

# Shortcuts

There are certain shortcuts you'll use all day, every day. They work whether you're doing stuff with photos, music, documents, or spreadsheets.

- **Copy a selected item:** Ctrl+C
- **Cut a selected item:** Ctrl+X
- **Paste a selected item:** Ctrl+V
- **Undo an action:** Ctrl+Z
- **Redo that thing I just undid:** Ctrl+Y
- **Select everything:** Ctrl+A
- **Print:** Ctrl+P

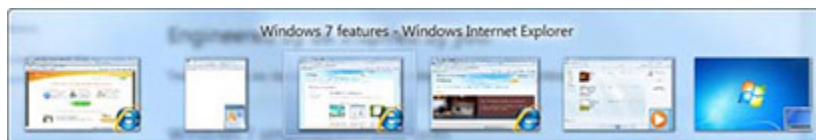
## Manage open windows

Chances are, you use your PC to do a lot of things at once. Shortcuts go a long way towards cutting the clutter. Go ahead and try these out as you read about them.

- **Switch between open windows**

Alt+Tab

If you have lots of open windows and you're not sure exactly which one you need, press Alt+Tab, and get a quick thumbnail view of all open windows. Then, while holding down the Alt key, press the Tab key multiple times until you get to the window you want.




Press Alt+Tab to switch between open windows

- **Clear away everything and show the desktop**

Windows logo key  +D


Use this shortcut when you want to minimize a lot of open windows at once to check something on your desktop. Clutter-to-clean with two fingers.

- **Minimize the window**

Windows logo key  +Down Arrow

Minimizing a window is a surefire way to see what's underneath it. And it's fast to use the shortcut. If the window is maximized already (covering the entire screen) it'll go to "normal" size. And if it's normal size, it'll minimize entirely.

- **Maximize the window**

Windows logo key  +Up Arrow

Maximizing windows works the same way.

## Manage tasks

You might already be using a shortcut—Ctrl+Alt+Delete—to open up Task Manager or to lock your computer. But there are shortcuts for this shortcut.

- **Open Task Manager**

Ctrl+Shift+Esc

This simple shortcut whisks you straight to Task Manager—without any intermediary steps.

- **Lock your PC or switch users**


Windows logo key  +L

This shortcut locks your PC and instantly displays the login screen.

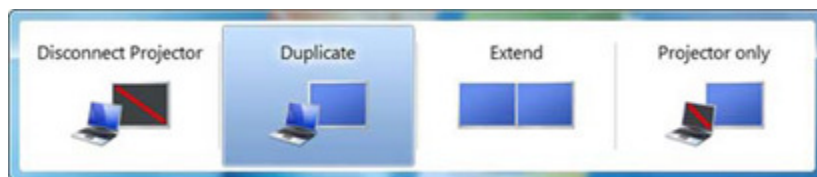
## Display your way

No matter how you want to view your PC, shortcuts help you get there faster.

- **Choose a presentation display mode**


Windows logo key  +P

Whether you're giving a presentation or are using multiple monitors, it's simple to switch settings.



Choosing a presentation display mode

- **Zoom in, zoom out**

Windows logo key  +Plus Sign or Minus Sign

The Plus Sign key (+) zooms you in, the Minus Sign key (-) zooms you out. This lets you see small text on a webpage or to check out the pixels in a photo.



You can use your keyboard to zoom in on a photo detail

## A few last tricks


Here are a few final shortcuts. For more keyboard shortcuts, [check out the complete list](#).

- **Search for files and folders**

Windows logo key  +F


In the past, finding a file could be like an archaeology expedition. But nowadays, search is really fast and thorough. Use this shortcut to get a search window, type in a few keywords, and presto, you'll get your file.

- **Open a new instance of a program**

Windows logo key  +Shift+Click a taskbar icon

I like Internet Explorer tabs—but sometimes I want a whole new browser window. To get one, I click the Internet Explorer icon while holding down Shift.

- **And when you need it ...get help**

Windows logo key  +F1

It's the simplest shortcut out there. When all else fails, and you're just not sure what to do, press F1.

## Computer keyboard

In computing, a **keyboard** is a typewriter-style device, which uses an arrangement of buttons or keys, to act as mechanical levers or electronic switches. Following the decline of punch cards and paper tape, interaction via teleprinter-style keyboards became the main input device for computers.

A keyboard typically has characters engraved or printed on the keys and each press of a key typically corresponds to a single written symbol. However, to produce some symbols requires pressing and holding several keys simultaneously or in sequence. While most keyboard keys produce letters, numbers or signs (characters), other keys or simultaneous key presses can produce actions or execute computer commands.

Despite the development of alternative input devices, such as the mouse, touchscreen, pen devices, character recognition and voice recognition, the keyboard remains the most commonly used device for direct (human) input of alphanumeric data into computers.

