



Develop Your  
Creativity

# COMPUTER OPERATION, LEARNING ABOUT MODERN TECHNOLOGIES & SUPPORT FOR MOBILE DEVICES

## SCENARIO IV



Co-funded by  
the European Union

LEADER:



PARTNERS:



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# I GENERAL INFORMATION



## Time:

4x60 minutes to implement module 1

## Age:

The recipients of the workshops are adults aged 45-70 who are members of the Universities of the Third Age, Senior Clubs, libraries, community centres, thematic circles or other places associating the elderly. The scenario can be used by the elderly, who often have issues with computer operation and learning about modern technologies and need support for mobile devices.

## Number of participants:

Workshop group for 10 people of any gender. You can also hold the workshop in a smaller group of a minimum of 6 people, depending on the conditions of the room, but no more than 14 people.

## Training methods:

- conversation,
- presentation,
- practical exercises,
- explanations,
- observation,
- discussion.

# I GENERAL INFORMATION



## Modules within a topic:

Lecture about Computer operation and learning about modern technologies & Support for mobile devices (2h)

Main topics that will be covered in the lecture are:

- What is Computer Operations?
- Definition of Computer Operations
- Basic Operations of Computer System
- Modern Technology: Definition, Examples, Influence and Future
- How To Use a Smartphone

## Topics of classes:

- What is Computer Operations?
- Definition of Computer Operations
- Basic Operations of Computer System
- Modern Technology: Definition, Examples, Influence and Future
- How To Use a Smartphone

## Course of classes:

- Introduction to classes - 20 min talk
- Practical workshop - 60 minutes
- 10-minute break
- 30-minute follow up exercises
- Practical workshop - 60 min
- 30-minute follow up exercises
- Questions and answers - 10 minutes
- Summary with evaluation: 20 minutes

Assuming the implementation of 1 module, each module is additional min. 4 hours of work.



# GENERAL INFORMATION

## Equipment/facilities used:

- speakers
- handset
- mat
- computer equipment / laptop
- projector
- Internet



# Purpose of the classes

Information about the workshop leader

On completing the classes, a participant shall:

- Be able to know what are computer operations
- Be able to know more about modern technologies
- Be able to know how to use smartphone

List of competences acquired during the classes:

- Knowledge on Computer operations
- Knowledge about modern technologies
- Knowledge on how to use smartphone



## II INTRODUCTION

### Introduction of the workshop leader(s) (10 minutes)

The presenter introduces himself to the workshop participants and says:

- Their full name
- Interests/hobbies
- Experience



# The course of the workshop

## 1. Introducing the trainer / trainers. Greeting (5 mins.)

- First name, Last Name,
- education,
- experience,
- interests.

## 2. Introductions of the training participants (15 mins.)

Writing the name on a sticky note and sticking it on the visible part of the clothes. Then, each of the participants, briefly - in one sentence, presents their expectations regarding the training.

## 3. Group rules (25 mins.)

The trainer prepares a mind map titled with the topic of the training. It creates 4 main branches from the main topic:

- TRAINING OBJECTIVES
- EXPECTATIONS
- RULES
- TRAINING EVALUATION. TIPS FOR THE FUTURE

(identifying aspects of the training that can be improved in the future).

Trainer hangs the prepared mind map in the training room so that it is visible to each of the participants.





## Stages of presenting a mind map:

1. Presentation of the main goals of the training recorded on a previously prepared mind map.
2. The facilitator asks the participants about their expectations regarding the training and writes them down on a mind map using the activating method: brainstorming.
3. The instructor defines the 3 most important rules that apply during the training. Additionally, the instructor emphasizes the possibility of implementing 1 principle proposed by the training participants.
4. The last point of the mind map is part of the training evaluation. After the workshop, the trainer asks the participants how they evaluate the training and writes down their comments on a mind map.



# III. THE CONTENT

## Computer operation and learning about modern technologies & Support for mobile devices

The trainer presents the lecture bellow about the computer operation and learning about modern technologies & Support for mobile devices.

### What is Computer Operations?

Ever wondered where your computer's power comes from?

Ever wondered what's going on inside a running computer?

Why does my computer do different things with certain key combinations?

In case you didn't know, your computer is made up of thousands of tiny switches that work together.

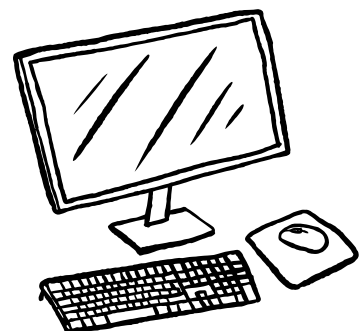
A computer is made up of various components, all of which work together to perform the tasks the computer is designed to perform. They process information, store data, and provide some form of output.

In other words, each component has a specific task that it performs in order for your computer to function properly.

The computer consists of her three main components:  
Hardware, software, input/output devices.

The computer consists of her three main components:

- hardware,
- software,
- input/output devices.



There are other components that provide inputs or outputs to the system, but by definition they are hardware components.

All these components work together to keep your computer running properly. Your personal computer behaves differently depending on which operating system you have installed, such as Windows 10 or macOS. For example, every personal computer has its own operating system.

### Definition of Computer Operations

Simply put, computer operations means that whatever instructions are given to a computer system, that computer system will execute those instructions.

The process of carrying out given instructions is called computer operation.

Various computer operations are defined below.

### Basic Operations of Computer System

There are five basic operations of a computer system, which are given below.

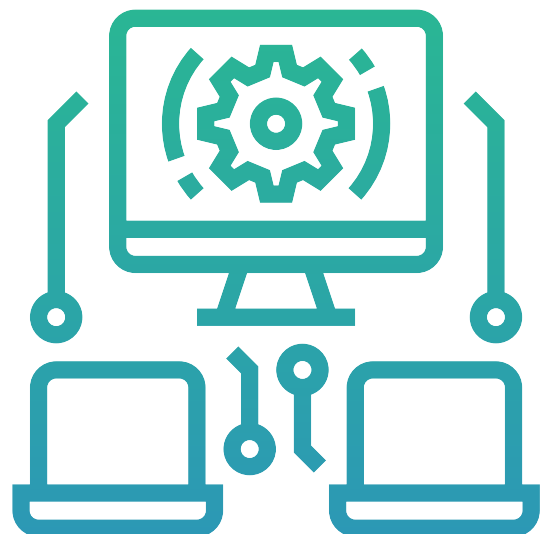
1. Inputting

2. Processing

3. Outputting

4. Storing

5. Controlling



## 1. INPUTTING

What is Inputting?

There are five basic operations of a computer system, as shown below. Simply put, inputting is the process by which a user enters any type of data into a computer system.

Input is the first basic operation of a computer system. Input devices are used to provide information to the computer. For example, a mouse or keyboard can be input devices.

You can also use the camera to take photos and videos and upload them to your personal computer. A keyboard is an example of an input device.

When typing on the keyboard, pressing the individual keys causes the letters A, B, and C to be converted into binary code and sent to the system's processor or CPU.

The CPU then analyzes this code and produces the appropriate output based on the input.

For example, if you type "ABC" on your keyboard, your system's processor or CPU will parse "ABC" as ABC and generate a letter for each key pressed (that is, A = a; b = b; c = C).

Computers are used not only to run programs, but also to store data.

There are many different types of storage devices that you can use to store your data, including hard drives, DVDs, and USB flash drives.

In addition, computers have multiple ways of entering data into these storage devices, as through a USB port or by using a keyboard. If the data comes from another source (such as a camera), it may pass through an interface card before reaching the CPU.

You cannot enter data into your computer without using an input device.

Input devices must be used to enter data into a computer.



Also, there are many types of input devices and their names are given below:

- Keyboard
- Mouse
- Track Ball
- Joy Stick
- Light pen
- Graphic Tablet
- Microphone
- Scanner
- Bar Code Reader
- Magnetic Ink Card Reader(MICR)
- Optical Character Reader(OCR)

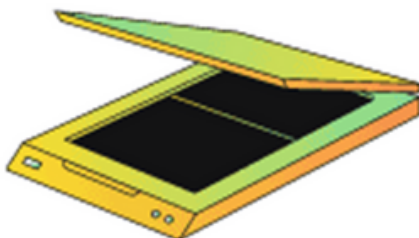
## **Input Devices of Computer**



**Keyboard**



**Mouse**



**Scanner**



**Microphone**

PICTURE OF INPUT DEVICE

## 2. PROCESSING

Processing is the second basic operation of computer systems. Processing simply means that the computer system begins to carry out instructions given by the user. This process is called processing.

The processor is the computer component that does most of the "work" in terms of processing.

Responsible for executing programs and executing user instructions.

The processor reads and writes information to the hard drive (a type of storage device) and sends messages to other components in your computer such as the monitor, mouse, and keyboard.

All this data flowing through a personal computer is created by currents flowing through each component at a specific rate or frequency.

This is called clock speed. The higher the clock speed, the faster your personal computer can process information.

