



MALICIOUS CODES:

DEFINITION OF MALICIOUS CODE,
HOW IT WORKS, COMMON
DELIVERY METHODS, AND ITS
EFFECTS ON COMPUTER SYSTEMS

Testing for Security

Presented by
GROUP 5

Securing Systems Through
Authorized Testing



DEFINITION AND OVERVIEW

WHAT IS MALICIOUS CODE?

Is a any computer program, script, or set of instructions written intenionally to cause harm, steal data or break a computer system network.

OVERVIEW

- Can spread through infected files, links, email, attachments, and unsafe downloads.
- May damage files, steal data, or let attackers control a device.
- Examples include viruses,, worms, Trojan horses, ransomware and spyware.

KEY IDEA



Malicious code threatens the confidentiality integrity, and security of computer system.





HOW THE ATTACKS OCCURS?



1. ENTRY

Infected files or suspicious



2. ACTIVATION

infected files or suspicious



3. HARMFUL ACTIVATION

Steals data or damages files



4. IMPACT

Data loss or security risks





TYPES OF MALICIOUS CODE

01

Virus

Attaches to files

02

Worms

Replicate itself between systems.

03

Trojan Horse

Disguised itself as legitimate software.

04

Ransomware

Locks or encrypt files.

05

Spyware

Secretly collects information

06

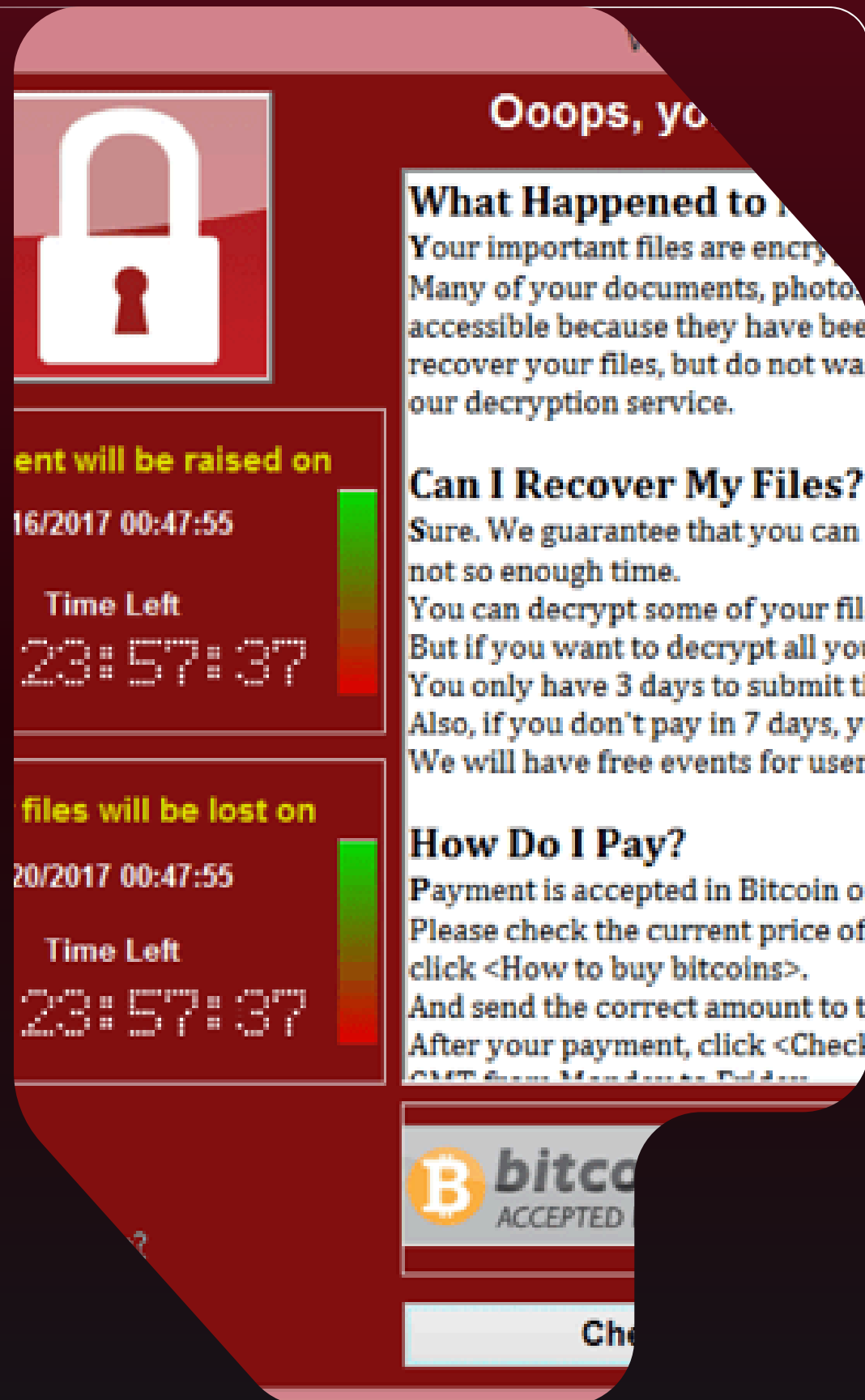
Rootkits

Hidden malicious software

REAL WORLD EXAMPLES

- A ransomware attack that encrypted files and disrupted hospitals and businesses worldwide

