

MINNESOTA TECH FOR SUCCESS



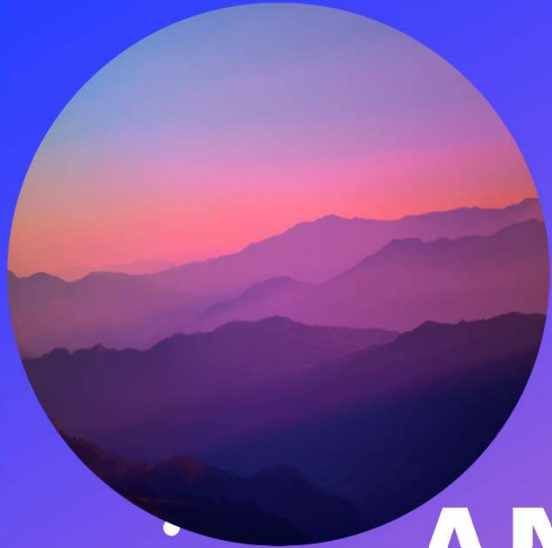
Week 5-7: Software
and Operating Systems

1/10/2024

Agenda

- **Announcements**
- **Classroom (25 min)**
 - Troubleshooting
 - Continue Installing applications
 - “Hello World!”
- **Break (5 min)**
- **Warehouse (1.5 hrs)**
 - VR & Recycling





ANNOUNCEMENTS

Week 6



Announcements for 1/10

- **Next Module: Networking Basics**
 - w/ Dani & Jim
 - January 17th, 24th & 31st
- **Calendar**
 - Next session: **Wednesday, 1/17/2024**

Values

- **R**espect
- **A**ccountability
- **I**mprovement
- **S**teadfast
- **E**ncouragement

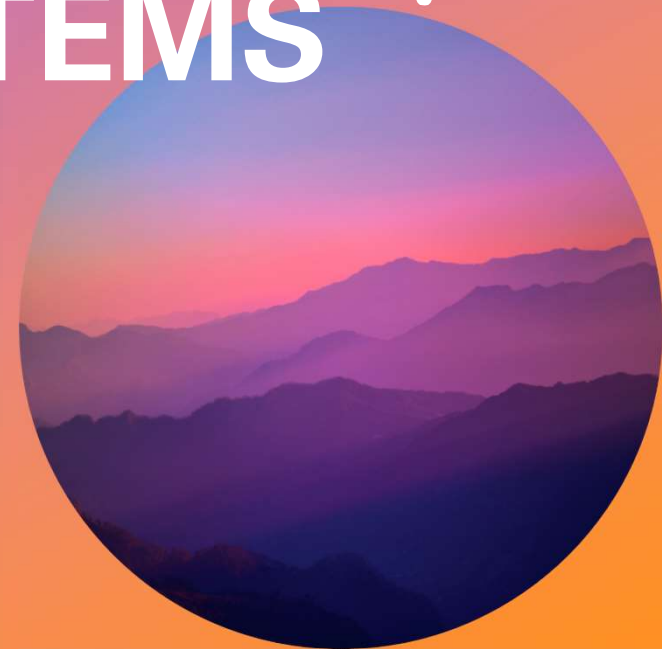


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SOFTWARE & OPERATING SYSTEMS



Software & Operating Systems: Objectives

1. What is software?

- Explanation of software, its role in computing, and the various types of software, including applications and operating systems

2. Basics of operating systems

- Fundamental functions of operating systems and how they interact with hardware

3. How to install and use software

- Guide on how to install and use software applications on a computer

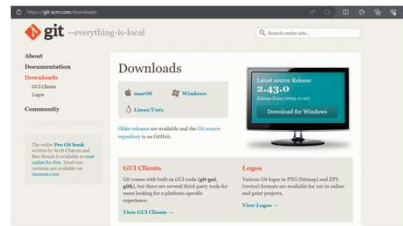
4. Simple software troubleshooting

- Basic troubleshooting steps for software-related issues, such as resolving software crashes.