For example, some personal computers run at 1 GHz (meaning 1 billion cycles per second), while others run at 800 MHz (800 million cycles per second).



### 3. OUTPUTTING

Outputting is the third basic operation of computers. Outputting simply means the output of the results specified by the user.

No matter what input the user's computer gives, it will output the output result for that input.

Input/output devices are responsible for interacting with the computer and the physical world.

For example, keyboards and mice are input and output devices. You are responsible for responding to commands and providing feedback.

Computers need these components to provide output, information that comes out of the system.

This includes visual feedback, such as video and text, and audio feedback, such as voice and music.

Hardware consists of all the physical components that make the personal computer work, and in some way allows him to interact with it.

Hardware includes a keyboard, mouse, microphone, or speakers. These are all pieces of hardware that allow us to use our computer in some way.

Software consists of everything on your screen, from Microsoft Word to Spotify, and lets you work with those programs on your computer.

Software could include online games like Microsoft Office and Candy Crush Saga.

Hardware and software make up a computer's "operating system" (OS) to make it work properly and work together.

An operating system enables input devices such as keyboards and mice to work with output devices such as monitors. This means that you can control what is happening on your screen by typing on your keyboard or moving your mouse.

You also need a driver (software) to allow hardware and software to communicate properly. Without the driver installed, nothing can be done.

### Note!

*Without using an output device, you cannot get the output result of the input data. To get output results, you need to use an output device.*

There are many types of output devices and their names are:

- Monitor
- Sound Card
- Video Card
- Printer
- Headphones
- Computer Speakers
- GPS
- Projector
- Speech-Generating Device
- Braille Reader

## Output Device of Computer



**Monitor**



**Printer**



**Speaker**



**Plotter**

PICTURE OF OUTPUT DEVICE



## 4. STORING

Storing is the fourth basic operation of computer systems. "Save" simply means to save the output result after executing the user's instruction.

The Central Processing Unit (CPU) is responsible for storing data in the computer's memory. This is where data is saved when you enter data into a Word document or open an image.

The CPU processes this data to facilitate retrieval. A processor is the component responsible for executing applications stored in the computer's memory. These processors reside on the motherboard and may vary depending on personal computer specifications.

When you save a file, you are copying it from random access memory onto a storage device like an external hard drive, CD/DVD, or flash drive.



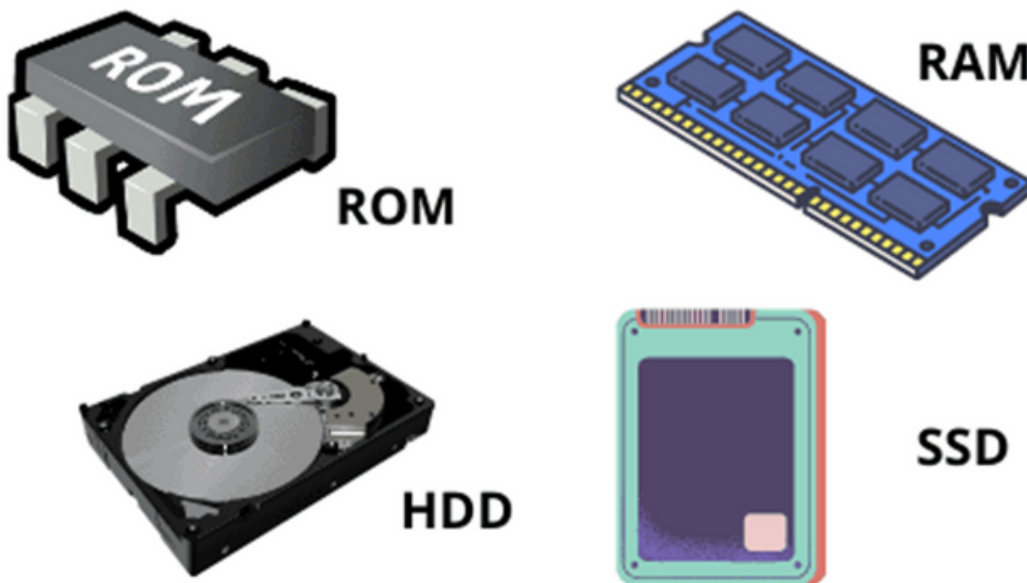
When saving a file to your computer's hard drive, be sure to save two copies of the original file. One copy is stored in the original location and the other backup copy is stored in another location.

This redundancy ensures that if something goes wrong with the first file (for example, if you accidentally delete it), another copy of that file exists elsewhere on your hard drive.

There are many types of storage devices and their names are:

- Hard Disk Drive ( HDD )
- USB Flash Drives
- Compact Discs (CDs)
- Secure Digital Cards (SD Card)s
- Solid-State Drives (SSD)
- Floppy Disks
- Tapes
- DVD and Blu-ray Discs
- RAM

## Storage Device of Computer



PICTURE OF STORAGE DEVICE OF COMPUTER

## 5. CONTROLLING

Controlling is the fifth basic operation of computers. Controlling is the combination of all computer operations.

Controlling is a type of process that monitors the instruction given by the user from the time it is executed to the output result. This process itself is called controlling.

In simple language, monitoring means monitoring which devices are doing their job.

In simple computer systems, the monitoring task is done by an ALU (Arithmetic Logic Unit).

### Example of Controlling - Computer Mouse

A computer mouse translates your hand movements into commands to the computer.

Buttons are located on either side of a computer mouse, often with three buttons that allow you to scroll up and down a page without clicking.

Other input devices include keyboards, touch screens, joysticks, and trackballs. The world of computers is big and complex, but a little knowledge, like how a mouse works, can help you better understand how it works.





## Modern Technology: Definition, Examples, Influence and Future



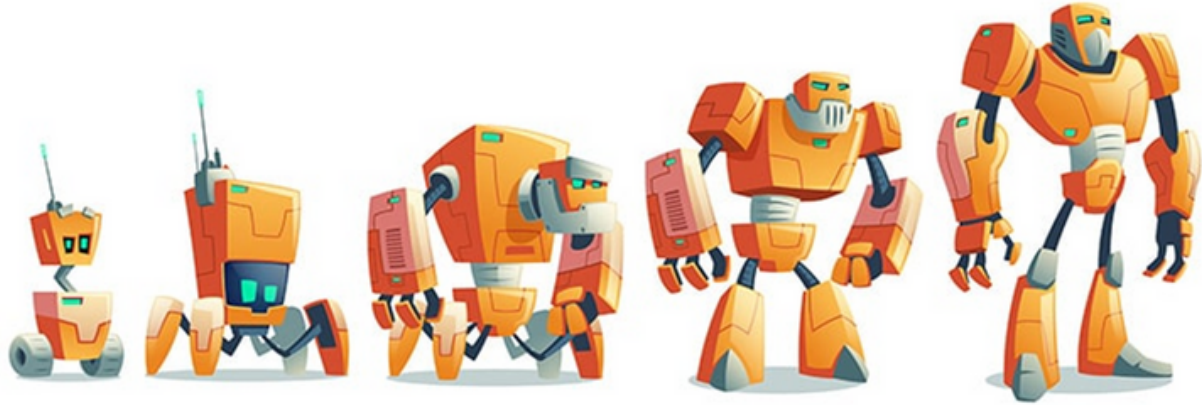
Modern technology has changed a lot compared to what we saw in the last decade or last century. New machines and devices are invented to make work easier than ever before. Everything from the smallest sewing machine to the fastest car in the world is automated and requires minimal manual labor. Modern technical schools make it easy for students to explore the possibilities of the latest technological inventions. Her influence is immense in creating the perfect generational competence in today's technology.

### What is Modern Technology?

Modern technology is the evolution of old technology with new additions and modifications. For example, it's impossible for people in this decade to live with a wired phone on the table. Therefore, mobile phones that can be taken anywhere are a perfect example of technological progress, or simply modern technology. All the machines and devices around us are products of modern technology. This made it much easier than we imagined. Modern technology has impacted all areas of our lives and has quickly become an important factor. We have even reached the point where everything we use in our daily lives is in some way directly or indirectly related to technological progress. So even if you consciously want to, you can't get around modern technology.



It's important to get things done faster and more efficiently by improving your workflow. Machines always outperform in terms of precision and efficiency, whether they help people or work alone.



So, we are taking advantage of them to make our jobs easier. The realization that you can do more with less time and less effort paved the way for the modern technology we see today.

### Examples of Modern Technology

The latest examples of modern technology include 5G networks that will provide users with super-fast internet, self-driving cars and reusable satellite carriers. But that's not all. The number of technological advances we've made and the tools we've invented is staggering. Here is a list of modern technological inventions that make our lives easier and facilitate operations in every industry. These are examples of modern technology.

## 1. Robots



ROBOT

Robotics improved a lot in the last few years. Numerous new inventions arrived on the market in various forms and for various uses. The robots also widened the possibility of modern technology in education. They are being used to assist the teachers, help students, clean blackboards, clean the classrooms, etc. in hi-tech countries like Japan. They also invented robots that answer to humans utilizing artificial intelligence.

