**Tikrit University**

**College of Engineering-Shirqat**

**Department of Electrical Engineering**

**Computer Programming**

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**2024 - 2025**

## Lecture 2
# E-COMMERCE

## E-Commerce

Electronics Commerce (E-Commerce) refers to the process of buying and selling goods, services, or information over the internet or other electronic networks. It encompasses a wide range of online commercial activities, from individual consumer purchases to large-scale business transactions. E-commerce can involve various business models, including business-to-consumer (B2C), business-to-business (B2B), and consumer-to-consumer (C2C) interactions, facilitated by digital platforms, websites, and mobile applications.



## Concepts of Electronic banking services

Electronic banking (E-banking) is defined as the automated delivery of new and traditional banking products and services directly to customers through electronic, interactive communication channels. E-banking includes the systems that enable financial institution customers, individuals or businesses, to access accounts, transact business, or obtain information on financial products and services through a public or private network, including the Internet. Customers access e-banking services using an intelligent electronic device, such as a personal computer (PC), personal digital assistant (PDA), automated teller machine (ATM), kiosk, or Touch Tone telephone.

## Types of E-Banking

Electronic banking has many names like e banking, virtual banking, online banking, or internet banking. It is simply the use of electronic and telecommunications network for delivering various banking products and services. Through e-banking, a customer can access his account and conduct many transactions using his computer or mobile phone. *Types of Electronic Banking Services:*

1. ATM and debit card services
2. Phone banking
3. SMS banking
4. Electronic alert
5. Mobile banking

### ATM and debit card services

ATMs (Automated Teller Machines) and debit cards are crucial parts of electronic banking, offering convenient access to bank services:

- **ATM:** ATMs allow customers to withdraw cash, check account balances, transfer funds between accounts, and more, all without entering a bank branch. Modern ATMs also support deposits and check cashing in some regions.

- **Debit Card:** A debit card links directly to the user's bank account, allowing them to make purchases or withdraw cash at ATMs. These transactions happen in real-time, meaning funds are immediately deducted from the account. Debit cards are also used for online shopping and can be integrated with digital wallets like Google Pay or Apple Pay.



### Phone banking

phone banking is a service provided by a bank or other financial institution that enables customers to perform over the telephone a range of financial transactions that do not involve cash or financial instruments (such as checks) without the need to visit a bank branch or ATM.
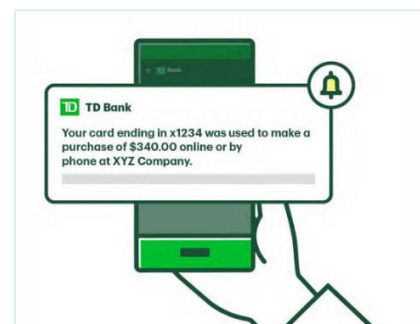
## SMS banking

Short message service (SMS) Banking is a Mobile technology that allows you to request and receive banking information from your bank on your mobile phone via Short message service (SMS). Individuals or corporate bodies can manage their bank accounts, check their account balances, perform check requests, money transfers, pay some bills, and perform other banking transactions using their mobile phones. There are two methods of SMS widely used in applications; they are the PUSH & PULL.

## Electronic alert

Electronic alerts have become an integral part of customer communication, enhancing user engagement and security. Electronic Alert means a notification, instruction, communication, order, message, data, or information sent by the Bank to you and/or your Authorized Users via SMS, email or such other mode of electronic delivery as the Bank may determine from time to time.

## Mobile banking

Mobile banking allows customers to conduct banking transactions through their mobile phones. Mobile banking applications have rapidly evolved, incorporating advanced technologies to enhance user experience.

# COMPUTER TROUBLESHOOTING

## Introduction to Computer Troubleshooting

Computer Troubleshooting: Process of identifying, diagnosing, and resolving issues in computer systems, both hardware and software.

*The Importance of Computer Troubleshooting:*

- Keeps computers running smoothly.
- Saves time and money by avoiding repairs.
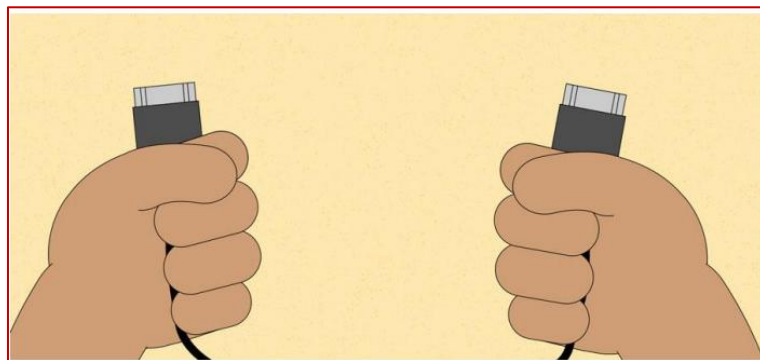- Helps build skills you can use in tech jobs.

