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Personal computer notes pdf

It is impossible to imagine a life without a computer nowadays. We do our job, have fun and winter what we need to know through computers. Sometimes we forget that a smartphone is just a palm-sized version of our desktop computer. While the term computer can be used on virtually any device that has a microprocessor in it, most people think of the computer as a device that receives input from the user using a mouse or keyboard, handles it in some way and displays the result on the screen. Hardware and software in computers have evolved at a circuit-cracking pace over the past few decades - bulky desk-crushing machines from the early '80s look nothing like feather touchscreen tablets today. Compared to computers from the late 20th century, the number of computers in the 1960s and 1990s was the first And this very connectedness has changed computers in themselves. Gone are the days of dial-up modems that beeped their way to text-based message boards. Computers now use Wi-Fi and broadband to get through multimedia content from live news to movies to multiplayer and more. There are many terms used to describe different types of computers. Most of these words mean the size, expected use, or ability of your computer. Let's save the most obvious. Personal Computer (PC) content defines a computer for general use by one person. While the iMac is definitely a PC, most people apply the shortcut to computers that run on the Windows operating system instead. Computers were first known as microcomputers because they were complete computers, but built on a smaller scale than the huge systems used by most businesses. In 1981, the iconic tech maker IBM unveiled its first computer that relied on Microsoft's now-legendary operating system - the MS-DOS (Microsoft Disk Operating System). Apple followed up in 1983 by creating Lisa, one of the first computers with a GUI (graphical user interface) [sources: Alfred, Cabell]. This is a fictionalized way of saying icons were visible on the screen. Before that, computer screens were pretty simple. Advertising On the road, critical components such as processors (central processor units) and RAM (random access memory) evolved at a breakthrough pace, making computers faster and more efficient. In 1986, Compaq released a 32-bit processor on its 386 machines. And of course, Intel grabbed a place in computer history in 1993 with its first Pentium processor [sources: PCWorld, Tom hardware]. Now, personal computers have touch screens, all kinds of built-in connectivity (like Bluetooth and WiFi), and operating systems that morph through the day. Thus, the size and shapes of the machines themselves. Until the mid-1980s, consumers had one choice for PCs – and it was Format. These knee-knocking boxes (called towers) were big enough to smoud your shins. Equipped with large CRT (cathode ray tube) monitors, crowded with your home workspace or office. The expectation with desktop systems was that you would set your computer in a permanent place. Most desktop computers offer more power, storage and versatility at a lower price than their portable brethren, which was what made them the go-to computer in the 1990s when laptops were still thousands of dollars [source: Britannica]. These days, desktops are much, much cheaper than they have been for 20 years, and you can only have one for a few hundred dollars. That's a far cry from the thousands of dollars they cost in the 1980s. In fact, one of Hewlett-Packard's first commercial PCs, the 300, cost $95,000 in 1972 [source: Comen]. Advertising How smartphones and laptops continue their domination of the world, and their prices have put them within reach of most consumers, desktops go the way of the dinosaur. In 2017, global desktop sales fell below 100 million, far fewer than the 161.6 million laptops that flew off the shelves that same year [source: Moore-Colyer]. But don't cry on the surface. This PC format indicates products that are equally powerful, with the huge added benefit of portability. And hardcore players still value desktops. Once upon a time, if you wanted to use a computer, you had to use the desktop. Engineers simply could not condense sophisticated systems in the computer into a portable box. In the mid-1980s, though, many large computer manufacturers were pushing to popularize laptops. Laptops are laptops that integrate a display, keyboard, pointing device or trackball, processor, memory and hard drive all in a battery-operated package slightly larger than the average hardboard book. Advertising The first real commercial laptop, though, was a far cry from the slender devices of crowded retail stores today. Osborne 1, released in 1981, sold for around $1,800, had 64kb of memory - and weighed about 24lbs (10 kilograms). As it toned your biceps, Osborne 1 also gave eyes a workout as the screen was just 5 inches (12 centimeters) [source: Computing History]. Fortunately, manufacturers quickly improved on the look and feel of laptops. Just two years later, the Radio Shack trs-80 Model 100 wrapped its component in a 4-pound (8 kilogram) frame, but it lacked much. By the end of the decade, the NEC UltraLite broke barriers by cramming real computing efficiency into the first real laptop (i.e. a very lightweight laptop) style that weighed just 5 pounds (2.2 kilograms). The race for ultra-portability was officially on [source: Bellis]. However, laptops do not overtake PCs on sale until 2005 [source: Arthur]. Netbooks are ultra-portable computers that are even smaller than traditional laptops. Extreme cost-effectiveness (roughly $200) means they are cheaper than almost any brand new laptop found in retail stores. However, netbooks' internal components are less powerful than in conventional laptops [source: Krynin]. Netbooks first appeared in 2007, primarily as a means of accessing the Internet and web applications, from email to music and movie streaming to web surfing. They are incredibly compact, but as a result, their specification list often resembles a very stripped-down laptop. They have small displays (as small as 