In normal usage, the keyboard is used as a text entry interface to type text and numbers into a word processor, text editor or other programs. In a modern computer, the interpretation of key presses is generally left to the software. A computer keyboard distinguishes each physical key from every other and

reports all key presses to the controlling software. Keyboards are also used for computer gaming, either with regular keyboards or by using keyboards with special gaming features, which can expedite frequently used keystroke combinations. A keyboard is also used to give commands to the operating system of a computer, such as Windows'Control-Alt-Delete combination, which brings up a task window or shuts down the machine. A command-line interface is a type of user interface operated entirely through a keyboard, or another device doing the job of one.

## Layout

### **Alphabetic**

The Dvorak Simplified Keyboard layout arranges keys so that frequently used keys are easiest to press, which reduces muscle fatigue when typing common English.

There are a number of different arrangements of alphabetic, numeric, and punctuation symbols on keys. These different keyboard layouts arise mainly because different people need easy access to different symbols, either because they are inputting text in different languages, or because they need a specialized layout for mathematics, accounting, computer programming, or other purposes. The United States keyboard layout is used as default in the currently most popular operating systems: Windows, Mac OS X and Linux. The common QWERTY-based layout was designed early in the era of mechanical typewriters, so its ergonomics were compromised to allow for the mechanical limitations of the typewriter.

As the letter-keys were attached to levers that needed to move freely, inventor Christopher Sholes developed the QWERTY layout to reduce the likelihood of jamming. With the advent of computers, lever jams are no longer an issue, but nevertheless, QWERTY layouts were adopted for electronic keyboards because they were widely used. Alternative layouts such as the Dvorak Simplified Keyboard are not in widespread use.

The QWERTZ layout is widely used in Germany and much of Central Europe. The main difference between it and QWERTY is that Y and Z are swapped,

and most special characters such as brackets are replaced by diacritical characters.

Another situation takes place with "national" layouts. Keyboards designed for typing in Spanish have some characters shifted, to release the space for Ñ ñ; similarly, those for Portuguese, French and other European languages may have a special key for the character Ç ç. The AZERTY layout is used in France, Belgium and some neighbouring countries. It differs from the QWERTY layout in that the A and Q are swapped, the Z and W are swapped, and the M is moved from the right of N to the right of L (where colon/semicolon is on a US keyboard). The digits 0 to 9 are on the same keys, but to be typed the shift key must be pressed. The unshifted positions are used for accented characters.

Keyboards in many parts of Asia may have special keys to switch between the Latin character set and a completely different typing system. Japanese layout keyboards can be switched between various Japanese input methods and the Latin alphabet by signaling the operating system's input interpreter of the change, and some operating systems (namely the Windows family) interpret the character "\"" as "¥" for display purposes without changing the bytecode which has led some keyboard makers to mark "\"" as "¥" or both. In the Arab world, keyboards can often be switched between Arabic and Latin characters.

In bilingual regions of Canada and in the French-speaking province of Québec, keyboards can often be switched between an English and a French-language keyboard; while both keyboards share the same QWERTY alphabetic layout, the French-language keyboard enables the user to type accented vowels such as "é" or "à" with a single keystroke. Using keyboards for other languages leads to a conflict: the image on the key does not correspond to the character. In such cases, each new language may require an additional label on the keys, because the standard keyboard layouts do not share even similar characters of different languages (see the example in the figure above).

## **Key types**

### **Alphanumeric**

Alphabetical, numeric, and punctuation keys are used in the same fashion as a typewriter keyboard to enter their respective symbol into a word processing program, text editor, data spreadsheet, or other program. Many of these keys will produce different symbols when modifier keys or shift keys are pressed. The alphabetic characters become uppercase when the shift key or Caps Lock key is depressed. The numeric characters become symbols or punctuation marks when the shift key is depressed. The alphabetical, numeric, and punctuation keys can also have other functions when they are pressed at the same time as some modifier keys. The Space bar is a horizontal bar in the lowermost row, which is significantly wider than other keys. Like the alphanumeric characters, it is also descended from the mechanical typewriter. Its main purpose is to enter the space between words during typing. It is large enough so that a thumb from either hand can use it easily. Depending on the operating system, when the space bar is used with a modifier key such as the control key, it may have functions such as resizing or closing the current window, half-spacing, or backspacing. In computer games and other applications the key has myriad uses in addition to its normal purpose in typing, such as jumping and adding marks to check boxes. In certain programs for playback of digital video, the space bar is used for pausing and resuming the playback.

