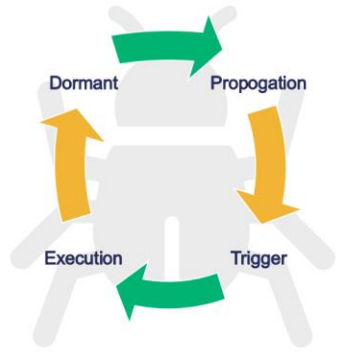




Computer viruses

By: Aditya Semwal

Phases of the Computer Virus Lifecycle



What is it?

A Brief History of Computer Viruses

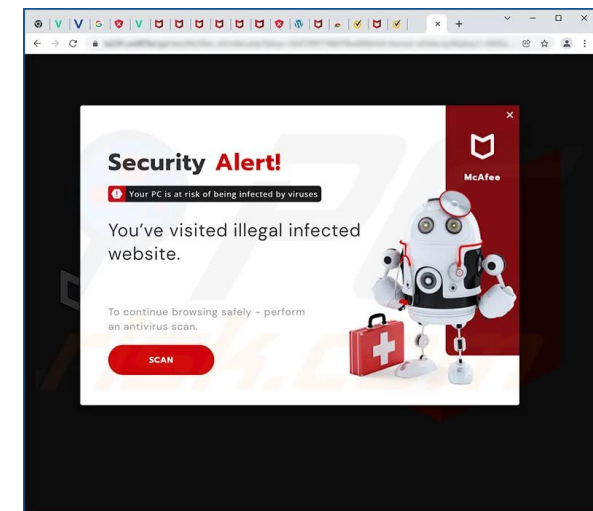
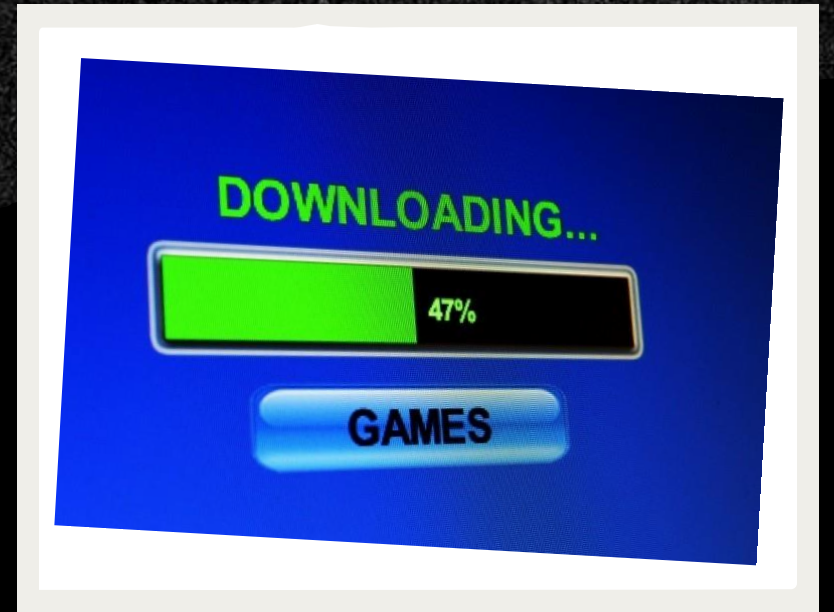


- Computer virus is much like a flu virus. It's designed to spread from host to host and it can also replicate itself. Similarly like in a way like disease needs a host cell to reproduce. Computer virus cannot reproduce and spread without programming such as a file or document.



How do you get viruses on your computer?

- Sharing music, files, or photos with other people
- Visiting an infected website or unsafe website with ads
- Opening spam email or an email attachment
- Downloading free games, toolbars and media players
- Installing mainstream software applications without thoroughly reading license agreements





Damages caused by a

virus

- Damage and corrupt files
- Slow down the performance of your computer
- Missing files on the computer hard disk
- Steal information (which can lead into identity thief)

t Excel

The file is corrupt and cannot b

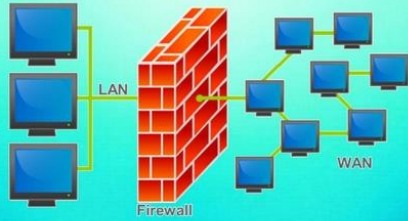
OK

What types of viruses are there?



- Marco virus (likes to hide office programs and spreads in email attachments and file sharing).
- Web scripting virus (hides in popular websites and waits for you to click it).
- Boot sector virus (ones of the first computer virus and only attracts a computer at its core).
- Trojan horses (hides in fake programs tempting you to download on your computer).

