

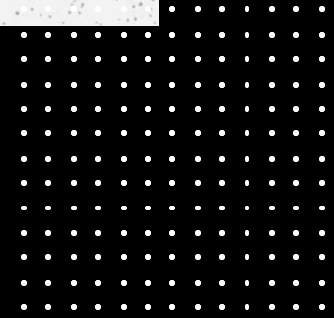
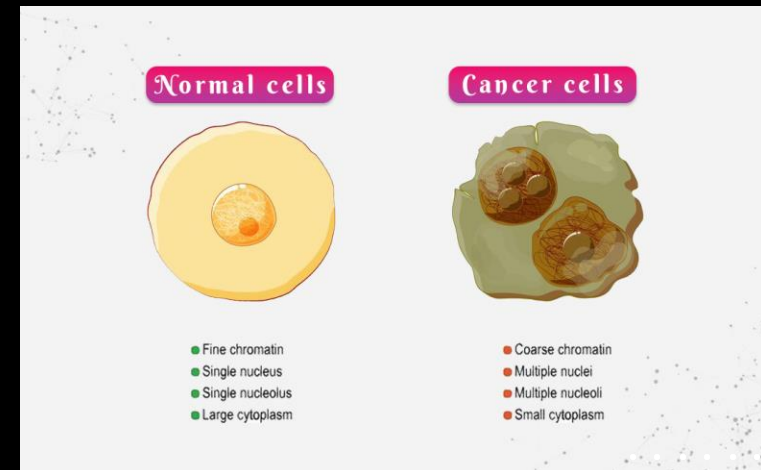
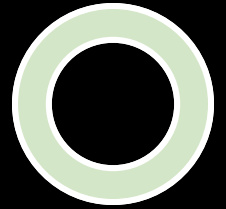


Computer viruses

By Emad and Jude

What are they?

- Computer viruses are a set of bad codes that are typically used to steal data or do damage to your computer, these codes are described as malicious which means that they are designed with bad intent which is why they are named malicious software.
- Computer viruses are like cancer cells, they are not similar when it comes to how they were created but they are similar when it comes to how they function and behave.
- Cancer cells are formed due to changes in genes which gives them the ability to divide uncontrollably, while computer viruses are codes written in a specific structure to give them the ability to duplicate themselves.
- Cancer cells are distorted cells that might or might not grow depending on genes which kind of means they're formed unnaturally; computer viruses are created with intent to duplicate.



Big questions

- How do viruses get onto your computer or onto a network?

A hacker designs a virus then imbeds it to a different thing like an email, an attachment, a picture, a file(s), or a website(s), then uploads it to the internet by publishing it online, sending out emails, posting pictures, file(s), attachments, and a whole lot of other things that you could or couldn't think of, the next step is done by you which is to simply open that email, visit that website(s), downloading that picture(s), downloading file(s), and visiting these website(s) and by doing so; you have officially infected your device.

- What types of viruses are out there?

Disruptive software: from its name, you can know that its objective is just to sabotage your experience with the operating system of your device, limits you from enjoying specific features or services like sound output, mouse, and keyboard.

Ransomware: classified within the malicious software branch, ransomware is malicious because it has a bad intent which is to restrict the victims access to their personal data and ask for a ransom which in most cases is going to be paid through crypto currency to limit the ability of tracking the hacker and in some cases even if you pay ransoms, you won't get your files and data back.

Trojans: like cancer cells, trojans hide and pretend they are innocent software until you click a download button or just open an email, they spread and infect your device and start spying on you, it falls under the spyware branch.

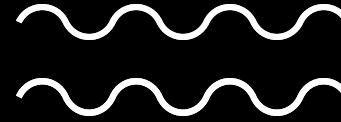
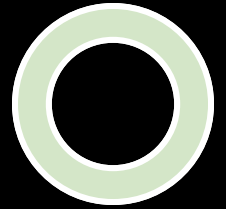
Rootkits: a software that allows hackers to take remote control of your device, they are often bundled with other suspected apps so that when you download them, they are hard to detect. For example: you download an older version of a specific app you wanted which doesn't exist on authorized websites, the rootkit is bundled with it, once you're done downloading and setting it up, hackers can manipulate and create commands of codes on your system. **(Is TEAMVIEWER A ROOTKIT SOFTWARE?)**

Adware: it works on turning your device into an ad gallery and then sends the earnings of these ads to the adware creator, in my opinion, adware is the most annoying type of viruses amongst all...