## Types of Computer problems

There are two main types:

- Hardware Problems: Physical parts like keyboard, mouse, or hard drive.
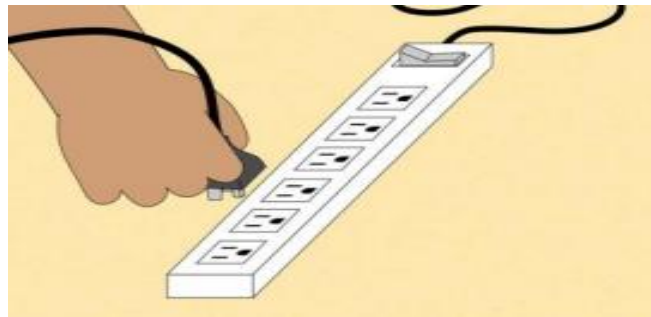- Software Problems: Programs and apps not working correctly.

## General troubleshooting tips

- Write Down Your Steps: Track your troubleshooting steps to avoid repetition.
- Note Error Messages: Document error messages for future reference.
- Check Cables:  Ensure all cables are connected properly.
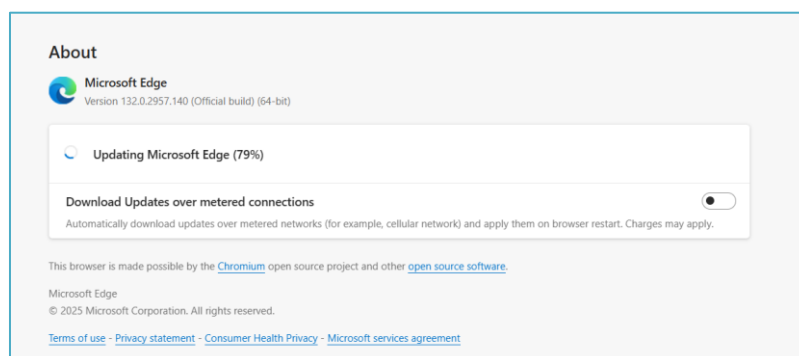- Restart the Computer: Often resolves basic issues.

## Simple solutions to common problems

- **Solution 1:** If your computer ***does not start***, begin by checking the power cord to confirm that it is plugged securely into the back of the computer case and the power outlet.
- **Solution 2:** If it is plugged into an outlet, make sure it is a ***working outlet***. To check your outlet, you can plug in ***another electrical device***, such as a lamp.
- **Solution 3:** If the computer is plugged in to ***a surge protector***, verify that it is turned on. You may have to ***reset*** the surge protector by turning it off and then back on. You can also plug a lamp or other device into the surge protector to verify that it's working correctly.
- **Solution 4:** If you are using ***a laptop***, the ***battery*** may not be charged. Plug the ***AC adapter*** into the wall, then try to turn on the laptop. If it still doesn't start up, you may need to wait a few minutes and try again.



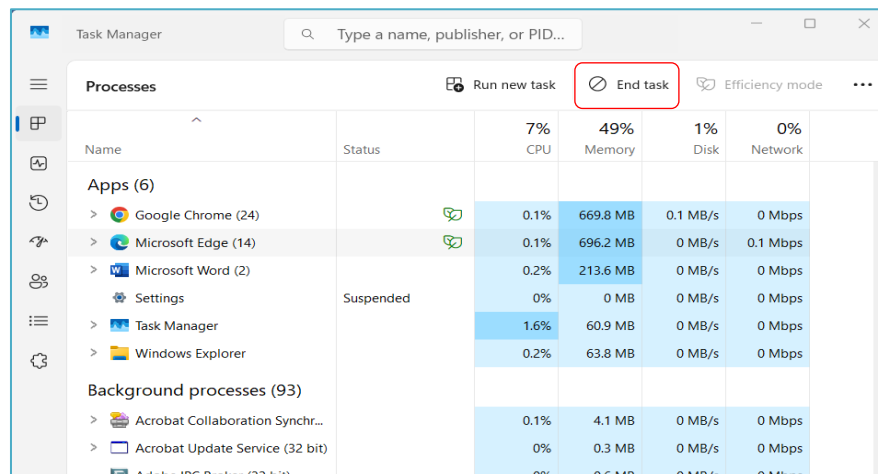Problem: **An application is running slowly**