Recap: Installing Software: Applications

1. Standalone Installer

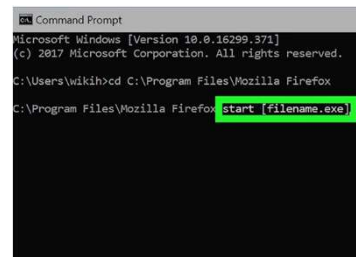
- .exe, .zip etc.



2. App Store: Microsoft Store, Mac App Store



3. Command-line shell Install



4. Physical (thumb-drive)

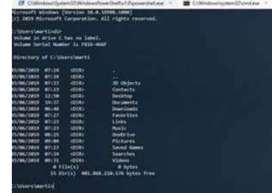


Recap: Ways to Use/Launch Software

1. Windows Start



2. Terminal

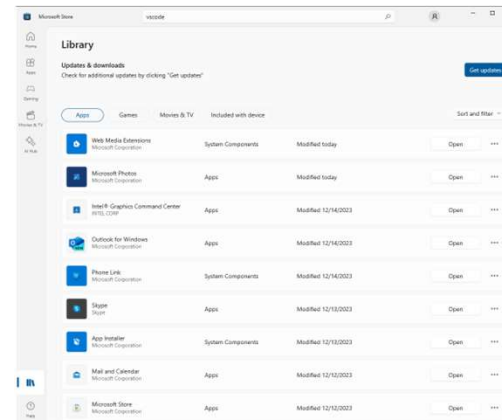
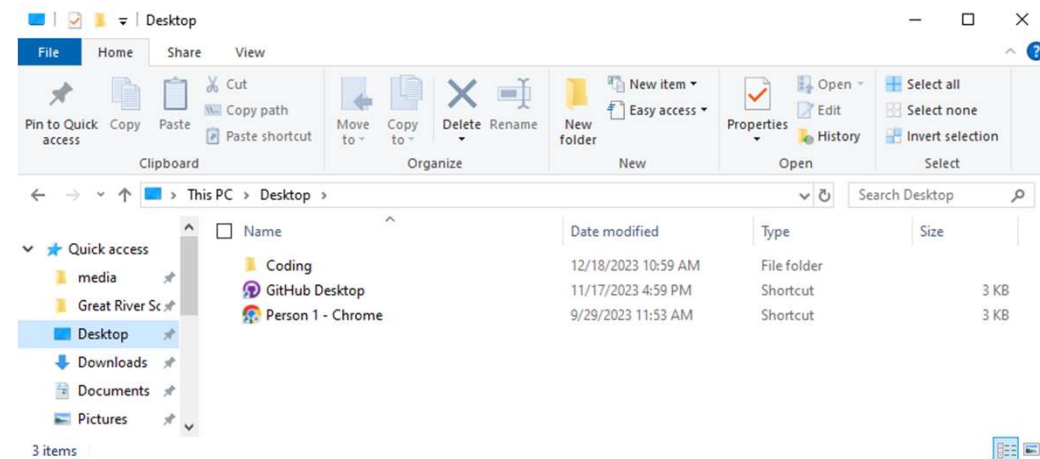


3. App shortcut icon



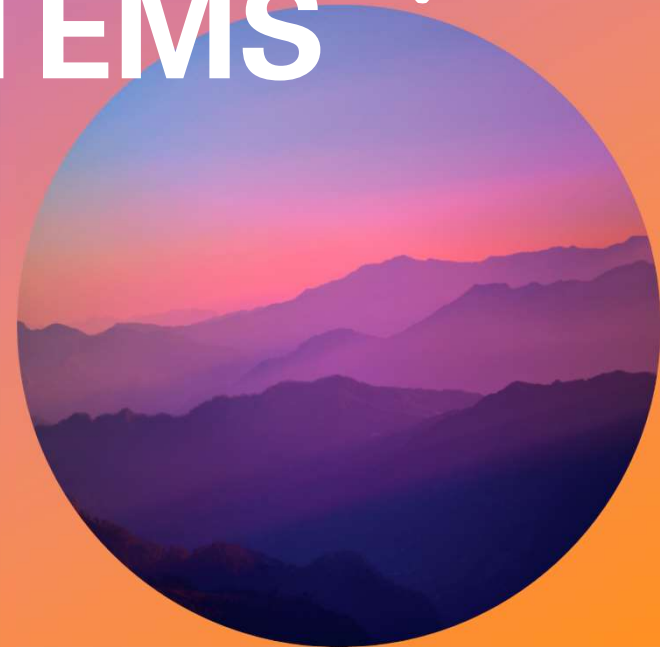
4. File Explorer .exe

5. Microsoft Store library



SOFTWARE & OPERATING SYSTEMS

Troubleshooting



Troubleshooting Steps Overview

If some Windows functions aren't working or Windows crashes, do the following:

1. Turning things Off and On
2. System File Checker
3. Uninstall/Reinstall/Update Applications
4. Check Resource Requirements

Troubleshooting: On/Off



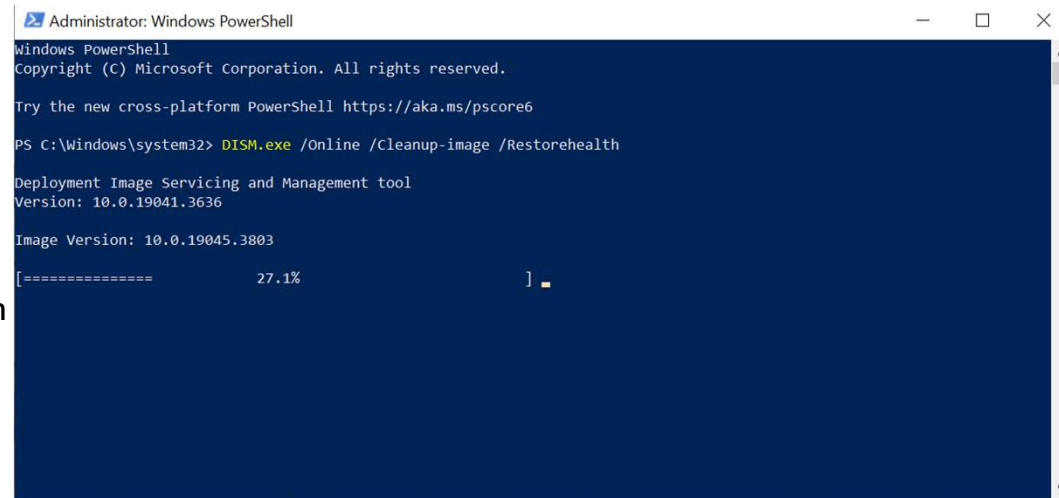
- **Memory Leak:** Programs that don't properly clean up and release used resources, prevents the system from allocating those resources to other applications
- Power buttons/switches* can be labeled with "I" and "O" symbols.
 - "I" = power on
 - "O" = power off

***Flea Power Drain:** process to drain static electricity from the desktop server. Helps resolve issues with bad power causing inconsistencies with components



Troubleshooting: System File Checker

- **System File Checker** - scans Windows and repairs & restores missing or corrupt files
1. Open Windows PowerShell Admin (or Command Prompt)
 2. Type: `DISM.exe /Online /Cleanup-image /Restorehealth` (note the space before each "/"), and then press Enter. (May take minutes to start and up to 30 minutes to complete.)
 3. After message: "The operation completed successfully," type: `sfc /scannow` (note the space between "sfc" and "/") and press Enter.
 4. After you see a message that says, "Verification 100% complete," type: `exit`.



```
Administrator: Windows PowerShell
Windows PowerShell
Copyright (c) Microsoft Corporation. All rights reserved.

Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\Windows\system32> DISM.exe /Online /Cleanup-image /Restorehealth

Deployment Image Servicing and Management tool
Version: 10.0.19041.3636

Image Version: 10.0.19045.3803

[=====                27.1%                ] _
```

Troubleshooting: Uninstall/Reinstall/Update

1. Start > Settings > Apps > **Apps & features**
2. Windows Recovery Environment (WinRE)

Apps & features

Choose where to get apps

Installing apps only from Microsoft Store helps protect your device.