## 2. Smartwatches



Sony Smartwatches

A smartwatch is a type of regular watch, but it has many functions just like a smartphone. You can make phone calls, text your friends, surf the web, and even take pictures. In the modern world of technology, smartwatches have a good chance of increasing user productivity. It's much easier to use your own watch instead of taking out your phone every time to answer a call or text a friend.

### 3. VR Headsets



Oculus VR

In this modernized world of technology, the status of virtual reality (VR) headsets is no longer hidden. Just put on a boxy headset and record the virtual world in front of you. As you can see from the image above, VR headsets are very practical and readily available in stores.

## 4. Self-Driving Cars



Tesla self-driving electric car

Self-driving cars are another great example of modern technology inventions. Companies like Tesla have been developing self-driving cars for some time and continue to improve them with each new model. You don't even need to put your hands on the steering wheel except in an emergency. The car will take you safely to the location marked on the map without worrying about traffic. Advanced sensors on all sides can not only detect when the car is approaching danger, but also anticipate possible problems while driving. More and more companies are switching to self-driving cars and saying goodbye to old technology.

## 5. Bitcoin



Bitcoin Logo

We talked about the latest tech gadgets above, but now it's time to think about something else. Bitcoin may be the best choice when it comes to the world of digital technology. Bitcoin is a virtual currency created by people who are not yet fully recognized. To understand the importance of Bitcoin, you need to know its current price. As of January 25, 2017, 1 Bitcoin = \$896.15. It once reached over \$68 000. However, one of Bitcoin's biggest drawbacks is that its value changes randomly.



## 6. AI Chatbots

The image shows a dark-themed interface for ChatGPT. At the top, the text "ChatGPT" is displayed in a large, white, sans-serif font. Below this, there are three columns, each with an icon and a title. The first column has a sun-like icon and is titled "Examples". It contains three text prompts: "Explain quantum computing in simple terms" →, "Got any creative ideas for a 10 year old's birthday?" →, and "How do I make an HTTP request in Javascript?" →. The second column has a lightning bolt icon and is titled "Capabilities". It contains three text prompts: "Remembers what user said earlier in the conversation", "Allows user to provide follow-up corrections", and "Trained to decline inappropriate requests". The third column has a warning triangle icon and is titled "Limitations". It contains three text prompts: "May occasionally generate incorrect information", "May occasionally produce harmful instructions or biased content", and "Limited knowledge of world and events after 2021". At the bottom of the interface, there is a text input field with the placeholder "Send a message." and a send button with a paper plane icon. Below the input field, there is a small disclaimer: "Free Research Preview. ChatGPT may produce inaccurate information about people, places, or facts. [ChatGPT May 12 Version](#)".

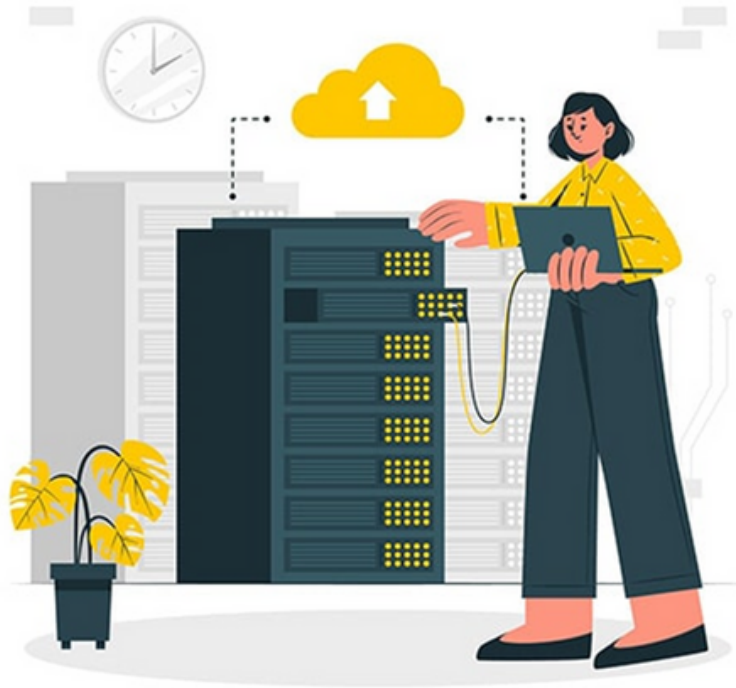
Examples	Capabilities	Limitations
"Explain quantum computing in simple terms" →	Remembers what user said earlier in the conversation	May occasionally generate incorrect information
"Got any creative ideas for a 10 year old's birthday?" →	Allows user to provide follow-up corrections	May occasionally produce harmful instructions or biased content
"How do I make an HTTP request in Javascript?" →	Trained to decline inappropriate requests	Limited knowledge of world and events after 2021

Send a message.

Free Research Preview. ChatGPT may produce inaccurate information about people, places, or facts. [ChatGPT May 12 Version](#)

Recently, many Artificial intelligence (AI) chatbots have appeared. ChatGPT is his one of the most popular. Google's own Bard is also awaiting public release. What makes them groundbreaking is their ability to provide information in a conversational tone. It's like chatting with another person. AI chatbots are definitely one of the latest examples of modern technology.

## 7. Cloud Technology



Cloud technology is growing rapidly. From hosting online websites to developing artificial intelligence, cloud technology is used everywhere. Cloud Hosting/Cloud Computing differs significantly from traditional hosting technologies due to its extreme flexibility and extensibility. Various industries, such as factories, enterprises, research institutes, and government agencies, are leveraging cloud technology to make their jobs easier. The cloud is the future.

## Advantages of Modern Technology

Modern technology has many advantages and disadvantages. However, it seems that the benefits may hide the impact of problems caused by technological developments. The advancement in modern automotive technology, like every other field we can imagine, have contributed to the vast improvement of mankind and the planet itself.



As we explained in the sections above, we cannot avoid technology in our lives. If you are looking for the merits and demerits of modern technology, we'll show you a few that match the latest technology, not the technology as a whole. These points explain why we cannot live without technology. These are the advantages of modern technology:

- 1.It makes it much convenient to learn and grab information.
- 2.Modern technology takes Innovation and Creativity to the next level.
- 3.Communications feature improved.
- 4.Transportation facilities boosted productivity.
- 5.Huge impact in the education industry.

8. Increased efficiency of people to complete particular tasks.
9. Entertainment gadgets improved to the extreme.
10. Numerous equipment got lesser prices with new technologies.
11. Improved the problem-solving ease.
12. Helped small businesses to grow faster.
13. Connected people together through social networking.
14. The lifestyle became easier.
15. Improved diagnosis and curing equipment enhanced the health industry.

### Disadvantages of Modern Technology

Modern technology also has some disadvantages too. Just like everything in the world has its good and bad sides, so does modern technology. As you can imagine, there are more than a few demerits. These are the disadvantages of modern technology:

1. Modern technology creates job insecurity due to the excessive use of robots and machines.
2. Creation of harmful weapons and machinery.
3. Increased pollution of air, water, and soil.
4. It can be a huge waste of time due to addiction to modern gadgets.
5. It increased competition in every field due to the usage of automation.
6. It can cause distractions from studies and other natural activities.
7. Modern technology can affect the creativity of people because of the easiness to do things using technology.
8. Cybercrimes increased, and almost anything is destructible by brilliant hackers.
9. Modern technology can create health complications like obesity due to the addiction to devices such as smartphones or tablets.
10. Affected social life by keeping people attached to tech gadgets.

## Influence of Modern Technology in our Society



Modern technology has a great impact on our society. It affects how we communicate, travel, learn, think, and live in general. In this era, modern technology cannot be ignored. We rely on it almost every day. From the time we wake up to the time we go to bed, almost everything in our daily lives depends on some kind of technology. Whether you set an alarm to wake up to a light or switch it off to rest, it's all done with the help of technology.

Modern technology makes everything much easier. You don't have to travel 1000 kilometers to talk to someone. All we have to do is pick up the cell phone and call. Therefore, the impact of modern technology on our society and its behavior is unimaginable. In conclusion, it is almost impossible for anyone to live without relying on some form of technology in our daily lives.



## The Future of Modern Technology



Technology is being modernized every day. So there is no doubt that it will continue to improve day by day. As new technological machines and devices are invented to increase the productivity of current technological inventions, the process is greatly sped up. In other words, different types of technology can be used to effectively and efficiently develop new technologies. The next few years will be spent traveling to outer planets and creating a better world with the help of robots.

All other modern technical matters will continue to improve, and the degree of improvement will exceed all expectations. And yes, smartphones, tablets and laptops will improve so much in the next few years that perhaps soon we will be able to enjoy the kind of on-air control of our devices that we have seen in so many Hollywood movies. The only thing scientists and thinkers should worry about is keeping dangerous inventions out of the wrong hands. Nuclear fission was proposed by Albert Einstein as a brilliant idea, but was used to destroy mankind. So let's hope for the good.