- **Solution 1:** Close and reopen the application.
- **Solution 2:** Update the application. To do this, click the ***Help*** menu and look for an option to check for ***Updates***. If you don't find this option, another idea is to run an online search for application updates.
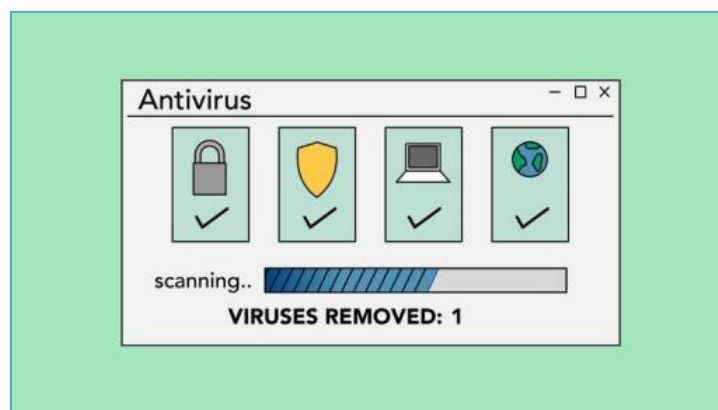
## Problem: **An application is frozen**

Sometimes an application may become stuck, or frozen. When this happens, you won't be able to close the window or click any buttons within the application.

- Solution: Force quit the application. you can press (and hold) **Ctrl+Alt+Delete** (the Control, Alt, and Delete keys) on your keyboard to open the **Task Manager.**
  - You can then select the unresponsive application and click End task to close it.

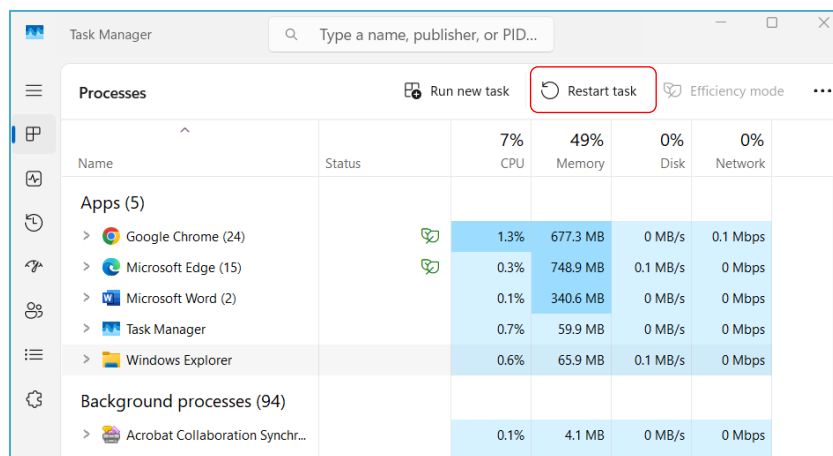| Task Manager | | | | | | |
|---|---|---|---|---|---|---|
| Processes | | | Run new task | ⊘ End task | Efficiency mode | ⋯ |
| | | | 7% | 49% | 1% | 0% |
| Name | Status | | CPU | Memory | Disk | Network |
| **Apps (6)** | | | | | | |
| > 🔵 Google Chrome (24) | | | 0.1% | 669.8 MB | 0.1 MB/s | 0 Mbps |
| > 🔵 Microsoft Edge (14) | | | 0.1% | 696.2 MB | 0 MB/s | 0.1 Mbps |
| > 📘 Microsoft Word (2) | | | 0.2% | 213.6 MB | 0 MB/s | 0 Mbps |
| ⚙ Settings | Suspended | | 0% | 0 MB | 0 MB/s | 0 Mbps |
| > 📊 Task Manager | | | 1.6% | 60.9 MB | 0 MB/s | 0 Mbps |
| > 🗂 Windows Explorer | | | 0.2% | 63.8 MB | 0 MB/s | 0 Mbps |
| **Background processes (93)** | | | | | | |
| > 📄 Acrobat Collaboration Synchr... | | | 0.1% | 4.1 MB | 0 MB/s | 0 Mbps |
| > 📄 Acrobat Update Service (32 bit) | | | 0% | 0.3 MB | 0 MB/s | 0 Mbps |
| 📄 Adobe IPC Broker (32 bit) | | | 0% | 0.6 MB | 0 MB/s | 0 Mbps |

## Problem: **All programs on the computer run slowly**

- Solution 1: Run a **virus scanner**.

  You may have **malware** running in the background that is slowing things down.
- Solution 2: Your computer may be running out of hard drive space.