Anywhere

Apps & features

App execution aliases

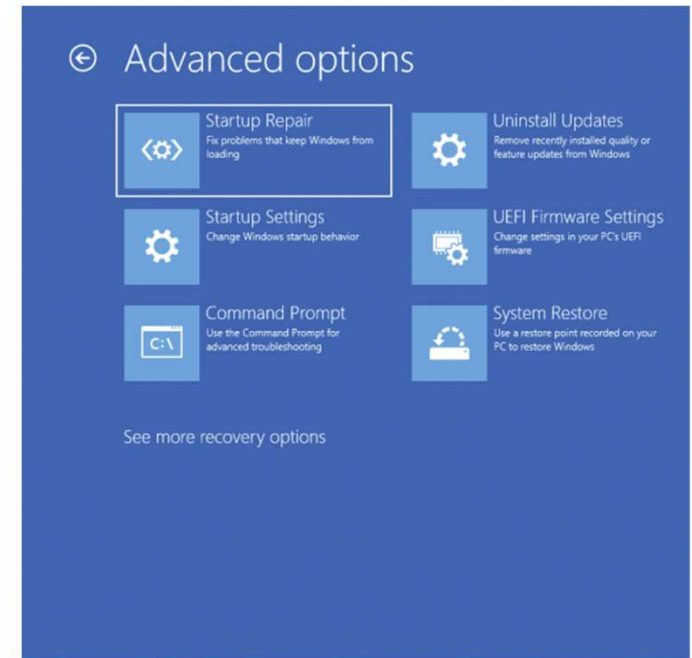
Search, sort, and filter by drive. If you would like to uninstall or move an app, select it from the list.

Search this list

Sort by: Name Filter by: All drives

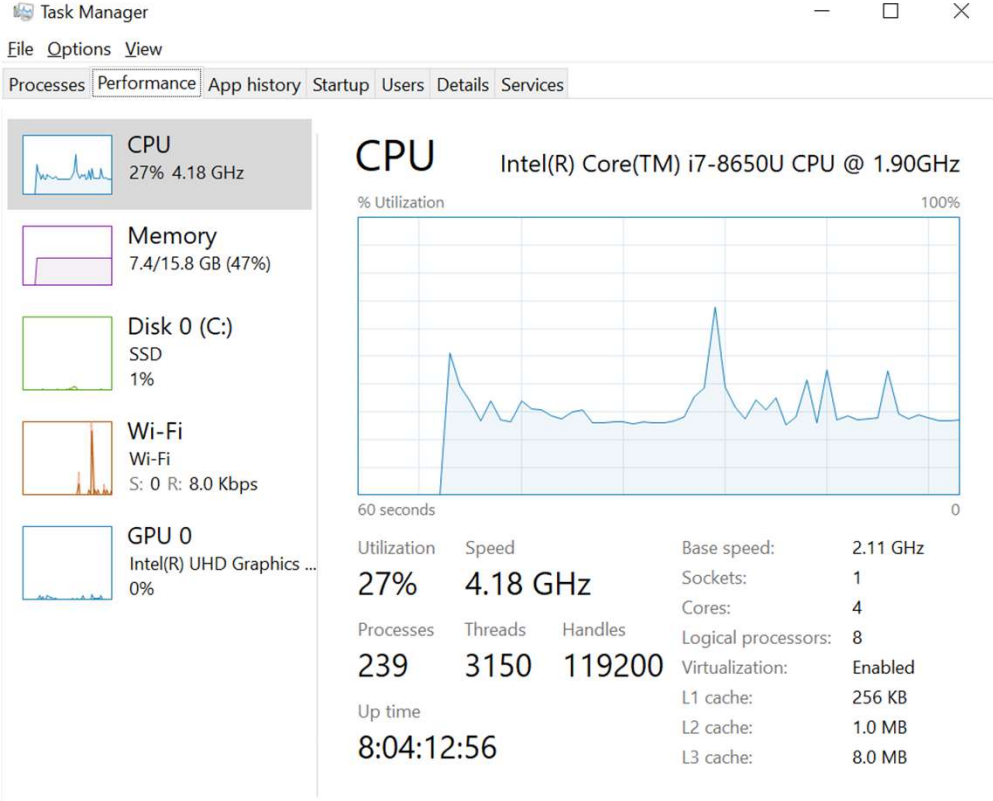
66 apps found

	3D Viewer Microsoft Corporation	16.0 KB 12/11/2023
	App Installer Microsoft Corporation	292 KB 12/19/2023
	Bang & Olufsen Audio Control Panel Synaptics Hong Kong Limited, Taiwan Branch (H.K.)	127 MB 9/27/2023