Now you know all about the latest technology, its strengths and weaknesses, and the other things mentioned above. The only thing we have to conclude is that we cannot live without technology, especially "modern technology".

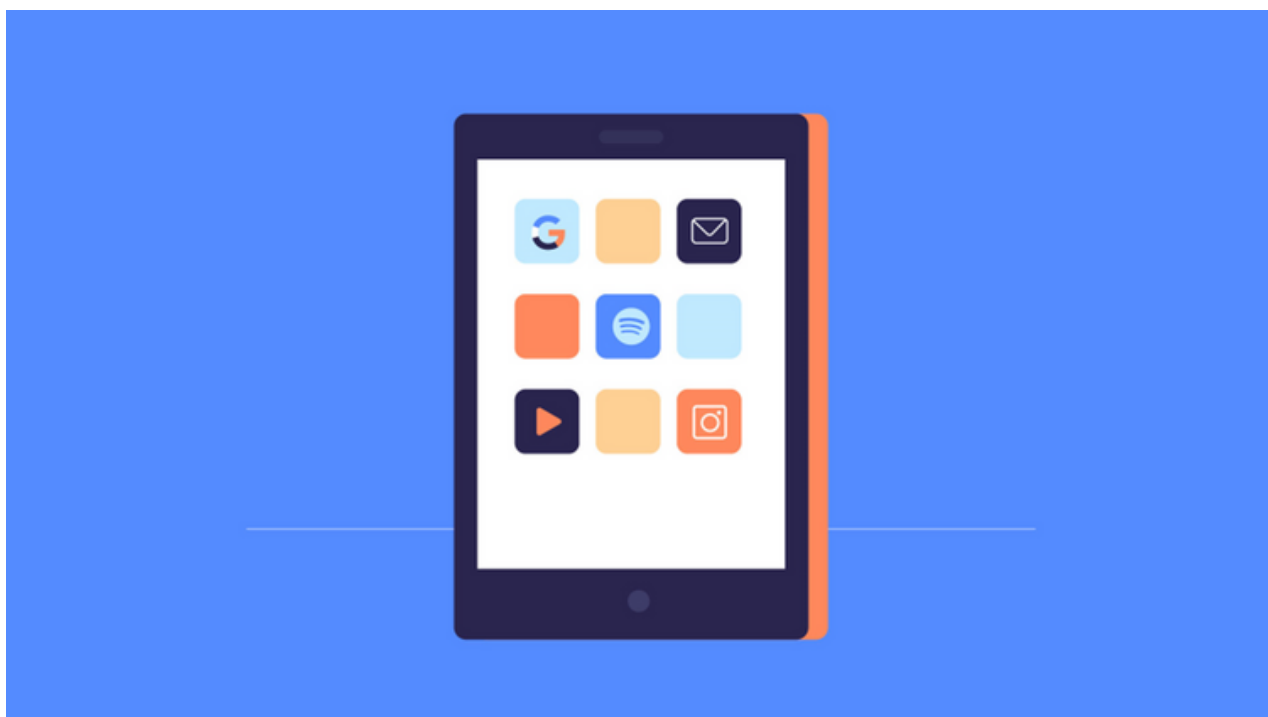


## What is a mobile device?

Mobile device is a generic term for all types of handheld computers. These devices are very portable and often fit in the palm of your hand. Some mobile devices such as tablets, e-readers, and smartphones are powerful enough to do many of the same things that desktop and laptop computers can do.

### Tablet computers

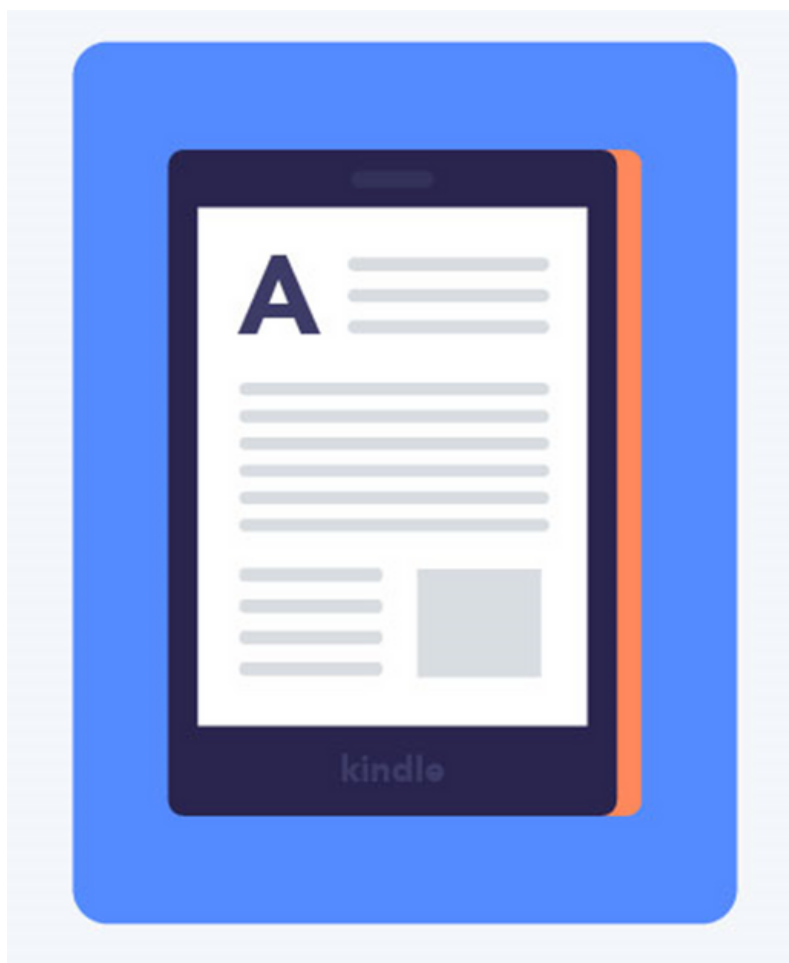
Tablet computers, like laptops, are designed to be portable. However, the computing experience offered is different. The most obvious difference is that tablet computers do not have keyboards or touchpads. Instead, the entire screen is touch-sensitive, allowing you to type on a virtual keyboard or use your finger as a mouse pointer.



Tablet computers do not necessarily have all the capabilities that traditional computers can do. Many people still need a traditional computer such as a desktop or laptop to use some programs. However, the tablet computer's convenience also makes it a great second computer.

## E-readers

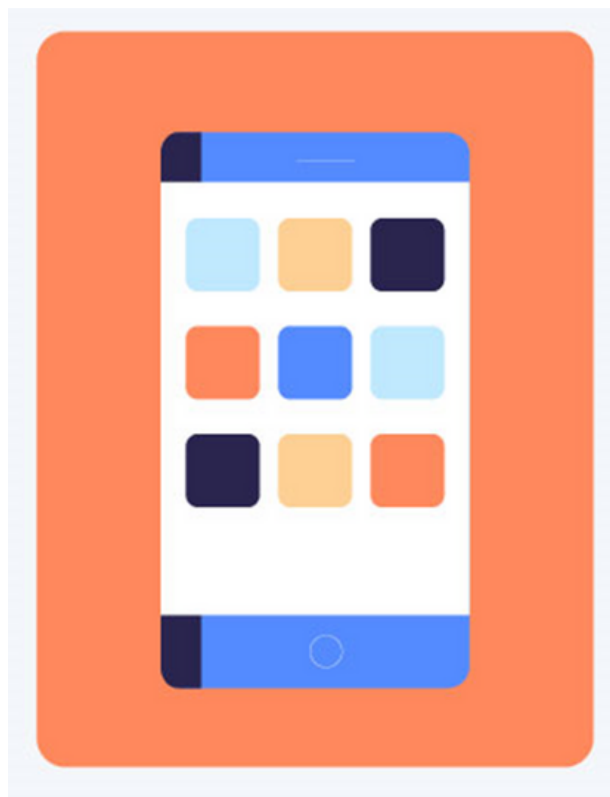
E-book readers (also called e-readers) are similar to tablet computers, but are designed primarily for reading e-books (downloadable digital books). Prominent examples include the Amazon Kindle, Barnes & Noble Nook, and Kobo. Most e-readers use e-ink displays that are easier to read than traditional computer displays. Even in bright sunlight, you can read like you are reading a regular book.



You don't need an e-reader to read e-books. You can also read on your tablet, smartphone, laptop or desktop.

## Smartphones

Smartphones are more powerful versions of traditional mobile phones. Smartphones have the same basic features like calling, voicemail, and text messaging, plus the ability to connect to the internet via Wi-Fi or cellular networks (requires monthly data plan purchase). This means that you can use your smartphone to do the same things you would normally do on your computer. For example, checking email, surfing the web, shopping online, etc.



Most smartphones have touch-sensitive screens and the devices do not have physical keyboards. Instead, type on the virtual keyboard and use your fingers to interact with the display. Other standard features include a high-quality digital camera and the ability to play digital music and video files. For many people, smartphones can actually replace their old laptops, digital music players, digital cameras, and other electronics with the same device.

