsored
- Red Teams
- Blue Teams (Zampanti, 2019)

```
// Friends do not let friends __doPostBack
function DoPostBack(arg) {
       if (arg) {
              // This is not going to end well
__doPostBack( MakeFriendAngry , arg);
              EndFriendShip();
        else {
               DoOtherMethod();
```

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IN WHAT WAYS CAN HACKERS GAIN UNAUTHORIZED ACCESS INTO

SYSTEM?



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(Mark Ciampa, 2014)

Ethical hacking and how it plays a role in combating unauthorized access by malicious hackers?



Ethical Hacking Cont'd

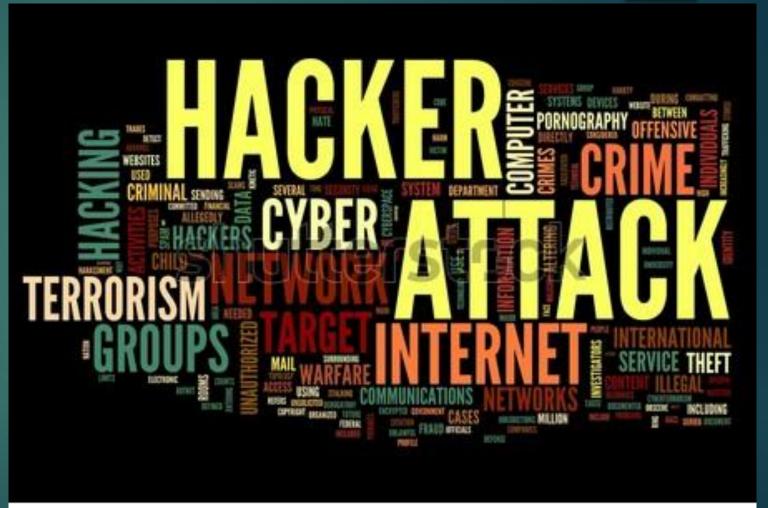
- White Hat Hackers
- Red Hat Hackers
- □ Blue Hat Hackers (Sarangam, 2020)



Key vulnerabilities ethical hackers look for

- Injection attacks
- Changes in security settings
- Exposure of sensitive data
- Breach in authentication protocols
- Components used in the system or network that may be used as access points

(Simplilearn, 2021)



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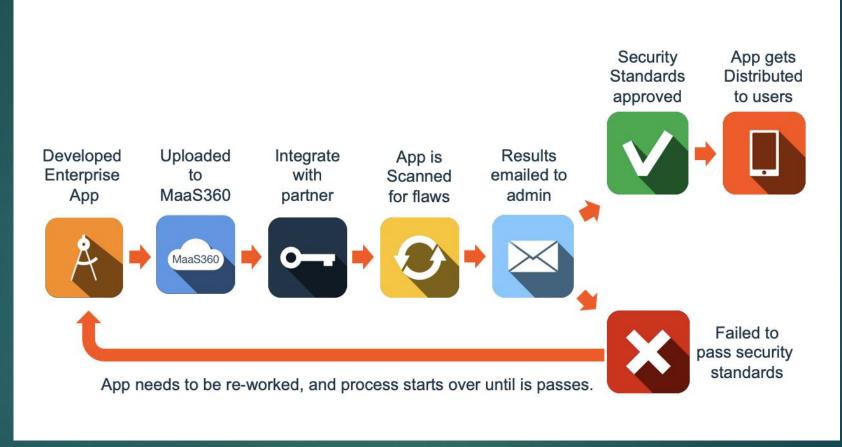
Common tools most ethical hackers use and the steps taken to secure a system?

- □ John the Ripper
- Metasploit
- Nmap
- Wireshark
- OpenVAS
- □ IronWASP
- □ Nikto
- SQLMap
- SQLNinja
- Maltego
- Burp Suite
- NetStumbler
- AirCrack-ng
- Ettercap
- Canvas (Team, 2021)



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Conclusion



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