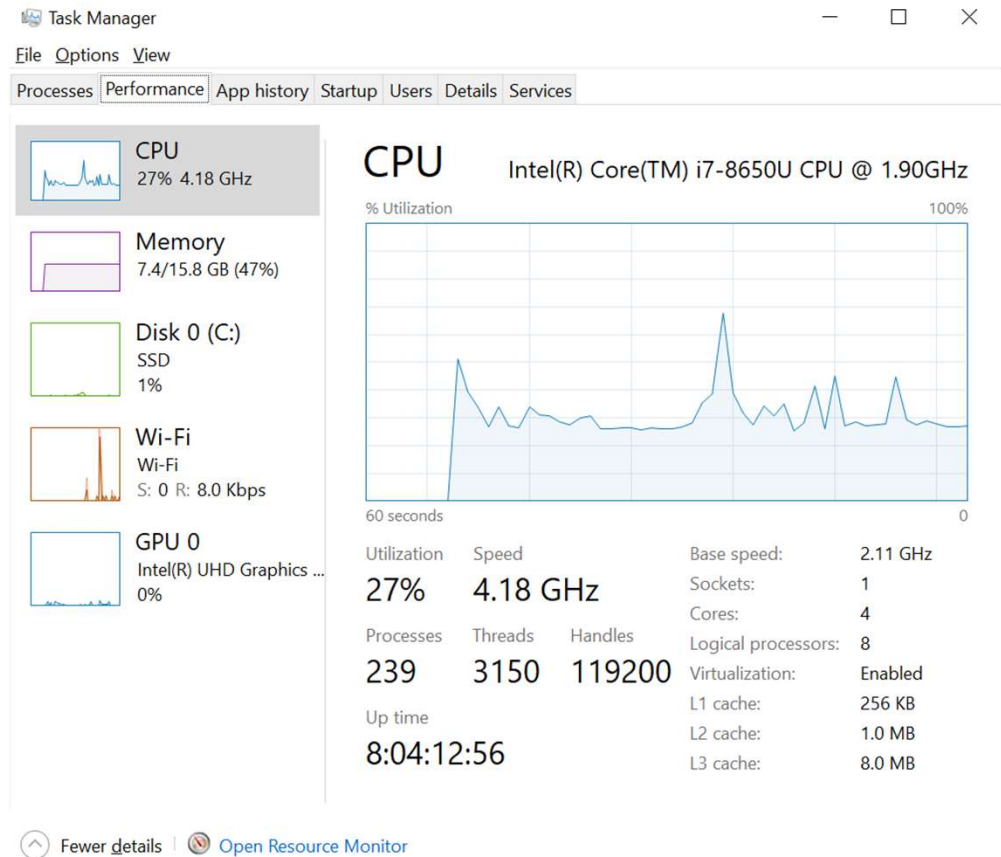


Troubleshooting: Resource Requirements

- **Task manager**
 - Press: [CTRL] – [SHIFT] – [ESC]
 - Investigate processes and performance
- Check and compare application minimum requirements with PC specs



Name	Status	27% CPU	46% Memory	1% Disk	0% Network
Apps (6)					
Google Chrome (4)		0%	138.1 MB	0 MB/s	0 Mbps
Microsoft Edge (25)		0%	708.0 MB	0.1 MB/s	0 Mbps
Microsoft PowerPoint (2)		0.4%	132.8 MB	0 MB/s	0 Mbps
Microsoft Teams (work or schoo...)		0%	223.5 MB	0 MB/s	0 Mbps
Outlook (new) (4)		0%	39.6 MB	0.1 MB/s	0 Mbps
Task Manager		0%	27.2 MB	0 MB/s	0 Mbps
Background processes (93)					
64-bit Synaptics Pointing Enhanc...		0%	0.2 MB	0 MB/s	0 Mbps
Antimalware Service Executable		0.4%	184.0 MB	0.1 MB/s	0 Mbps
AppHelperCap		0%	2.0 MB	0 MB/s	0 Mbps
Application Frame Host		0%	6.8 MB	0 MB/s	0 Mbps
COM Surrogate		0%	3.0 MB	0 MB/s	0 Mbps





