Being Smart On The Internet

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What is the internet?

The internet or "the web" is a large network of computers and devices connected to each other that ANYBODY with an internet connection can be part of. All these computers share and access information on a recurring basis.

What you can see (frontend):

-HTML (Hypertext Markup Language)- Any document on a website that you are reading, which is usually structured by a header, paragraphs, website links, etc.

-CSS (Cascading Style Sheets)- Controls how the website looks, like font and background colors

-Javascript- The complex features of a website, for example, anything animated or in 2D/3D, and interactions

Behind the scenes (backend):

-Database - stores your data so it can be used for future times.

-Server - computers that store the content, style and behavior of the web pages that you want to visit.

Example:

When clicking on your browser you search for Amazon. When clicking that search button the information goes to your Internet Service Provider (ISP) (Comcast, Verizon, etc.) modem sitting in your living room, continues to the underground cable in the street, and through to the nearest server system from Amazon. The client (your device) tells the server that you are trying to connect to the Amazon webpage. The server processes this information and sends the info you requested directly back to your computer screen. This is when the main Amazon page pops up on your laptop. This all happens in a matter of seconds.

Why should we stay safe on the internet? Why does it matter?

- Most of the information on the internet is public domain, therefore your information is too. Yes, everyone can see your addresses and current location if you are not safe. Worst case scenario: they can track you and find you if they know how to. Do you want that?

- The more effort you put into protecting your privacy, the less public information there will be about you on the internet. Great, isn't it?

- Would you like someone knowing what you're doing or where you are at all times? I bet you don't. So staying safe is something that we should all worry about.

Who should I worry about?

- Anyone! The internet is a public space and anything you do can be tracked. Even that Facebook post on your private account can be found.

- You should be aware of big internet service providers like Comcast and Verizon that are legally allowed to sell your information to other companies.

- Everything you do, see, or share on the internet can be accessed and recorded.

- To play it safe, if you do not want your mom or your future employer to see it, do not post it to your social media account.

- You have probably heard of Cookies before, but don't know exactly what they are. Cookies are data that is sent to your computer when you visit a website. It helps the website keep track of your activity. For example, keeping track of clothes you placed on a website's shopping cart.

How Can You Stay Safe?

When in public spaces, maintain your Wi-Fi network off, so your phone does not connect to public networks. If you connect to random public networks, for example, the free Wi-Fi at Starbucks, you are at risk of having your sensitive information leaked. So, make sure to not access any private websites, such as your Bank Account, or save any passwords on the web.

- Beware of public and unsecured internet connections like xfinitywifi or network connections that have “guest” in their name. Connections like this can store your data and sell it to whomever they want to. YES, it is legal, so be careful!

- Anyone, even the stranger sitting next to you in the coffee shop can access and even steal your information, so be wary.

Example of a “safe way” to use the internet:

A good start is to be sure to use sites that have HTTPS:// in the domain. *Why?* The “S” is important in the HTTPS. It uses encryption with a security protocol (TSL/SSL)* to safely send information over the internet and therefore one of the ways to secure your browsing.

Now, that doesn’t mean you have to avoid ALL sites which only have “HTTP” but it’s good to know that there are different “levels” of safety to be aware of on the internet.
**TSL/SSL* = They are one and the same as they are both the terms to describe the encryption of how your information is sent over the internet. The difference is that TSL is the most *recent* and updated version of its kind, whereas SSL was the first.

Throw in a trusted and reliable VPN service and you’re already on track to keeping your sensitive information and your devices protected.

What is a VPN*?*

A VPN is a Virtual Private Network that uses a special method to establish a channel between the client and the server. VPNs encrypt your data which makes it safe when browsing on the public internet. Since the public internet is less secure, a VPN helps encrypt the data, therefore, making it more secure.

Getting a VPN is very simple, you can buy a VPN online and pay a yearly subscription. There are free VPN options but are not recommended since they are unreliable. Why? Well, because the company isn't charging you. They would be making their income by storing and selling your information, which defeats its purpose.