  Try **deleting** any files or programs you don't need.
- Solution 3: If you're using a **PC**, you can run **Disk Defragmenter**.

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Problem: **The Computer is frozen**

Sometimes your computer may become completely unresponsive, or frozen. When this happens, you won't be able to click anywhere on the screen, open or close applications, or access shut-down options.
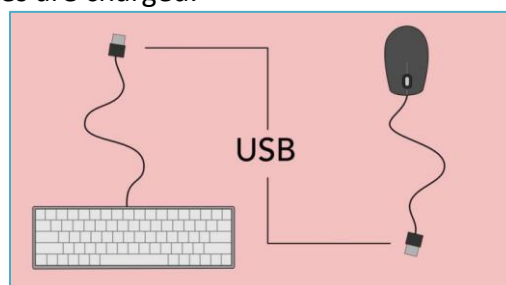
- Solution 1: Restart Windows Explorer. To do this, press and hold **Ctrl+Alt+Delete** on your keyboard to open the **Task Manager**. Next, locate and select **Windows Explorer** from the **Processes** tab and click **Restart**. *If you're using Windows 8*, you may need to click **More Details** at the bottom of the window to see the Processes tab.



- Solution 2: Press and hold the Power button for **5-10 seconds**. This will force the computer to shut down.
- Solution 3: If the computer still won't shut down, you can **unplug the power cable** from the electrical outlet. If you're using a laptop, you may be able to remove the battery to force the computer to turn off. **Note**: This solution should be your last resort after trying the other suggestions above.

Problem: **The Mouse/Keyboard has stopped working**

- Solution 1: If you're using a **wired** mouse or keyboard, make sure it's correctly plugged in to the computer.
- Solution 2: If you're using a **wireless** mouse or keyboard, make sure it is turned on and that its batteries are charged.
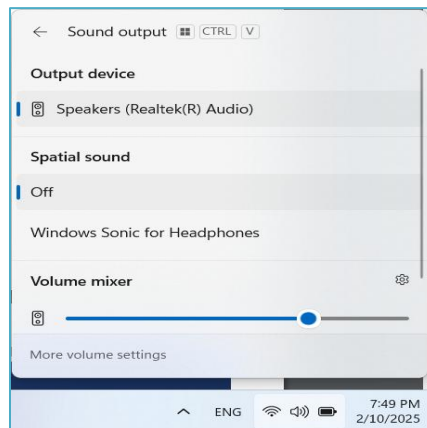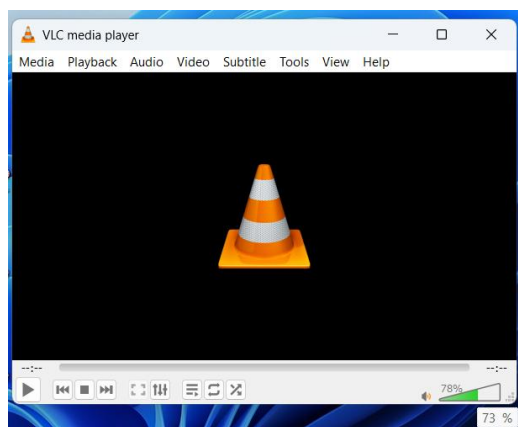
Problem: **The Screen is blank**
- Solution 1: The computer may just be in *Sleep mode*. Simply click the mouse or press any key on the keyboard to wake it.
- Solution 2: Make sure the monitor is *plugged in* and *turned on*.
- Solution 3: Make sure the computer is *plugged in* and **turned on**.
- Solution 4: If you're using a desktop computer, make sure the monitor cable is properly connected to the computer tower and the monitor.

Problem: **I Can't Hear the Sound on My Computer**
- Solution 1: Check the volume level. Click the audio button in the bottom-right corner of the screen to make sure the sound is turned on and the volume is up.



- Solution 2: Check the audio player controls. Many audio and video players will have their own separate audio controls. Make sure the sound is turned on and the volume is up in the player.
- Solution 3: Check the cables. Make sure external speakers are plugged in, turned on, and connected to the correct audio port or a USB port. If your computer has *color-coded* ports, the audio output port will usually be **green**.
- Solution 4: Connect headphones to the computer to determine if you can hear sound from the headphones.

**Solving more Difficult problems**

If you still haven't found a solution to your problem, you may need to ask someone else for help.

As an easy starting point, we'd recommend *searching the Web*. It's possible that other users have had similar problems, and solutions to these problems are often posted online. Also, if you have a friend or family member who knows a lot about computers, they may be able to help you.