ACTIVITY

Install & Sign-up &
"Hello World"



Continue Install/Sign-up for the following:

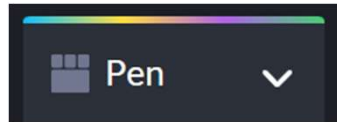
1. [Google Chrome Browser](#) **Install using standalone method**
2. [Git for Windows](#) – **Install using standalone method**
3. **Visual Studio Code** – **Install using app store method**
4. **Github -signup**
5. **CodePen -signup**

* All links are located on curriculum website

“Hello World!”

1. Navigate & login to: CodePen.io

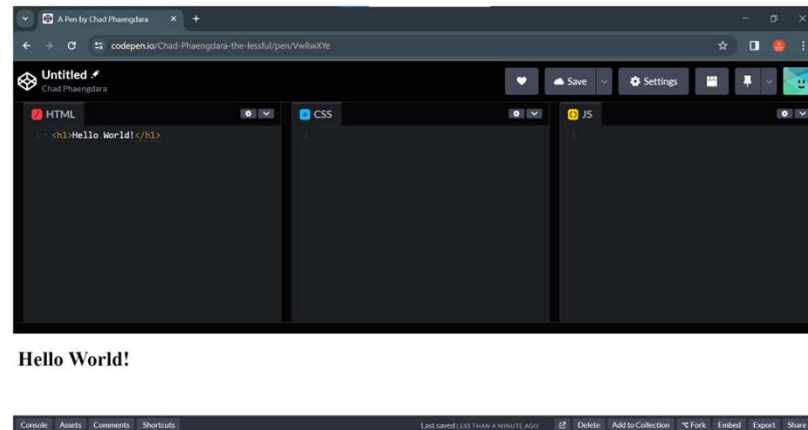
2. Click on: Pen



3. HTML Section

- Type:

```
<h1> Hello World! </h1>
```



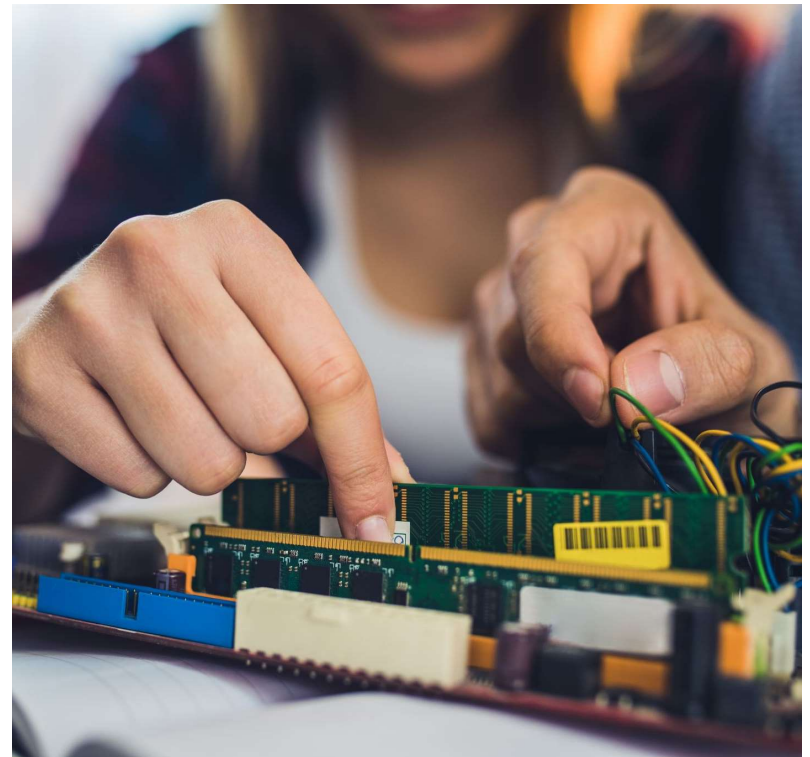


WAREHOUSE



Warehouse Activity

- 1:30-3:00pm
- Parting/recycling



BREAK

5 minutes