WANNACRY RANSOMWARE



I LOVE YOU VIRUS

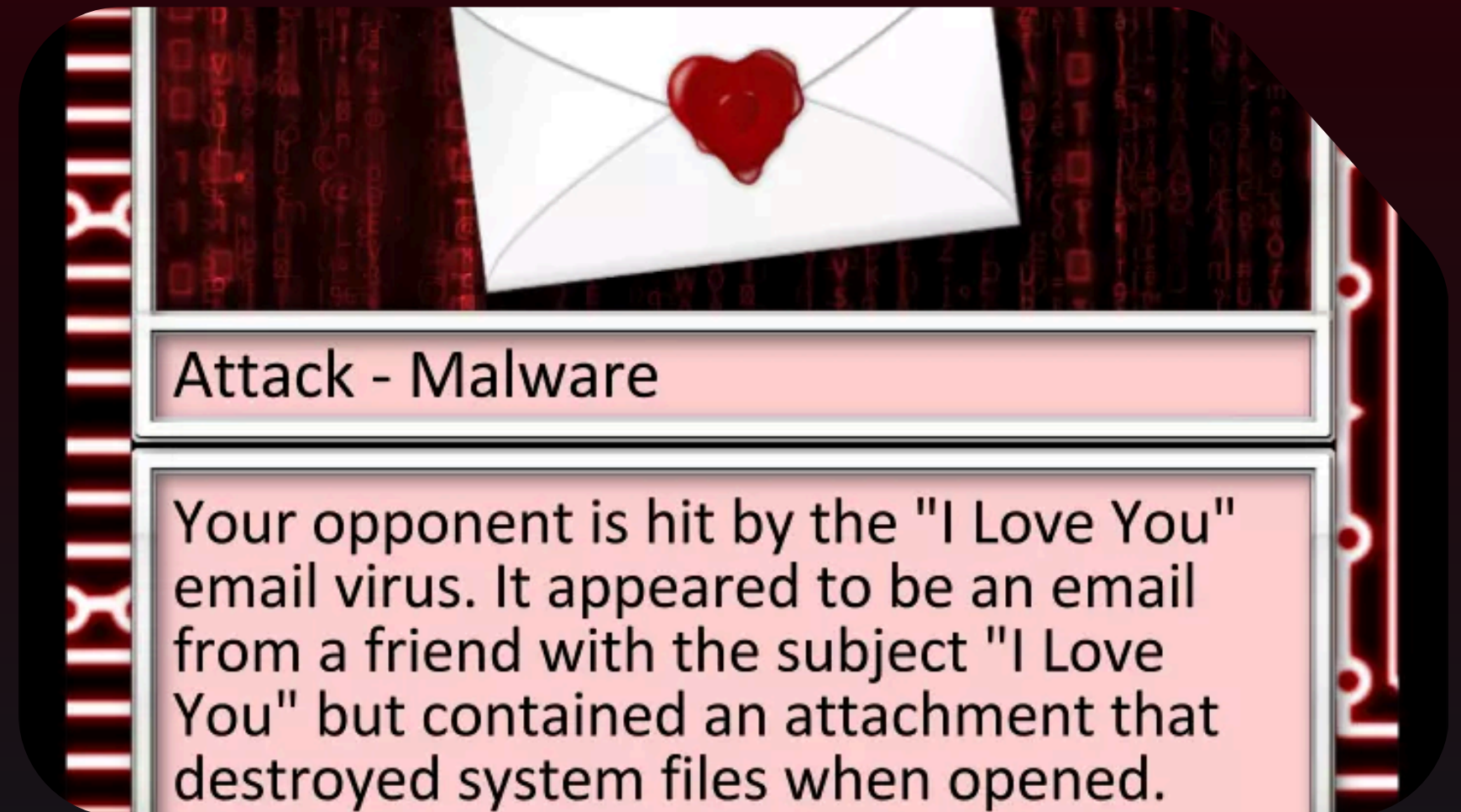
Year 2000

- A love letter that spread through email attachments and damaged files on infected computers.



NETWORK ATTACKS

Attempting unauthorized access.



EFFECTS AND RISKS OF MALICIOUS CODE

Cybersecurity Across Industries

- DATA THEFT

- SYSTEM DISRUPTION

- FILE DAMAGE

- FINANCIAL LOSS



PREVENTION AND SAFETY MEASURES

The Numbers Behind Security



USE ANTIVIRUS SOFTWARE

Detect and block malicious programs.

UPDATE YOUR SYSTEM

Fix security weaknesses by updating software regularly.

AVOID SUSPICIOUS LINKS

Do not open unknown links or unexpected attachments.

BACK UP IMPORTANT FILES

Keep copies of important data in a safe location.





CONCLUSION

Malicious code can harm computers by stealing personal information, damaging files, or disrupting systems. By learning about its different types and how to prevent it, we can protect our devices and stay safe online.

**THINK BEFORE
YOU CLICK.**

SUMMARY

- Cybersecurity and Infrastructure Security Agency (CISA) – [Official website](#)
- [Microsoft Security](#) – [Malware and cybersecurity information](#)
- National Cyber Security Centre (NCSC) – [Cybersecurity guidance](#)