## How To Use a Smartphone

Smartphones are used to make calls and send text messages, but they can also be used to access the Internet, check email, search the web, and more.

There are various brands of smartphones like:

- ♣ iPhones – made by Apple
- ♣ Android Phones made by Samsung, HTC, etc.
- ♣ Windows Phones made by Nokia

The difference between each mobile phone is that it has different operating systems developed by different manufacturers.

A mobile phone's touch screen can be controlled with a finger or easily manipulated using a pen-like device called a stylus. Styluses are available at most electronics stores.



### A word you will see a lot of: Apps

Abbreviation for the word application. This is a link that will take you directly to the program or her website you want to access. It is represented by an image or an icon. You will see a lot of apps on your phone.

Please note that different brands of smartphones have slightly different icons and buttons. All content in this lecture may not appear exactly as it appears on your mobile phone.

## BUTTONS ON YOUR SMARTPHONE

**EARPHONES SLOT:**  
YOU CAN INSERT  
EARPHONES HERE.

**SLEEP/WAKE BUTTON:**  
USE THIS BUTTON TO TURN THE  
SCREEN ON OR OFF. PRESS  
AND HOLD THE BUTTON FOR 5  
SECONDS TO POWER OFF THE  
PHONE. PRESS AND HOLD THE  
BUTTON FOR 5 SECONDS TO  
POWER THE PHONE BACK

**VOLUME CONTROL**

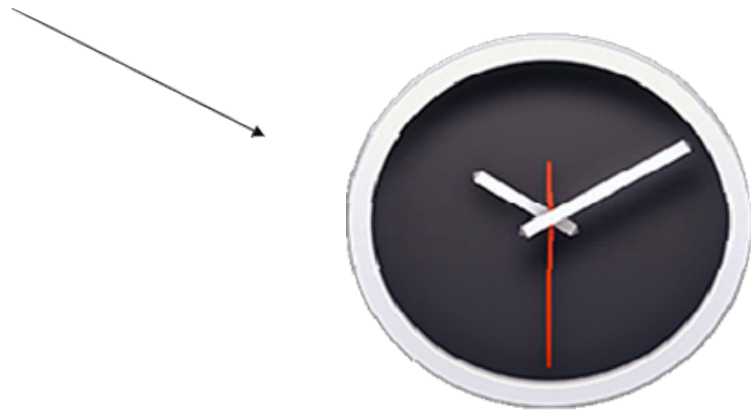


**HOME BUTTON:** PRESS THIS BUTTON AT  
ANY TIME TO EXIT THE CURRENT ACTION  
AND RETURN TO THE HOME SCREEN.

## SCROLLING THROUGH THE PHONE AND APPLICATIONS

Smartphones come preinstalled with a number of apps that allow you to perform various operations on your phone.

To access it, you have to tap the app you want to use. For example, to set an alarm, find the Clock app and tap.



Your adult educator will show you how to set the alarm on your phone.



To take a photo, find and tap the Camera app. A camera will appear and a circular button will appear on the screen that you can tap to take a photo

To view all your photographs, tap on the Gallery App.





All of the apps can be organised together on the home screen. You can return to the home screen at any time by pressing the home button.

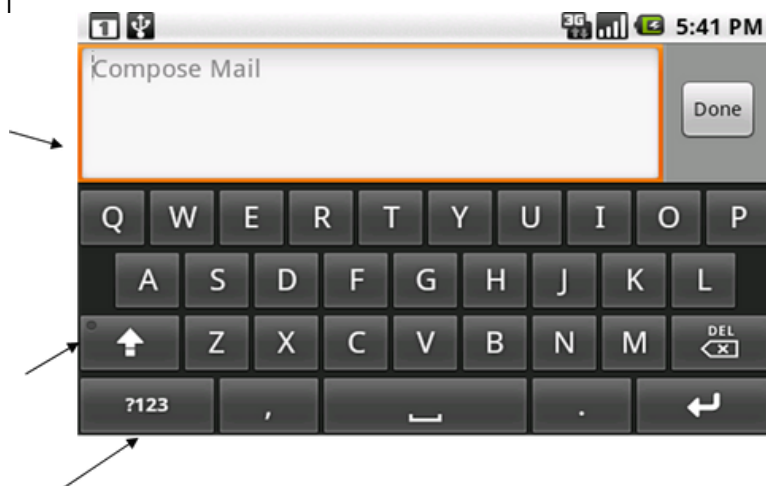
Sometimes there are too many apps to fit on one screen. So, to see all the apps on your phone, you have to scroll down to the next page of apps. Remember that you can always return to the home screen by pressing the home button.

## Using the keyboard

To bring up the on-screen keyboard, you need to tap where you want to type. Then it will automatically appear.

TAP WHERE YOU WANT  
TO TYPE AND THE  
KEYBOARD WILL  
APPEAR

TAP THE SHIFT KEY  
TO CHANGE TO AND  
FROM CAPITAL  
LETTERS. DOUBLE  
TAP FOR ALL  
CAPITALS



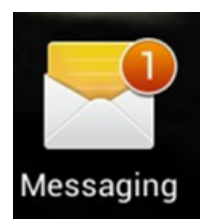
TAP THIS KEY TO  
DELETE

TAP THIS KEY FOR  
NUMBERS AND  
SYMBOLS

## Texting and Calling

### Texting

The app for texting is called Messaging. The number of unread text messages you have will appear in number form e.g. the image below shows 1 unread text message. To open messages tap on the messaging app.



This will open the message. Then tap the name of the person you want to read the message. Messages are in the form of conversations, so you can read old messages you've sent to that person, as well as messages they've sent back to you.

### Send a message:

When you open a contact's message, you'll see options at the bottom of the screen to compose or type your message. Tap this area. A keyboard will appear on the screen, allowing you to enter your message. To send a message:

Tap the envelope with the word "Send" or the arrow icon.

### Calling

To make a call on your phone, find and tap the phone icon.



Find and tap the keyboard icon. A numeric keyboard will appear. Select the number you want to call and tap the phone icon for the third time. This will make a call.

To call a contact saved on your mobile phone:

Tap the phone icon and look for the person's picture or the word "contact" on the screen. Scroll your finger up or down until you find the name of the person you want to call. Tap the person's name, then tap the phone icon.

### Adding Contacts

The easiest way to add a contact is to tap the phone icon and enter the number as you would when making a call. You should see a + sign or "Add to Contacts". Tap it and you will be asked if the contact is a new or existing contact.



Select a new contact or create a contact. Some phones will ask you if you want to save your contacts to your phone or SIM card. If you save it to the sim, then you can move your contacts easily if you get a new phone. Enter the person's name and tap Save. You can also view your contacts from the contacts icon on your smartphone.



## CONTACTS

## Mobile Data

### Phone Plan

here are two main types of phone plans. Pay as you go or pay by invoice. Which do you have and do you pay for data?

Having constant internet access on your phone means you are paying for data usage. A fixed amount of data is available each month. The standard amount varies depending on the price of your phone plan, but is typically between 500MB and 1GB. For normal smartphone users, this amount of data is usually sufficient.

Some phone plans come with unlimited data. This unlimited data offer usually includes a minimum 1-2 year phone contract.

### Not Paying for Data

If you don't want pay for data you use you can log into Wi-Fi to access the internet on your phone. Wi-Fi is available in many cafés, public buildings and at home if you have broadband.

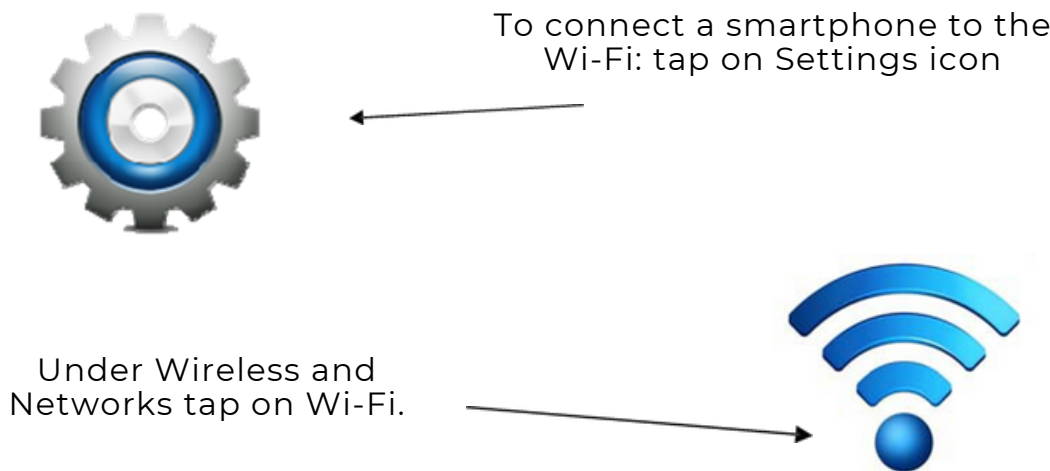
### Going Abroad?

