What are the potential threats to networks and their data?

Monday, 04 April 2022

Learning Intention

To secure understanding by being able to describe the consequence of computer viruses.

To develop knowledge by being able explain different types of malicious computer programs

To achieve excellence by Condensing understanding into suitable material

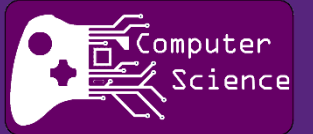What is Malware and how to prevent against it

Keywords

Tier 2 word – Malicious
intending to cause harm

Malware
Malicious software that is specifically designed to disrupt, damage, or gain unauthorized access to a computer system.
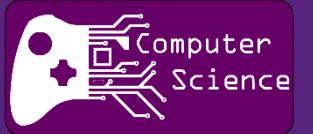
Malware

- Short for malicious software

- Malware is a broad-spectrum term used to describe software used to disrupt computer operation

- Example: Zbot

1. Virus
2. Adware
3. Rootkit
4. Spyware
5. Ransomware
6. Trojan horse
7. Remote access
8. Worm
9. Keylogger

Viruses

- ***A virus is a computer program that is able to copy itself onto other programs often with the intention of maliciously damaging data.***

- A virus is transmitted by 'piggybacking' on another program known as a **'vector'**.
    - Attack vectors include e-mail attachments, Web pages, pop-up windows, instant messages, chat rooms, and deception.
    - All of these methods involve programming (**except deception,** in which a **human** operator is fooled into removing or weakening system defences.)
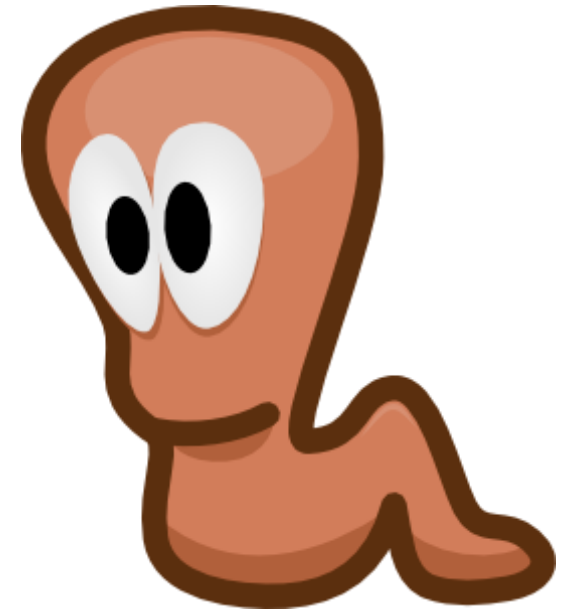
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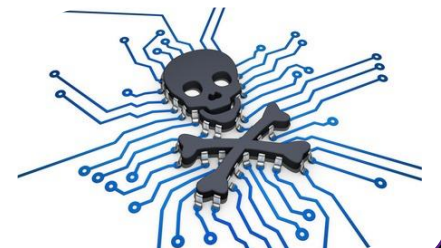
Worms

- Is similar to a virus but is a standalone program that replicates itself in order to spread to other computers.

- Worms identify vulnerabilities in operating systems and enable remote control of the infected computer

- It does not need a **vector**.

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ILOVEYOU

- Estimated Damage: $5.5 billion to $8.7 billion in damages; ten percent of all Internet-connected computers hit

- It took your contacts from your Outlook list. If you saw the e-mail message "I LOVE YOU" and opened it, it would copy and send out the message again and again.

- Recipients, who didn't know what was happening, would execute the document only to have most of their files overwritten.

    http://www.catalogs.com/info/travel-vacations/top-10-worst-computer-viruses.html

- https://www.youtube.com/watch?v=ZqkFfF5kAvw

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Key Loggers

- Are covert programs that capture keyboard (or other input device) input and transmit this data to a third party or hold the data for collection.
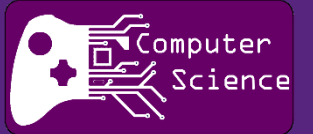
https://www.youtube.com/watch?v=EXxTtKXRRfE

KEYLOGGER
MONITORING SOFTWARE

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Trojan Horse / Trojan

- A Trojan is a program that appears to perform a useful function, but also provides a 'backdoor' that enables data to be stolen.

- The term is derived from the Ancient Greek story of the wooden horse that was used to help Greek troops invade the city of Troy by stealth.

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Spyware

- Installed by opening attachments or downloading infected software.

- Spyware can be used to collect stored data without the user's knowledge.

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Task

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Create a mind map out of the information on Malware, Viruses, Worms, Key loggers, Spyware and Trojans.

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