

BEFORE WE START ABOUT MALWARE

Lightbot is a great game to play if you are doing Computer Science or IT (especially if you are doing both).

You use algorithms to help the robot solve puzzles

Link: <https://lightbot.com/>

Available on iPhone, Android, MacOS, Windows

OBJECTIVES


- To learn what malware is
- To learn why people would want to infect others' computers with malware
- To research a real-life example of a malware attack, and look at some of the motivations behind them



WHAT IS MALWARE?

Malware is a name given to **malicious software**, which is any software that is created to cause harm to a computer system.

 **malicious**
/mə'liʃəs/
adjective
characterized by malice; intending or intended to do harm.
"he was found guilty of malicious damage"
Similar: spiteful malevolent hostile bitter

 **software**
/'sɒf(t)weɪ/
noun
the programs and other operating information used by a computer.
"the software industry"

TYPES OF MALWARE

- ✘ You've probably heard of computer viruses, which are designed to spread and infect other files to destroy your data (just like how a real virus works in your body) but those are just one type of malware.
- ✘ There are also:
 - ✘ Trojan Horses
 - ✘ Spyware



TROJAN HORSES

- ✘ Trojan Horses are designed to allow a hacker to access your computer at any time, as long as the trojan horse is on your computer
- ✘ The name comes from the story of the Trojan Horse that the Greeks used to defeat Troy
- ✘ https://en.wikipedia.org/wiki/Trojan_Horse



SPYWARE

- ✘ This type of malware is designed to allow a cyber criminal to spy on you, to steal passwords or other sensitive data
- ✘ Ways that spyware could spy on you:
 - ✘ Webcam images/video
 - ✘ Keys pressed on your keyboard
 - ✘ Microphone sound



TASK FOR YOU TO DO OVER SUMMER

Research an example of a real-world cyber attack. Put together a Powerpoint presentation or Microsoft Word essay that explains the following

- ✗ What happened?
- ✗ When did it happen?
- ✗ What was the motivation? (Money, revenge, etc.)
- ✗ Who was behind it?
- ✗ What damage was caused?
- ✗ If the criminals were caught, what was their punishment?
- ✗ Bonus: Was the victim punished in any way?
 - ✗ Companies can often be punished for allowing themselves to be the victim of a cyber attack, by not putting proper precautions in place, why do you think this is?

IDEAS TO USE IF YOU ARE STUCK

This website has a lot of good examples, but remember to do additional research once you have picked one - don't just copy and paste from here because we will know!

<https://www.csoonline.com/article/2130877/the-biggest-data-breaches-of-the-21st-century.html>