When traveling abroad, be sure to turn off your mobile data connection to avoid roaming charges. To do this, go to settings

- Wireless & Networks - Mobile Networks - Tap Data Enabled and make sure the box is unchecked. Each phone may be slightly different. If in doubt go to Google and type in the name of your phone and "how to turn off data" and you should find the answer.

## Connecting to Wi-Fi

Wi-Fi or wireless internet allows you to access the internet without mobile data. If you have broadband at home, you can also connect your smartphone to this internet signal.



Make sure the Wi-Fi option is enabled, select the Wi-Fi network you want to connect to and enter the password. You are connected to a WiFi network when you see the word "Connected" under the network name.

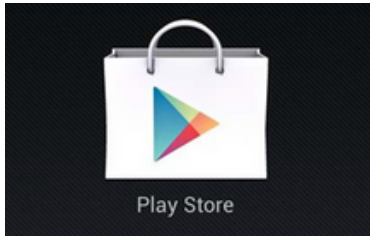
For some of the Wi-Fi networks you will need a password.

At home, the wireless network name (SSID) is usually the name of your Internet service provider followed by some numbers. For example: jlfugnt853357. When you click the wireless network name, you may be prompted for the password. Wireless network name and password are written under your router (black internet box) and the password is usually called: WEP key or WLAN key.

For Wi-Fi public places like libraries, hotels and cafés some may require a password and some may not.

## Apps

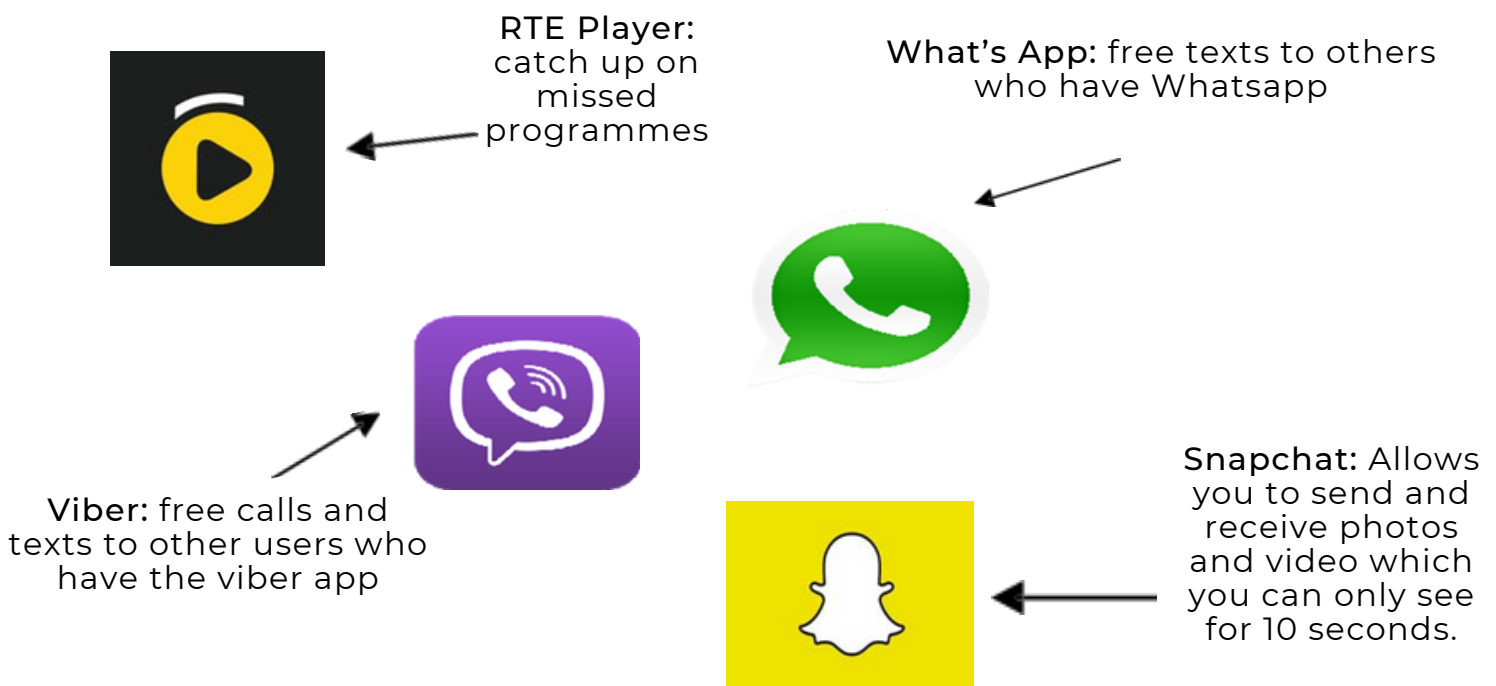
An app (application) is a shortcut that takes you directly to the website you're looking for. Many different organizations and companies have their own apps.



To download the app, you need to search for the app in the Play Store. You must sign in to the Play Store using your Gmail address. If you don't have a Gmail address, you'll need to create one.

There are hundreds of different Apps, some you need to pay for, but the majority of the most popular ones are for free.

Here is a list of some apps that you might find useful



**Popular Apps**  
BBC News  
Sky News

**Other Apps:**

- Facebook
- Tune In Radio – radio from around the world
- Twitter



- YouTube - watch videos on your phone
- Skype - allows you to make free phone calls with video
- Journey Planner – for public transport options
- Epicurious – recipes
- Pinterest – art and design Solitaire and Bridge Apps Instagram – for photo sharing

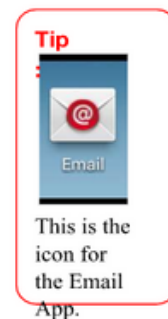
If you are concerned about how much data you use these Apps will check :

- Data Usage for iPhones
- 3G Watchdog for Android
- Data Sense Windows phones have this pre-installed app

## Email

You can send and receive email directly to your smartphone.

If you have Hotmail, or another email service you can tap on the email app and follow the instructions on screen.



If you have a Gmail account, you can use by going to App Store and download the Gmail app on your phone.

## Gmail – opening and replying to email

1. Tap on the Gmail App.
2. When the app is opened you will see the inbox on the left hand side.  
Click on inbox to open your emails. You can read an email simply by tapping on the email.
3. You can reply to the email by tapping reply, some phones may have a reply symbol instead.
4. Once you tap reply the keyboard will appear on screen. ↩
5. To write a new email tap on the word compose or the envelope symbol with the + sign. You will need to type the email address in the to: bar and the email in the main body of the email, tap send ➡



# WORK CARD 1

There are many types of input devices and their names are given below:

- Keyboard
- Mouse
- Track Ball
- Joy Stick
- Light pen
- Graphic Tablet
- Microphone
- Scanner
- Bar Code Reader
- Magnetic Ink Card Reader(MICR)
- Optical Character Reader(OCR)

There are many types of output devices and their names are:

- Monitor
- Sound Card
- Video Card
- Printer
- Headphones
- Computer Speakers
- GPS
- Projector
- Speech-Generating Device
- Braille Reader

There are many types of storage devices and their names are:




- Hard Disk Drive ( HDD )
- USB Flash Drives
- Compact Discs (CDs)
- Secure Digital Cards (SD Card)s
- Solid-State Drives (SSD)
- Floppy Disks
- Tapes
- DVD and Blu-ray Discs
- RAM

## EXERCISE CARD 1




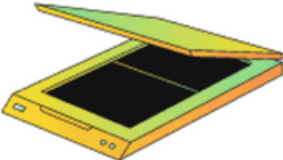

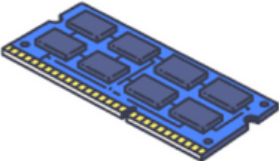

In the table below you have two columns related to computer operation devices. In the left column is an object. In the right one write the name of this object.

Names of the devices in random order follows bellow:


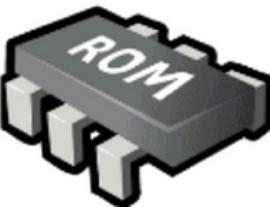
- PRINTER
- MOUSE
- PLOTTER
- ROM
- SCANNER
- RAM
- MONITOR
- MICROPHONE
- HDD
- SPEAKER
- SSD
- KEYBOARD

# EXERCISE CARD 1

# EXERCISE CARD 1



## WORK CARD 2

Simply put, computer operations means that whatever instructions are given to a computer system, that computer system will execute those instructions. The process of carrying out given instructions is called computer operation. Various computer operations are defined bellow.

There are five basic operations of a computer system, which are given below.

1. Inputting
2. Processing
3. Outputting
4. Storing
5. Controlling



## EXERCISE CARD 2

Ask each participant to write down the name of the basic computer operations.

1.....

2.....

3.....

4.....

5.....



