



## ICT

### First Semester

### Summary Sheet #3

Class: Grade 8

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As you have studied that any computer systems consist of **hardware** and **software**, the hardware is either **internal** or **external**.

The external hardware is categorized into **Input** or **output**.

**Input device** is a device that sends data to a computer.

Keyboard / keypad

Mouse

Joystick / controller

Scanner

Camera

Microphones

**Output device** is a device used to send data from the computer to the user

Monitor

Projector

Printer

Speaker / headphones

- ***An operating system:*** is a set of programs that controls how the computer interacts with the users and the external devices (Such as keyboard, monitor, mouse).

Examples of software: Windows, Unix, Macintosh, iOS, Android.

Users interact with the operating system through the **user interface**.

➤ ***There are four main types of user interfaces:***

1. Command line interface (CLI)
2. Graphical user interface (GUI)
3. Dialogue-based interface
4. Gesture-based interface

**Command line interface:** this is the first type of interface; users have to type in commands.

**Advantages:**

- Runs very quickly
- Used by technicians

**Disadvantages:**

- Command needs to be memorized
- Not user friendly

**Graphical user interface:** the most common type of interface in which applications are represented by icons, options are chosen

**Advantages:**

- Users do not have to learn commands
- Easy to use

**Disadvantages:**

- Large and take up lots of storage
- Can be slower than CLI

**Dialogue-based interface:**

**Advantages:**

- It allows hands-free control
- Useful for disabled people

**Disadvantages:**

- If there is noise, it's not reliable
- Expensive

### **Gesture-based interface:**

#### **Advantage:**

- User does not have to enter commands using keyboard

#### **Disadvantage:**

- User have to learn the gestures
- User may have to wear motion tracking gloves

### **Types of computers:**

1. Desktop computer (PC) (Personal Computer)
2. Laptop
3. Tablet
4. Phablet
5. Smartphones

<u><b>Device</b></u>	<u><b>Advantage</b></u>	<u><b>Disadvantage</b></u>
<b>Desktop</b>	<ul style="list-style-type: none"><li>▪ More powerful</li><li>▪ Have larger screen</li><li>▪ Cost less</li></ul>	<ul style="list-style-type: none"><li>▪ Not portable</li><li>▪ Take up space</li></ul>
<b>Laptop</b>	<ul style="list-style-type: none"><li>▪ Light weight</li><li>▪ Portable</li></ul>	<ul style="list-style-type: none"><li>▪ Amount of battery life</li><li>▪ Slower to start than tablet</li></ul>
<b>Tablet</b>	<ul style="list-style-type: none"><li>▪ Easy to use</li><li>▪ Light weight</li><li>▪ Lots of apps to choose from</li></ul>	<ul style="list-style-type: none"><li>▪ Can be expensive</li><li>▪ Amount of battery life</li></ul>
<b>smartphone</b>	<ul style="list-style-type: none"><li>▪ Pocket sized</li><li>▪ Can make phone calls</li><li>▪ Can use Wi-Fi</li></ul>	<ul style="list-style-type: none"><li>▪ Small screens can make reading difficult</li><li>▪ Web browsing can drain the battery quickly</li></ul>