Worms: they are a type of malware whose objective is to replicate and spread between devices through networks, it can infect multiple devices and host in them working on replicating themselves, they are malicious, so they are made in an evil intent.



Virus window and virus affection



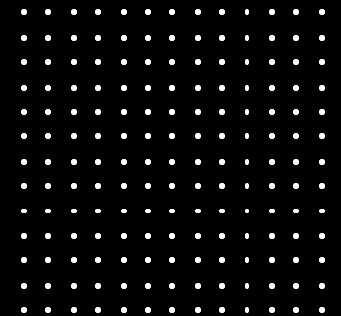
- How do viruses reach you or your device?

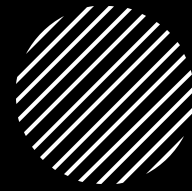
There is no smoke without fire which should mean that viruses won't reach you unless you get really close to them, but that is not true in all cases, viruses could be sent randomly through emails and even then, the virus won't reach you unless you open that email, so it requires some action done specifically by you.

- What can viruses do to you or your device?

Viruses won't harm you physically but will harm you mentally for sure, they could put you in a really bad situation where you must pay a ransom through crypto currency for you to retrieve important work data that might save you from being fired that is if you even get the data back. Don't say that you don't care about the mental situation that I am talking about, I am sure that you have experience being mentally tired of something and when that thing is so ridiculous that you can prevent it from happening just by avoiding these websites then why not do it...

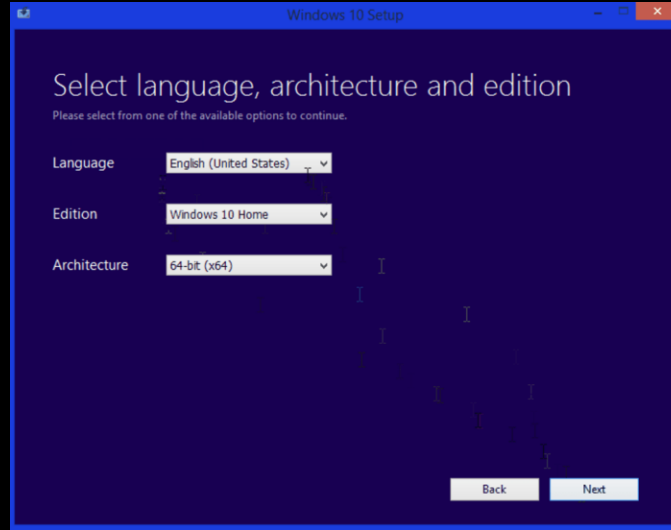
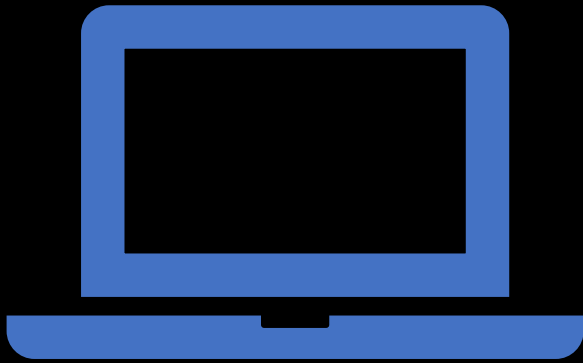
Viruses can destroy your data and require you to reinstall your operating system, viruses can also put your device in a situation where the hardware itself is dead. For example: viruses can give the hacker access to write codes, hacker writes commands that will prevent your system fans from running and that will result in either your device turned off or your hardware dead because of high temperature.





How can you stay safe?