## WORK CARD 3

### Basic Operations of Computer System

There are five basic operations of a computer system, which are given below:

1. Inputting
2. Processing
3. Outputting
4. Storing
5. Controlling

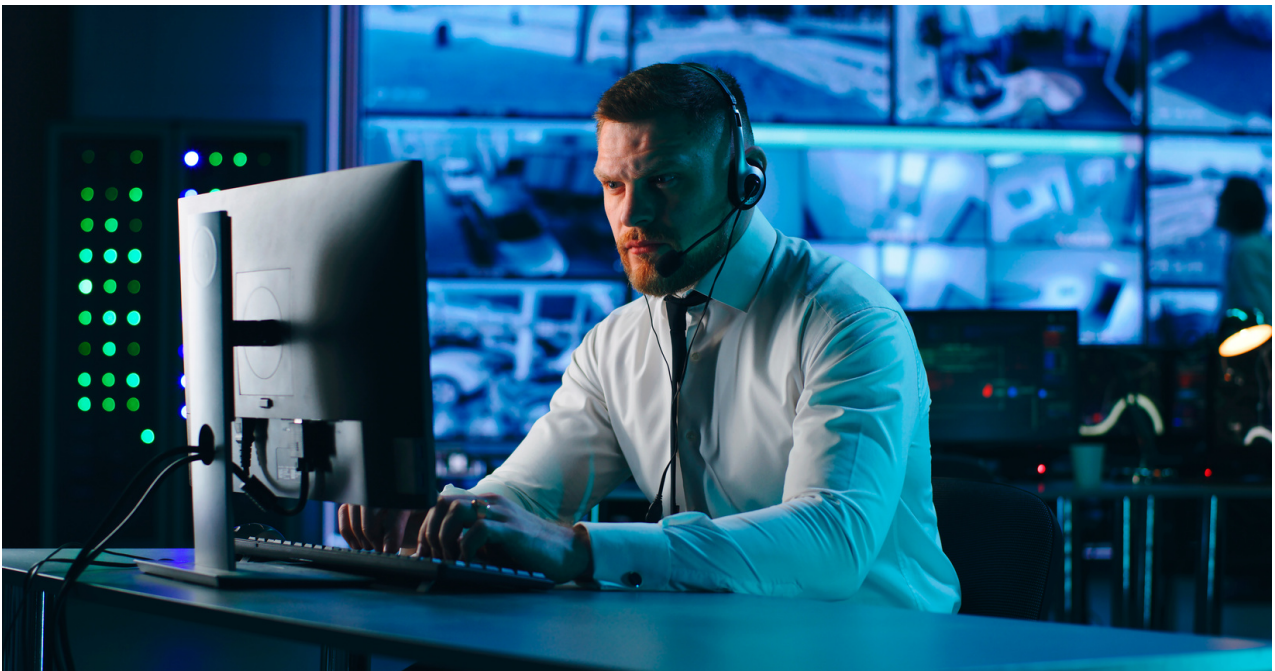




## EXERCISE CARD 3

After you named each of the basic computer operations find which description fits to which operation. Their names or a word corresponding with the terms are changed with @@@@

- @@@@ is the first basic operation of a computer system. @@@@ devices are used to provide information to the computer. For example, a mouse or keyboard can be @@@@ devices.
- @@@@ is the second basic operation of computer systems. @@@@ simply means that the computer system begins to carry out instructions given by the user. This process is called @@@@.
- @@@@ is the third basic operation of computers. @@@@ simply means the @@@@ of the results specified by the user.
- @@@@ is the fourth basic operation of computer systems. "Save" simply means to save the @@@@ result after executing the user's instruction.
- @@@@ is the fifth basic operation of computers. @@@@ is the combination of all computer operations.



## EXERCISE CARD 3

When participants match description with the term you can read them the exact descriptions which follow bellow:

*Input is the first basic operation of a computer system. Input devices are used to provide information to the computer. For example, a mouse or keyboard can be input devices.*

*Processing is the second basic operation of computer systems. Processing simply means that the computer system begins to carry out instructions given by the user. This process is called processing.*

*Outputting is the third basic operation of computers. Outputting simply means the output of the results specified by the user.*

*Storing is the fourth basic operation of computer systems. "Save" simply means to save the output result after executing the user's instruction.*

*Controlling is the fifth basic operation of computers. Controlling is the combination of all computer operations.*



## WORK CARD 4

There are many types of input devices and their names are given below:

- Keyboard
- Mouse
- Track Ball
- Joy Stick
- Light pen
- Graphic Tablet
- Microphone
- Scanner
- Bar Code Reader
- Magnetic Ink Card Reader(MICR)
- Optical Character Reader(OCR)
- touch screen

There are many types of output devices and their names are:

- Monitor
- Sound Card
- Video Card
- Printer
- Headphones
- Computer Speakers
- GPS
- Projector
- Speech-Generating Device
- Braille Reader

There are many types of storage devices and their names are:

- Hard Disk Drive ( HDD )
- USB Flash Drives
- Compact Discs (CDs)
- Secure Digital Cards (SD Card)s
- Solid-State Drives (SSD)
- Floppy Disks
- Tapes
- DVD and Blu-ray Discs
- RAM



## EXERCISE CARD 4

It is important to know the difference between each computer device and to which basic computer operation is related, so in the table below please fill in the right column the name of the computer operation they belong to.

<b>KEYBOARD</b>	
<b>MONITOR</b>	
<b>TRACK BALL</b>	
<b>PRINTER</b>	
<b>MOUSE</b>	
<b>HARD DISK DRIVE ( HDD )</b>	
<b>LIGHT PEN</b>	
<b>BRAILLE READER</b>	
<b>USB FLASH DRIVES</b>	
<b>GPS</b>	
<b>COMPACT DISCS (CDS)</b>	
<b>GRAPHIC TABLET</b>	
<b>SECURE DIGITAL CARDS (SD CARD)S</b>	
<b>PROJECTOR</b>	

## EXERCISE CARD 4

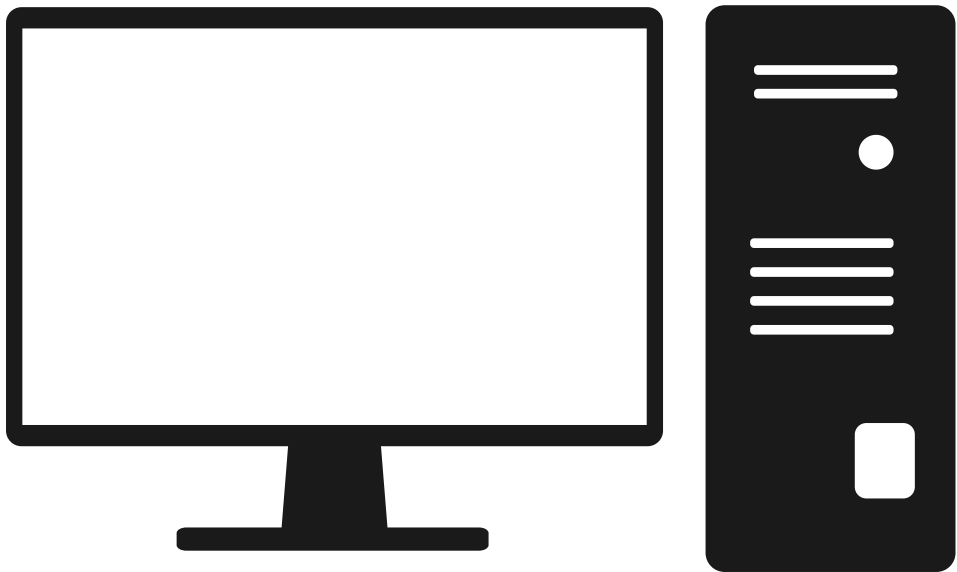
It is important to know the difference between each computer device and which basic computer operation it is associated with, so in the table below, please fill in the right column with the name of the computer operation they belong to.

<b>SOLID-STATE DRIVES (SSD)</b>	
<b>SOUND CARD</b>	
<b>JOY STICK</b>	
<b>RAM</b>	
<b>MICROPHONE</b>	
<b>SCANNER</b>	
<b>COMPUTER SPEAKERS</b>	
<b>TAPES</b>	
<b>BAR CODE READER</b>	
<b>VIDEO CARD</b>	
<b>MAGNETIC INK CARD READER(MICR)</b>	
<b>DVD AND BLU-RAY DISCS</b>	
<b>SPEECH-GENERATING DEVICE</b>	
<b>OPTICAL CHARACTER READER(OCR)</b>	

# EXERCISE CARD 4

It is important to know the difference between each computer device and which basic computer operation it is associated with, so in the table below, please fill in the right column with the name of the computer operation they belong to.