FIREWALL SOFTWARE



Protect yourself

PROTECTING YOUR COMPUTER

COMPUTER BASICS



Use antivirus protection and a firewall



Update your operating system regularly



Increase your browser security settings



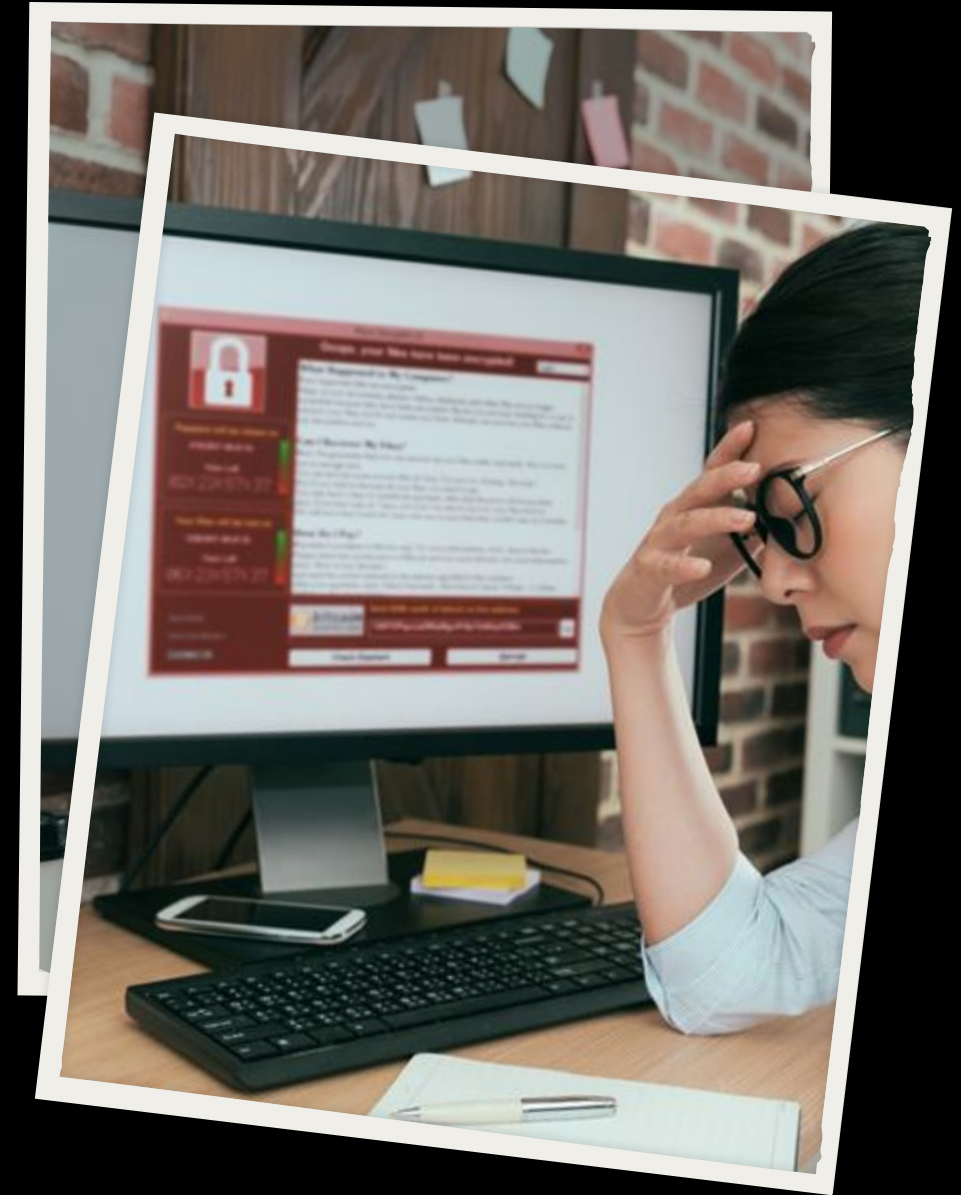
Only download software from sites you trust



