Steps to keep your computer running smoothly

Make sure Antivirus is installed, running, and up to date

Some free Antivirus programs:

- Avast https://www.avast.com/free-antivirus-download
- AVG https://www.avg.com/en-us/free-antivirus-download
- Bitdefender https://www.bitdefender.com/solutions/free.html
- Windows Defender If you are running Windows 10 it is built into the Operating System Install Free version. You do not need the Pro or the trail of the Pro.

Run Full Computer scan if one hasn't been performed in a while. Quick scan once a month or so.

If virus are found follow the program will recommend a procedure for removing the virus(s) (quarantine, or deletion of files)

Run an Anti-Malware scan

All Anti-Virus have the basic Malware protection but it can be a good idea to run a dedicated Malware scan every once and a while.

Some free Anti-Malware programs:

Malwarebytes - https://www.malwarebytes.com/

Install Free version. You do not need the Pro or the trail of the Pro.

If malware are found follow the softwares recommended procedure for removing them (could be quarantine, or deletion of files)

Keep Computer Operating System Up to Date

It is a very good idea to keep your computer up to date. Security updates are very important and with Windows 10 you will always be updated to the latest version for free.

- Windows 10/8 Start/Windows -> Settings (Windows Settings) -> Update & Security -> Windows Update
- Windows 7 From Control Panel (I think)

Check for updates and install any recommended updates

TIP: If computer failing to install updates try disabling your antivirus and installing again. Make sure to re-enable antivirus after install.

Uninstall Programs

It's a good idea to uninstall any programs you aren't using or don't know what they are (This includes Browser Toolbars).

On most Windows computers you can uninstall programs the following:

• Control Panel -> Programs -> Uninstall a program

A list of installed programs will populate. Go through this list and uninstall the ones you are not using anymore or don't know what they are (maybe they got installed along with other programs)

TIP: Pay attention when you INSTALL programs as well. Sometimes you may agree to install some other program with the one you want to install. Read Read Read.

Backup your important files

It is always a good idea to backup your important files (Word, Excel files, pictures, music, etc....) just in case you delete them by accident, something happens to your computer (crash, hard drive fail), etc....

There are many cloud services you can use for free (up to a certain storage) or you can use USB thumb drives or USB external hard drives.

Some Cloud services:

- Google Drive https://www.google.com/drive/
- Microsoft One Drive (built into the Windows 10 OS) https://onedrive.live.com/about/en-us/
- Dropbox https://www.dropbox.com/business/landing-t61fl-v2

Install and use another web browser besides IE or Edge

Internet Explorer and Edge are junk and they are slow and more acceptable to viruses. Install another web browser that is faster and more user friendly to use.

- Chrome (Google) https://www.google.com/chrome/browser/features.html
- Firefox https://www.mozilla.org/en-US/firefox/new/

I recommend Chrome if you use a lot of Google services (gmail, drive, hangouts, maps, etc...)

Clean up computer temporary files

Your computer can get full of temporary files that may slow down your computer but most importantly take up space that are not needed.

Windows has a built in feature to help remove these files safely:

- Open a file Explorer (Window key + E for a shortcut), Go to "This Computer", Find your "C" Drive under Devices and Drives, right click on the C Drive, Select Properties at the bottom of the list, Click on "Disk Cleanup" on the General tab.
- When the Disk Cleanup window opens make sure you click "Clean up system files". It will rescan and Disk Cleanup will open again.
- In the window "Files to delete" check off all the boxes and then click ok.
- This can take a while to run.

Disk Defragmentation

If you have "an old fashioned" hard drive:) it is a good idea to run a Disk Defragmentation for that drive every once and file to rearrange files on the drive for faster performance. If you have an SSD drive this is not required but you can still "Optimize" it by running the "Trim" function.

For both drive types both can be performed the same way:

- Open a file Explorer (Window key + E for a shortcut), Go to "This Computer", Find your "C" Drive under Devices and Drives, right click on the C Drive, Select Properties at the bottom of the list.
- Click Tools tab and then under "Optimize and defragment drive" Click on "Optimize".
- Optimize Drives window will open and show a list of drives, type, when they were last run, and the current status.
- Optimize the C drive first and then go from there.
- This can take a while to run.

Disable programs from Startup

Many programs start loading and run when your computer starts up. You might have given a program permission to do this when installing and didn't even know. Most do not need to start running when you are starting up your computer and this can cause for longer startups and issues with computers with low amounts of memory/RAM.

You can disable programs from starting up by the following (Be-Careful!)

- Ctrl+Alt+Delete, Task Manager, click on Startup tab.
- In Startup sort the table by "Startup impact". This will show you which programs have the highest impact (slowing your computer down)
- You can right click on each program and choose "Disable" if you want that program to stop loading on startup. Choose wisely, some you might want (like your antivirus:))
- Right click again on the program and choose Enable if you have disabled the program and want it starting up again on startup.

Other Hardware Recommendations

There are two "simple" hardware solutions to boosting the speed and life of your computer (if you can upgrade the hardware of your computer). Desktops are easier to upgrade than Laptops. Some Laptops can be hard to get into and some are easy. Youtube videos are great to see what you need to do.

Hardware to upgrade:

- Hard Drive The most single easiest way to speed up your computer is to buy a SSD (Solid State Drive). Your computer will feel twice as fast as the read/write times are double/triple that of a "spinny" hard drive.
 - SSD's are pretty cheap today. You can buy a 250GB drive for < \$100, might even find a 500GB for around \$100.
- Memory If you have 4GB of memory/RAM or less you should definitely look into upgrading. I recommend at least 8GB and 12 or 16 GB is nice.
 - To find the type of memory your computer needs use the power of google with your machine model. 8GB can be had for < \$100.