HEADPHONES	
FLOPPY DISKS	
TOUCH SCREEN	



## WORK CARD 5

The latest examples of modern technology include 5G networks that will provide users with super-fast internet, self-driving cars and reusable satellite carriers. But that's not all. The number of technological advances we've made and the tools we've invented is staggering. Here is a list of modern technological inventions that make our lives easier and facilitate operations in every industry. These are examples of modern technology:

- Robots
- Smartwatches
- VR Headsets
- Self-Driving Cars
- Bitcoin
- AI Chatbots
- Cloud Technology



## EXERCISE CARD 5

Instructions to the adult educator: Make a discussion with the adult learners and ask them to point out at least 3 examples of modern technology and how they influence their life. Distribute them printouts of the working card bellow:

EXAMPLE OF MODERN TECHNOLOGY	INFLUENCE IN MY LIFE

## WORK CARD 6

Modern technology has many advantages and disadvantages. However, it seems that the benefits may hide the impact of problems caused by technological developments. The advancement in modern automotive technology, like every other field we can imagine, have contributed to the vast improvement of mankind and the planet itself.

We cannot avoid technology in our lives. If you are looking for the merits and demerits of modern technology, we'll show you a few that match the latest technology, not the technology as a whole. These points explain why we cannot live without technology. These are the advantages of modern technology:

- It makes it much convenient to learn and grab information.
- Modern technology takes Innovation and Creativity to the next level.
- Communications feature improved.
- Transportation facilities boosted productivity.
- Huge impact in the education industry.
- Increased efficiency of people to complete particular tasks.
- Entertainment gadgets improved to the extreme.
- Numerous equipment got lesser prices with new technologies.
- Improved the problem-solving ease.
- Helped small businesses to grow faster.
- Connected people together through social networking.
- The lifestyle became easier.
- Improved diagnosis and curing equipment enhanced the health industry.





## WORK CARD 6

Modern technology also has some disadvantages too. Just like everything in the world has its good and bad sides, so does modern technology. As you can imagine, there are more than a few demerits. These are the disadvantages of modern technology:

- Modern technology creates job insecurity due to the excessive use of robots and machines.
- Creation of harmful weapons and machinery.
- Increased pollution of air, water, and soil.
- It can be a huge waste of time due to addiction to modern gadgets.
- It increased competition in every field due to the usage of automation.
- It can cause distractions from studies and other natural activities.
- Modern technology can affect the creativity of people because of the easiness to do things using technology.
- Cybercrimes increased, and almost anything is destructible by brilliant hackers.
- Modern technology can create health complications like obesity due to the addiction to devices such as smartphones or tablets.
- Affected social life by keeping people attached to tech gadgets.



## EXERCISE CARD 6

Instruction to the adult educator: Divide participants in 2 groups. One should discuss the advantages of modern echnology and the other- the disadvantages of modern technology. Time for discussion- 10 minutes. Print out the cards bellow and distribute them to the groups. Each group should summarize the outcomes on a card. After that the each group should nominate a speaker to present the group result.



## EXERCISE CARD 6

### Advantages of Modern Technology

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### Disadvantages of Modern Technology

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## WORK CARD 7

Mobile device is a generic term for all types of handheld computers. These devices are very portable and often fit in the palm of your hand. Some mobile devices such as tablets, e-readers, and smartphones are powerful enough to do many of the same things that desktop and laptop computers can do.





## EXERCISE CARD 7

Ask each participant to write down in the table below 3 names of mobile devices and why they are important in his life.

MOBILE DEVICE	IMPORTANCE

## WORK CARD 8

Smartphones are used to make calls and send text messages, but they can also be used to access the Internet, check email, search the web, and more.

There are various brands of smartphones like:

- iPhones – made by Apple
- Android Phones made by Samsung, HTC, etc.
- Windows Phones made by Nokia

The difference between each mobile phone is that it has different operating systems developed by different manufacturers.

Each smartphone has Earphones slot, Sleep/Wake Button, Volume Control and Home Button.





## EXERCISE CARD 8

Ask the participants to write down what is the name and function of the button after each arrow.



## WORK CARD 9

To make a call on your phone, find and tap the phone icon.

Find and tap the keyboard icon. A numeric keyboard will appear. Select the number you want to call and tap the phone icon for the third time. This will make a call.

To call a contact saved on your mobile phone:

Tap the phone icon and look for the person's picture or the word "contact" on the screen. Scroll your finger up or down until you find the name of the person you want to call. Tap the person's name, then tap the phone icon.

The easiest way to add a contact is to tap the phone icon and enter the number as you would when making a call. You should see a + sign or "Add to Contacts". Tap it and you will be asked if the contact is a new or existing contact.

Select a new contact or create a contact. Some phones will ask you if you want to save your contacts to your phone or SIM card. If you save it to the sim, then you can move your contacts easily if you get a new phone.

Enter the person's name and tap Save. You can also view your contacts from the contacts icon on your smartphone.



## EXERCISE CARD 9

Divide adult learners in groups by two. They should fulfill the following tasks:

- To exchange their phone numbers;
- To save them in their contact books in their smartphones;
- To call each other;
- To send a sms each other;



## WORK CARD 10

Wi-Fi or wireless internet allows you to access the internet without mobile data. If you have broadband at home, you can also connect your smartphone to this internet signal.

To connect a smartphone to the Wi-Fi: tap on Settings icon

Under Wireless and Networks tap on Wi-Fi.

Make sure the Wi-Fi option is enabled, select the Wi-Fi network you want to connect to and enter the password. You are connected to a WiFi network when you see the word "Connected" under the network name.

For some of the Wi-Fi networks you will need a password.

At home, the wireless network name (SSID) is usually the name of your Internet service provider followed by some numbers. For example: jlfugnT853357. When you click the wireless network name, you may be prompted for the password. Wireless network name and password are written under your router (black internet box) and the password is usually called: WEP key or WLAN key.

For Wi-Fi public places like libraries, hotels and cafés some may require a password and some may not.





## EXERCISE CARD 10

Ask each of the adult learners to connect to the WiFi network in the hall. If there is not a WiFi network the adult educator can create a hotspot. The name of the WiFi network/ the Hot spot is Simba. The password is 88HTg6#L

Concrete tasks that each adult learner need to do are:

- To scan for WiFi networks;
- To find the Simba network;
- To fill the WiFi password;
- To check are they connected to the WiFi network;
- To open google.com in the smartphone's browser.



## IV End of the workshop (20 MIN.)

The facilitator asks the participants to sit in a circle and each answer the question:

- What did you like the most about today's workshops?
- What will you take for yourself?
- What surprised you the most and caught your attention?
- How did the workshops affect you?
- What things are you going to change in your behavior?

After the participants have finished speaking, the facilitator would like to thank you for your participation in workshops and the teacher asks you to fill in evaluation questionnaires.

After taking the questionnaires, the teacher will distribute the diplomas.





# V Evaluation Questionnaire



## SCENARIO IV | COMPUTER OPERATION, LEARNING ABOUT MODERN TECHNOLOGIES & SUPPORT FOR MOBILE DEVICES

DEAR PARTICIPANT/DEAR PARTICIPANT,  
WE HOPE THAT THE WORKSHOP WAS INTERESTING FOR YOU AND YOU COULD LEARN MANY INTERESTING THINGS. WE WANT TO RECEIVE FEEDBACK FROM YOU, SO WE WILL BE VERY GRATEFUL FOR YOUR TIME AND FOR COMPLETING THE QUESTIONNAIRE BELOW.  
THE QUESTIONNAIRE IS ANONYMOUS.

**1. DID THE WORKSHOP PROVIDE YOU WITH USEFUL TIPS AND TECHNIQUES FOR WORKING WITH COMPUTERS?**

☐ DEFINITELY YES    ☐ RATHER YES    ☐ RATHER NO    ☐ DEFINITELY NOE

**2. DID THE WORKSHOP PROVIDE YOU WITH POSSIBLE TECHNIQUES FOR SUPPORT MOBILE DEVICES?**

☐ DEFINITELY YES    ☐ RATHER YES    ☐ RATHER NO    ☐ DEFINITELY NO

**3. DID THE WORKSHOP PROVIDE YOU WITH USEFUL INFORMATION ABOUT MODERN TECHNOLOGIES?**

☐ DEFINITELY YES    ☐ RATHER YES    ☐ RATHER NO    ☐ DEFINITELY NO

**4. WHICH PART OF THE WORKSHOP DID YOU LIKE THE MOST AND WHY?**

.....

.....

**5. WOULD YOU LIKE TO TAKE PART IN OTHER THEMATIC WORKSHOPS?**

☐ YES    ☐ NO

**6. IF YES, PLEASE LIST THE TOPICS THAT WOULD BE INTERESTING FOR YOU.**

.....

.....

**7. SHARE YOUR REFLECTION AND COMMENTS**

.....

.....

**THANK YOU FOR YOUR CONTRIBUTION.**



Develop Your  
Creativity

# CERTIFICATE

IT IS CONFIRMED THAT

.....  
(FULL NAME)

TOOK PART IN THE WORKSHOP  
"COMPUTER OPERATION, LEARNING ABOUT MODERN  
TECHNOLOGIES & SUPPORT FOR MOBILE DEVICES"

DEVELOP YOUR CREATIVITY  
ERASMUS PROJECT NO. 2020-1-PL01-KA227-ADU-095783

WORKSHOP FACILITATOR:

PLACE:

DATE:



Co-funded by  
the European Union