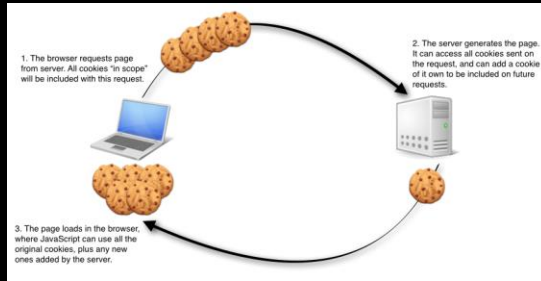
- In the digital world of computers, you can't guarantee your safety unless you follow specific rules and even then, your safety is not always guaranteed; here are some rules you need to follow for you to be safe.
- Do not open every single email or attachment you receive.
- Do not visit untrusted websites, make sure these websites are safe before entering them or downloading from them.
- Download an anti-virus software, it will help a lot with making your experience safer.
- A tiring option but affective is to reset your device every 6-12 months, it will take long but will keep you safe because when you do so, you download the latest updates of your OS.



Personal experience

- I try to be extra cautious when visiting online websites, I usually know if the website is safe by looking at its name and web address.
- I think my device got infected with a virus on this long weekend while I was researching this project, what a coincidence.
- I use a web tool called [Norton Safe web](#), it simply gives rating to each website based on its users experience and tells me if it is safe to visit.
- As I get a virus into my device, I notice a change and start getting confused until I reset the entire OS, that is when I really make sure that everything is back to normal...





Learning the lingo

- White hat vs black hat vs gray hat: white hat will hide discovered bugs or issues in websites to prevent bad from happening, black hat will use that opportunity to do bad or benefit from it and will teach others about it, gray hat will play dead and avoid it.
- Cookies are used to gather data, they are almost on every single website out there, their purpose is to gather information about both users and websites used to find out who visits these websites, they get downloaded to the user's device and then they get retrieved later.
- Cyberterrorism is not a virus but an action, it like a demonstration but a lot more violent where the influencers will happily make impact on us web users to do certain things while they are safely unknown.

Website Cookie

xyz.com

From Google

Clicked on 2 Pages

Signed in

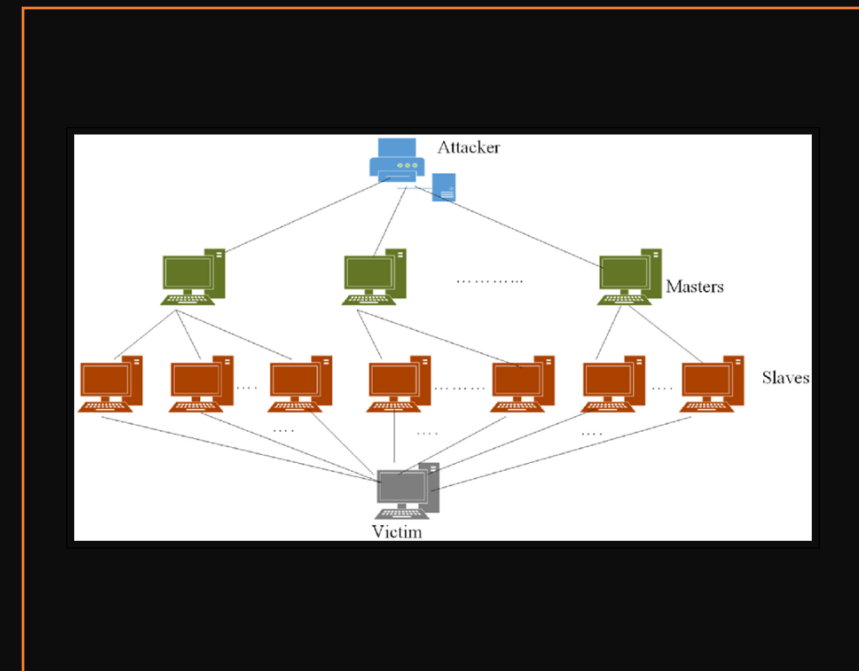
Stayed 2 minutes

Items bought

Has data on previous visits to a website

Learning the lingo

- Data mining sounded interesting and less dangerous for me although, I don't like the idea of gathering information which is often done by companies like Microsoft, Apple, Samsung, Google, and many others. The collected data is mostly used to improve businesses of their companies throughout various ways such as ads.
- DoS attacks: when too many people visit a website, this website might or might not shutdown, these attacks target websites to shut them down by overwhelming or flooding them with visitors which are often coded bots which will result in harm to business or individuals.
- Keystroke loggers: a piece of hardware connected to your keyboard that gives hackers knowledge of what you type for example: your bank account information and your emails and passwords...