6 or 7 inches or 15-18 centimeters), a small storage capacity (maybe maxing out at 64 GB), and sometimes save or completely skip data ports (like USB or HDMI) that traditional laptops control. A lot of netbooks come from small manufacturers because big guns can't be bothered with the low profit margins of these cheaper machines [source: Lenovo]. Advertising Because they have relatively slow processors and little memory, netbooks can't do heavy lifting for graphics or hardcore games. Instead, they are best for a task that gives them their name: surfing the web [source: Krynin]. Tablets have largely replaced niche netbooks occupied. Tablets are thin, flat devices that look like larger versions of smartphones. They were first produced in 2000 by Lenovo, but popularized by Apple in 2010 with the release of its iPad [source: Bort]. Tablets can do pretty much all the features that laptops do, but they don't have the internal fans that computers have. So they have to rely on processors with lower performance that won't use as much heat or battery power. They also have less storage capacity than traditional computers. Older tablets use the same operating systems as mobile phones, but newer tablets use a full operating system such as Micrsoft Windows 10 [source: Lenovo]. Tablets are more portable than PCs, have longer battery life, but they can also do smartphone-like activities like taking pictures, playing games, and drawing with a stylus. For those who like the laptop keyboard feature, some tablets come with a keyboard (connected or detachable), allowing you to combine the best of both worlds. The first computers of the 20th century were the first computers in the world. These days, you can perform much more exercise processing directly in the trouser pocket. Handheld computers like smartphones and PDAs are one of the iconic devices of our era [source: Arthur]. Debuting in the 1990s, Personal Digital Assistants (PDAs) were tightly integrated computers that often used flash memory instead of a hard drive for storage. These computers typically didn't have keyboards, but relied on touchscreen technology to input the user. PDAs were usually smaller than paperback, very light with adequate battery life. For a time, they were the go-to device for calendars, and simple messaging features [source: Britannica]. Remember the Palm Palm and BlackBerry? Advertising But as the smartphone revolution began, the PDA lost its luster. Smartphones like the iPhone and Samsung Galaxy blend call features and PDA features along with full-blown computer capabilities that get more jaw-dropping by day. They feature a touch interface, high-speed processors, many gigabytes of memory, complete connectivity options (including Bluetooth, Wi-Fi and more), two-lens cameras, high-quality audio systems and other features that would have flied electronics engineers half a century ago. Although smartphones have existed in some fashion since 2000, it was the heavily hyped debut of the iPhone 3G in 2007 that brought the device to the masses. The look, feel and functicality of this iPhone set the template for all the other smartphones that followed [source: Nguyen]. A workstation is simply a desktop computer that has a more powerful processor, additional memory, high-end graphics adapters and improved capabilities for performing a special set of tasks such as 3D graphics or game development [source: Intel]. Workstations, such as regular desktop computers, are designed for individual users. But they differ from desktop computers in that they are much, much easier. Typically, it's businesses like engineering firms or multimedia companies that buy these computers for their employees [source: TechTarget]. Advertising The power of the workstation is not cheap. While small businesses can easily find normal desktops for just a few hundred dollars, workstations can cost three times as much. Basic workstations easily go for $1,500 and double the price in a hurry [source: Benton]. But while cheap desktop computers are built with equally cheap (read: sometimes unreliable) components, workstations are quality machines designed for serious business. They can be left on overnight to crunch numbers or render animations. Therefore, these computers sport redundant hard drives for data security, as well as faster processors and mass storage SSDs. All these factors point to a machine that has done more for profit instead of basic word processing or random mine games [source: Benton]. A computer that has been optimized to provide services to other computers on the network, servers typically have powerful processors, a lot of memory, and large hard disks. Unlike a desktop or laptop computer, you don't sit on a server and enter. Instead, the server provides power to your computer — and much of it — over a local area network (LAN) or over the Internet. Companies small and large lean on servers to provide information, process orders, track traffic data, crisis scientific formulas, and much more. Servers are often stored on shelves in a dedicated server room, which in some companies may resemble warehouses. Advertising As ordinary computers, servers have typical computer motherboards, RAM, video cards, power supplies and enough network connections for any need. However, they usually don't have dedicated displays. Instead, IT workers use a single monitor to configure and control multiple servers that combine their computing power for ever greater speed. Sometimes you wonder how a service like Google can anticipate your search questions in real time... and then kick the answers to your deepest questions at the moment? It's all because of the servers. By some estimates, the company maintains and operates approximately 2.5 million servers in huge data centers scattered across the Earth [source: Data Center Knowledge]. In the early days of computing, mainframes were huge computers that could fill an entire room or even an entire floor! As the size of computers has shrunk while their power has increased, the term mainframe has fallen out of use in favor of a corporate server. You'll still hear the term mentioned, though, especially