



Digital Literacy I: Fundamentals

Unit 6 Computer Maintenance and Security

LAB 1 System Maintenance

Objectives

- Properly clean, maintain, and protect external computer-parts and peripherals
- Update Windows 10 (security patches, system fixes, software releases)
- Optimize your computer's internal hard drive or external drives
- Remove unnecessary files to free up disk space

Equipment Required

- Notebook computer
- Optical mouse
- Can of compressed air
- Items to clean a computer case, keyboard, monitor, and mouse
- Desktop computer (provided by HFC)
- Stand-alone keyboard (provided by HFC)
- Mechanical mouse (provided by HFC)
- Stand-alone monitor (provided by HFC)

Introduction

Using the wrong cleaning method can damage your external computer-hardware and peripherals; so in this lab, you will demonstrate how to properly clean and maintain the computer case, keyboard, monitor, mechanical- and optical-mouse.

It's also important to maintain the computer's software and file system in order to keep your PC running smoothly. So, you will also demonstrate how to keep Windows 10 up-to-date, find and delete unnecessary files, and optimize the hard-drive.

In order to perform the lab Procedure, you should know how to:

- Clean the external surfaces of the computer case and peripheral
- Locate and install updates for Windows 10
- Utilize Disk Cleanup and Disk Defragmenter





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Procedure

CLEANING

1. Imagine that the keyboard has collected dust and crumbs under the keys, and a sticky film on top of the keys. Demonstrate the proper method(s) to remove the dust, crumbs, and stickiness.
2. Clean the outside surfaces of an optical mouse
3. Clean the outside surfaces and inside parts of a mechanical mouse
4. Clean the monitor housing and screen
5. Clean the exterior of a desktop computer case

WINDOWS UPDATE

6. Check your computer for Windows updates
7. Select and install critical updates only

MAINTENANCE SETTINGS

8. Check the following maintenance settings:
 - a. Check for Solutions: On, Ask before checking
 - b. Backup: date of last backup
 - c. Check for Updates: no action needed
 - d. Troubleshooting: no action needed

DISK CLEANUP and OPTIMIZER

9. Using Disk Cleanup, delete “Temporary Internet Files” only from your computer’s hard-drive
10. Use Disk Optimizer to analyze your hard-drive fragmentation
11. Decide whether it’s necessary to defrag your hard drive

End





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