Learning the lingo

- Payloads: they are the amount of data transferred or moved or delivered, they are always dealt with as frame bits such as Point to point protocol frames, Ethernet frames, and Fiber frames.
- Hacker vs cracker: hackers tend to break into systems for learning or improvement purposes while crackers break into systems with bad intent which is to cause as much damage as possible.
- Blended threats are a whole different level of viruses where if you get one you automatically get bundled with two or more other viruses.

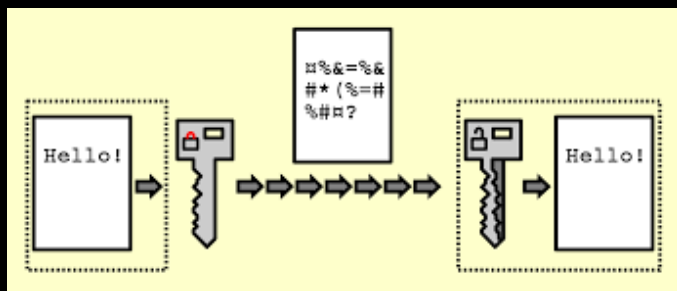
**DIFFERENCE BETWEEN HACKER AND CRACKER:
ALL THAT YOU NEED TO KNOW**




SYNTAX



Learning the lingo

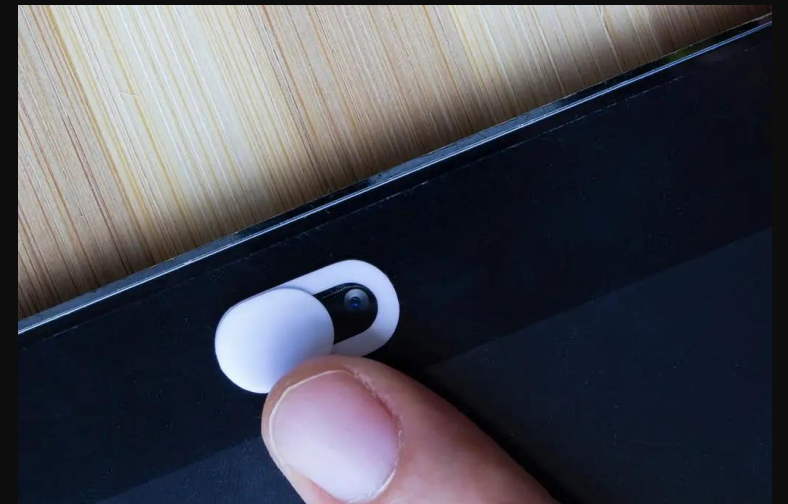


- Firewall: it is like a sieve; it filters outgoing and incoming traffickers only letting in traffickers who match expectations.
- Spoofing: when a person, an app, or a website pretend to offer specific services for them to gain your trust and that is when they reach their target which is to steal data or spread viruses.
- Encryption is a method used to hide the information's true meaning, when text is encrypted, no one could understand it except if they had a key, unencrypted texts are called plaintext and encrypted texts are called ciphertext.



Tools and tips

- Anti-virus: 1.Norton 2.McAfee 3.Total AV
- I don't think you should download firewalls because depending on what OS you use; it comes with an authorized preinstalled firewall.
- Always keep an eye on your OS updates
- Don't download anything from anywhere, sieving it might work but, you should be careful and learn from your mistakes.
- Be extra careful if you have a webcam because someone is watching you



Videos

- An example of what viruses can do to your computer: [Video](#)
- Most dangerous viruses: [Video](#)
- What is a computer virus: [Video](#)

A critical exception 0E has occurred
the current application will

* Press any key to continue
* Press CTRL+ALT+DEL to restart

End Of Universe Warning

End Of Universe

End Of Universe

End Of Universe

End Of Universe

End Of Universe

End Of Universe

End Of Universe Warning

This operation is estimated to take 154146901011 quadrillion years to complete.
Are you sure you want to continue?

End Of Universe Warning

End Of Universe Warning

This operation is estimated to take 154146901011 quadrillion years to complete.
Are you sure you want to continue?

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This operation is estimated to take 154146901011 quadrillion years to complete.
Are you sure you want to continue?

Yes

No

Yes

No

Yes

No

Complete.

Complete.