in large companies to describe huge machines processing millions of transactions every day, while working to meet the needs of hundreds if not thousands of individual users. Although mainframes have traditionally meant a centralized computer connected to less powerful devices such as workstations, this definition is blurring as smaller machines get more power and mainframes get more flexible [source: IBM]. Mainframes first leveled off in the post-World War II era, as the U.S. Department of Defense ramped up its energy to fight the Cold War. Even as servers become more numerous, mainframes are still used to crunch some of the largest and most complex databases in the world. They help secure countless sensitive transactions, from mobile payments to top secret corporate information [source: Alba]. Advertising In fact, IBM, one of the world's most enduring mainframes creators in more than half a century, saw a surge in mainframe sales in 2018, for the first time in five years. This is in part because mainframes can pack as much muscle calculation into an area that is as small as a rack of modern, high-speed servers [source: Hall]. This type of computer usually costs hundreds of thousands or even millions of dollars. Although some supercomputers are individual computer systems, most of them consist of more high performance computers operating in parallel than a single system. The most famous supercomputers are built by Cray Supercomputers. Supercomputers are different from mainframes. Both types of computers control incredible computing power for Earth's most intensive industrial and scientific calculations. Mainframes are generally improved to provide the highest data reliability. Advertising Supercomputers, on the other hand, are formula 1 racing cars of the computer world, built for breakthrough processing speed so companies can through calculations that other systems could have weeks or even months. They are often found in places such as atomic research centres, spy agencies, scientific institutes or weather forecasting stations, where speed is vital. For example, the United States' National Oceanic and Atmospheric Administration, which has some of the world's most advanced weather forecasting capabilities, uses some of the fastest computers in the world - capable of more than 8 quadrillion calculations per second [sources: Hardawar, NOAA]. This kind of heart-stopping computer power comes at equally heart-stopping prices. The U.S. Department of Energy's Oak Ridge National Laboratory summit supercomputer, for example, cost $200 million. It's the first supercomputer built to process AI applications [source: Wolfson]. Laptops are the latest trend in computing. Basically, common computer applications (email, database, multimedia, calendar/scheduler) are integrated into watches, mobile phones, screens and even clothing. Many other wearables target outdoor enthusiasts and fitness freaks, allowing them to track their location, altitude, calories burned, steps, speed, and much, much more. Apple's iWatch, now in its fourth incarnation, is one of the best reviewed wearables to date. These small watches have many features of a full-fledged smartphone. This allows you to perform normal text messages and email duties. And it has a built-in mobile phone, unlike some other smartwatches that need to be paired with a phone to make calls. It even has a built-in electrical heart sensor that you can use to make an electrocardiogram and share it instantly with your doctor [source: Apple]. But the watch is just the beginning. Sewn accessories for clothes grow, as do smart glasses, smart belts, sleep monitors, heart rate trackers and smart ear buds. A company called MC10 is even brauting skin spots that will track the different biological processes going on in your body [source: Ubiquitous Computing]. Wearables are indeed a new horizon in personal computing. Their flexibility and mind-warping potential speak to the idea that the computer revolution is not over. If anything, the PC era might just be getting underway. Originally published: November 14, 2008 In Windows operating system, shutdown and restart of both can shut down the computer. But they don't do it in exactly the same way. More Great Links Resources Alba, Davey. Why on Earth is IBM still making Mainframes? Wired. January 13, 2015. John. January 19, 1983: Apple receives graphics with Lisa. Wired. January 19, 2010. Randy. August 12, 1981: IBM Gets Started with 5150 PCs. Wired. August 12 Mary. Laptop history. ThoughtCo. April 19, 2018. Brian. Workstation vs. Desktop: Which office does your office need? Redshift. March 19, 2013. . PDA handheld. . Pc. Michael. How to choose a server for your small business. PC World. March 21, 2012. . Best Wearable Tech for 2018. Evan. How much does a personal computer cost the year you were born? USA Today. June 22, 2018. history. Osborne, 1st Center Knowledge. Frequently asked questions about the Google Data Center. March 16, 2017. . The invention of the PC. Christine. Why Mainframes aren't going away over time. Knowledge of the data center. February 7, 2018. t-going-away-any-time-soonIBM. What is mainframe? It's a style of computing. is ubiquitous computing. Wearables: The Next Big Thing Like Smartphones Mature. February 22, 2018. . Workstation or PC: How to decide what type of system is right for you. Mark. What is a netbook? LifeWire. March 5, 2018. . What is a netbook? Bradley, Servers are the heart of the Internet. LifeWire. July 2, 2018. Roland. Desktop PC Sales Fell in 2017 as Death Rattle Sounds Again. The Inquirer. March 1, 2018. and Atmospheric Administration. NOAA will kick off 2018 with a massive supercomputer upgrade. January 10, 2018. Tuan C. History of smartphones. ThoughtCo. October 3, 3017. . The 25 greatest computers of all time. 11 August 2006. Workstation. . Personal digital assistant. s Hardware. Intel Drops 'Pentium' Brand. January 14, 2006. 1832-2.htmlWolfson, Elijah. The U.S. surpassed China with a Supercomputor capable of as many calculations per second as 6.3 billion people. QZ.com June 2018. Kim Ann. Computer History: LiveScience Quick Timeline. September 6, 2017.