Immediately delete messages you suspect to be spam

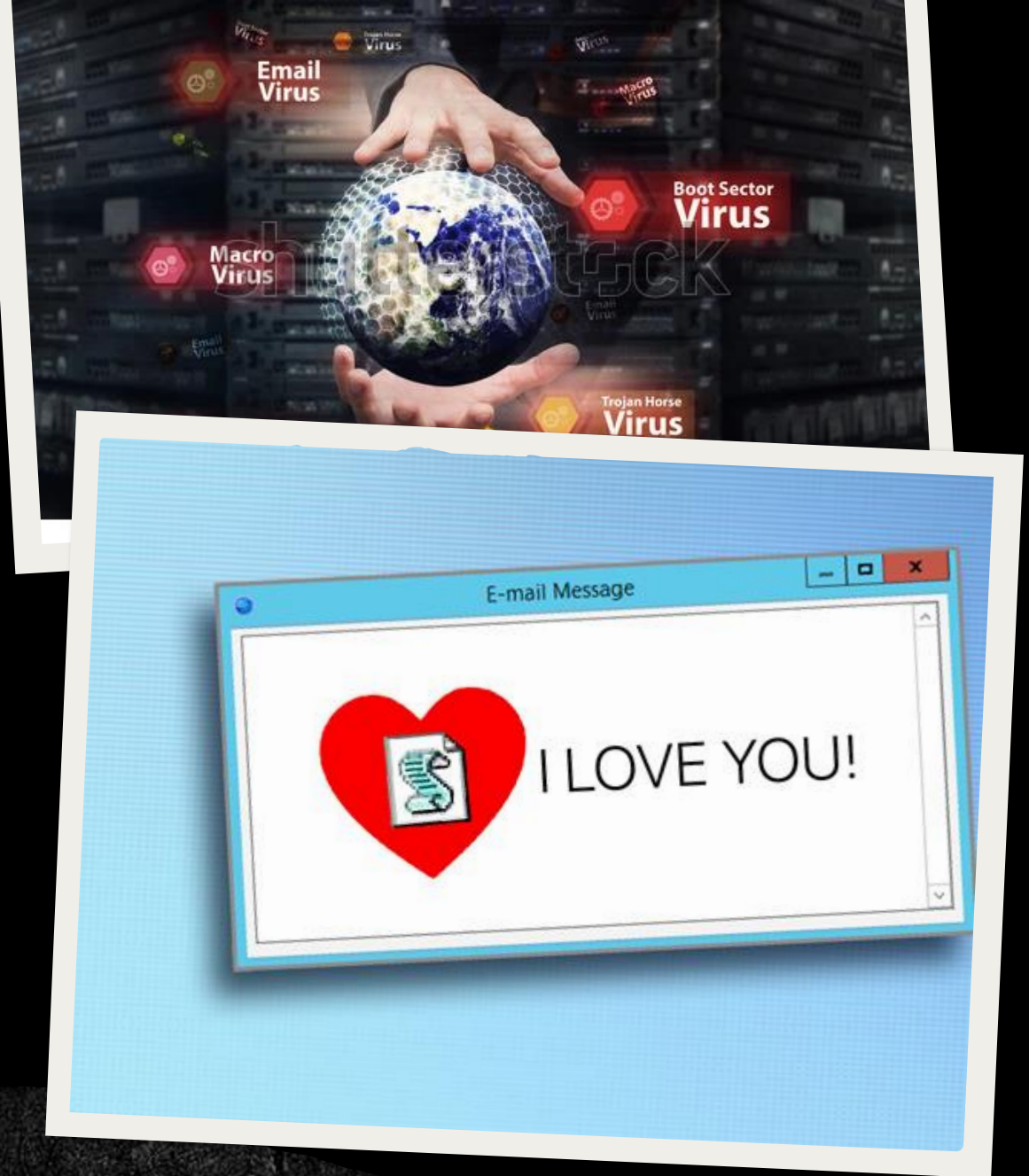
Personal experience

- I don't have any experience or know anyone that got a computer virus. I always thought about virus and kind of scared that my phone or laptop will get a virus. That never happened, I think my phone already has an anti-virus installed so my phone already protects me from any virus I have. My laptop also has an anti-virus in it. On my laptop I pay a lot of money to keep that anti-virus but in my phone, I don't have to pay anything. I know that virus can affect many people from their files to their identity theft. A virus can ruin many lives or even destroy them.



- ILOVEYOU (ILOVEYOU virus would post itself as a love confection, it would send itself to the user's mails and overwrite files, making the computers unbootable. This virus considered to be the harmful, damages were up to 10 billion).
- Code red (code red targeted Microsoft's IIS users and even a white house website wasn't safe. Once infected, the virus replicate itself, taking the computers resources. It hit a total of two out of six million IIs servers).
- Melissa (this virus started in 1999, it infected word document. Once opened, it would get user's email contacts. This also disruption to governments and corporations alike).
- My doom (this virus was one of the fastest spreading virus of all time, at its peak it infected one in 12 emails. Its goal was to take down google and Lycos. It was successful taking down goggle for a day).

Famous viruses





***A video on
different viruses***

Some virus terms

- Malware is a software that is designed to disrupt, damage or gain access to computer system.
- Payload is the carrying capacity of a packet or other transmission data unit.
- Zombie or bot is compromised computer under the control of an attracter who often controls many other compromised machines that together make up a botnet.
- Rootkit virus is a software bundle designed to give unauthorized access to a computer or other software.
- Polymorphic virus is a type of malware that is programmed to repeatedly mutate its appearance or signature files through new decryption routines.
- Drive-by downloads is the unintentional downloads of malicious code onto a computer or mobile device that exposes users to different types of threats.

More virus terms

- Data grabbers is an information gatherer, e.g., about users of a website (without their consent).
- Data mining the practice of analyzing large databases to generate new information.
- Spyware is a software that installs itself on to a user's computer and starts monitoring their internet behavior without the user's knowledge or permission.
- Firewall a network security device that monitors and filters incoming and outgoing network traffic based on an organization's previously established security policy.
- A cookie is a piece of data from a website that is stored within a web browser that the website can retrieve later.
- Cache is the temporary memory termed "CPU cache memory".