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# PC - Basic Information

# Basic parts of a computer

- CPU
  - o Central Processing Unit
  - This is the "brain" of the computer, responsible for carrying out instructions and performing calculations
- RAM
  - o Random Access Memory
  - o This is the computer's short-term memory, used to temporarily store data that is currently in use
- HDD / SSD
  - o Hard Disk Drive
  - o Solid State Drive
  - o This is where the computer stores all of its data, including the operating system, programs, and user files
- Motherboard
  - This is the main circuit board that connects all of the computer's components together
- PSU
  - o Power Supply Unit
  - This converts AC power from the wall outlet into DC power that the computer can use
- GPU
  - o Graphics Processing Unit
  - This is responsible for processing graphics and video, and is especially important for tasks like gaming and video editing
- Optical drive
  - This is a drive that reads and writes to optical discs like CDs and DVDs
- Network card
  - This allows the computer to connect to a network, whether it's through Ethernet or Wi-Fi

#### Hardware, software, applications, programmes

 Hardware refers to the physical components of a computer system such as the central processing unit (CPU), motherboard, hard drive, and monitor

- Software refers to the non-tangible components of a computer system such as the operating system, drivers, utilities, and programming languages
- Applications are software programs designed to perform specific tasks or functions for the user, such as word processing, photo editing, or gaming. Applications can be either pre-installed or downloaded separately by the user
- Programs, also known as software programs, are sets of instructions that tell the computer what to do. Programs can be written in different programming languages and can range from simple scripts to complex applications

# A laptop X a desktop computer (advantages, disadvantages of each type)

- Laptop Advantages
  - o Portability
    - Laptops are designed to be portable and can be carried around easily
  - o Battery-powered
    - Laptops have an in-built battery, making them ideal for use in places where power outlets are unavailable
  - o Space-saving
    - Laptops take up less space than desktop computers, making them ideal for small spaces
  - o Convenience
    - Laptops are all-in-one devices, which means that they have a built-in display, keyboard, touchpad, and speakers
- Laptop Disadvantages
  - o Limited Upgradeability
    - Laptops are not as easily upgradeable as desktop computers, as most components are built-in and cannot be easily replaced
  - o Performance
    - Laptops tend to have lower performance levels than desktop computers, especially when it comes to graphics and gaming
  - o Price
    - Laptops can be more expensive than desktop computers with similar specs
  - o Heat
    - Laptops generate more heat than desktop computers, and prolonged use can lead to overheating and damage to internal components
- Desktop Computer Advantages
  - o Power and performance
    - Desktop computers generally have more powerful processors, more memory, and better graphics cards than laptops

- o Upgradeability
  - Desktop computers are easily upgradeable, with most components being easily replaceable.
- o Price
  - Desktop computers tend to be less expensive than laptops with similar specifications
- o Cooling
  - Desktop computers can be fitted with large fans and heatsinks, which can keep them cool and prevent damage from overheating
- Desktop Computer Disadvantages:
  - o Space requirement
    - Desktop computers require more space than laptops, as they consist of separate components, including a monitor, keyboard, and CPU tower
  - o Lack of portability
    - Desktop computers are not portable and cannot be easily moved around
  - o Power supply
    - Desktop computers require a stable power supply and cannot be run on battery power
  - Complexity
    - Desktop computers can be more complex to set up and maintain, especially if the user has to assemble the individual components themselves

# The most common problems with a PC and how to solve them

- Slow Performance
  - O If your PC is running slowly, it could be due to a number of reasons. To fix the issue, you can try to remove any unused programs or files, run a virus scan to ensure that the system is not infected with malware, defragment the hard drive, and ensure that the computer has sufficient memory (RAM) to run the programs you need
- Blue Screen of Death
  - O If your PC displays a blue screen with an error message and then restarts, it could be due to hardware or software issues. You can try to update the drivers for your hardware, run a system scan to check for malware, or perform a system restore to a previous point in time when the computer was working correctly
- Computer Won't Turn On
  - o If your PC won't turn on, it could be due to a power issue, such as a dead battery or a faulty power cord. To fix this issue, check the power outlet, the power cord, and the battery (if applicable) to ensure that they are all functioning properly. You can also try resetting the computer's internal components, such as the memory and the hard drive

- Internet Connectivity Issues
  - O If your PC is having trouble connecting to the internet, it could be due to issues with your modem or router, a faulty network adapter, or incorrect network settings. To fix this issue, you can try resetting your modem and router, updating your network adapter drivers, or resetting your network settings

#### • No Sound

 If your PC is not producing any sound, it could be due to a number of issues, such as faulty speakers or headphones, incorrect sound settings, or outdated drivers. To fix this issue, you can try checking the sound settings, updating the drivers for your audio devices, or replacing the speakers or headphones

# The use of a PC (in general, your personal attitude to using a PC

- The use of a PC is essential in today's world, as it has become an integral part of our daily lives. Whether it's for work, communication, entertainment, or education, PCs offer a range of benefits that make our lives easier and more productive
- I personally use a desktop computer with three monitors plugged in. You may ask why, Its because it helps me with productivity, i'm trying to self-study for example website developing and programming and studying Janapese at the moment. Basically I can do more things at the same time, when I have more monitors.

# The Internet (advantages, disadvantages, possible dangers of using the Internet - loss /misuse of personal data, photos, pornography, child abuse, addiction to games, social media,....)

- The internet is a powerful tool that has revolutionized the way we live, work, and communicate. However, it also comes with its advantages, disadvantages, and potential dangers. Here are some of the pros and cons of using the internet, as well as some of the potential risks
- Advantages of the Internet
  - o Access to Information
  - o Communication
  - o Entertainment
  - o Shopping
  - o Education
- · Disadvantages of the Internet
  - o Addiction to games or social media
  - o Privacy Concerns
  - o Online scams
- · Possible dangers of using the Internet
  - o Loss of Perosnal Data
  - o Pornography
  - o Cyberbullying

# Applications and web pages you use the most and why, time you spend online

- I spend lots of time watching videos on Youtube, or simply surfing through facebook or instagram
- My favourite application I use is Notion which is basic TODO application where I can schedule my tasks

## Your computers skills

- My hardware skills are that I can build computer just from parts
- My software skills are that I can develop some websites and console apps in c# and Java

## The future of computers

o I think there will be a lot of development in AI in the future. There will be better components like better graphic cards and processors.