### **Modifier keys**

Modifier keys are special keys that modify the normal action of another key, when the two are pressed in combination. For example, <Alt> + <F4> in Microsoft Windows will close the program in an active window. In contrast, pressing just <F4> will probably do nothing, unless assigned a specific function in a particular program. By themselves, modifier keys usually do nothing. The most widely used modifier keys include the Control key, Shift key and the Alt key. The AltGr key is used to access additional symbols for keys that have three symbols printed on them. On the Macintosh and Apple keyboards, the modifier keys are the Option key and Command key, respectively. On MIT computer keyboards, the Meta key is used as a modifier and for Windows keyboards, there is a Windows key. Compact keyboard layouts often use a Fn key. "Dead keys" allow placement of a diacritic mark, such as an accent, on

the following letter (e.g., the Compose key). The Enter/Return key typically causes a command line, window form or dialog box to operate its default function, which is typically to finish an "entry" and begin the desired process. In word processing applications, pressing the enter key ends a paragraph and starts a new one.

### **Cursor keys**

Navigation keys or cursor keys include a variety of keys which move the cursor to different positions on the screen. Arrow keys are programmed to move the cursor in a specified direction; page scroll keys, such as the Page Up and Page Down keys, scroll the page up and down. The Home key is used to return the cursor to the beginning of the line where the cursor is located; the End key puts the cursor at the end of the line. The Tab key advances the cursor to the next tab stop. The Insert key is mainly used to switch between overwrite mode, in which the cursor overwrites any text that is present on and after its current location, and insert mode, where the cursor inserts a character at its current position, forcing all characters past it one position further.

The Delete key discards the character ahead of the cursor's position, moving all following characters one position "back" towards the freed place. On many notebook computer keyboards the key labeled Delete (sometimes Delete and Backspace are printed on the same key) serves the same purpose as a Backspace key. The Backspace key deletes the preceding character. Lock keys lock part of a keyboard, depending on the settings selected. The lock keys are scattered around the keyboard. Most styles of keyboards have three LEDs indicating which locks are enabled, in the upper right corner above the numeric pad. The lock keys include Scroll lock, Num lock (which allows the use of the numeric keypad), and Caps lock.

### **System commands**

The SysRq and Print screen commands often share the same key. SysRq was used in earlier computers as a "panic" button to recover from crashes (and it is still used in this sense to some extent by the Linux kernel; see Magic SysRq key). The Print screen command used to capture the entire screen and send it to the printer, but in the present it usually puts a screenshot in the clipboard. The Break key/Pause key no longer has a well-defined purpose. Its origins go

back to teleprinter users, who wanted a key that would temporarily interrupt the communications line. The Break key can be used by software in several different ways, such as to switch between multiple login sessions, to terminate a program, or to interrupt a modem connection. In programming, especially old DOS-style BASIC, Pascal and C, Break is used (in conjunction with Ctrl) to stop program execution. In addition to this, Linux and variants, as well as many DOS programs, treat this combination the same as Ctrl+C. On modern keyboards, the break key is usually labeled Pause/Break. In most Windows environments, the key combination Windows key+Pause brings up the system properties. The Escape key (often abbreviated Esc) is used to initiate an escape sequence. As most computer users no longer are concerned with the details of controlling their computer's peripherals, the task for which the escape sequences were originally designed, the escape key was appropriated by application programmers, most often to "escape" or back out of a mistaken command. This use continues today in Microsoft Windows's use of escape as a shortcut in dialog boxes for No, Quit, Exit, Cancel, or Abort. A common application today of the Esc key is as a shortcut key for the Stop button in many web browsers. On machines running Microsoft Windows, prior to the implementation of the Windows key on keyboards, the typical practice for invoking the "start" button was to hold down the control key and press escape. This process still works in Windows 2000, XP, Vista, 7, and 8. The Enter key is located: One in the alphanumeric keys and the other one is in the numeric keys. When one worked something on their computer and wanted to do something with their work, pressing the enter key would do the command they ordered. Another function is to create a space for next paragraph. When one typed and finished typing a paragraph and they wanted to have a second paragraph, they could press enter and it would do spacing. Shift key: when one presses shift and a letter, it will capitalize the letter pressed with the shift key. Another use is to type more symbols than appear to be available, for instance the apostrophe key is accompanied with a quotation mark on the top. If one wants to type the quotation mark but pressed that key alone, the symbol that would appear would be the apostrophe. The quotation mark will only appear if both the required key and the Shift key are pressed. The Menu key or Application key is a key found on Windows-oriented computer keyboards. It is

used to launch a context menu with the keyboard rather than with the usual right mouse button. The key's symbol is usually a small icon depicting a cursor hovering above a menu. On some Samsung keyboards the cursor in the icon is not present, showing the menu only. This key was created at the same time as the Windows key. This key is normally used when the right mouse button is not present on the mouse. Some Windows public terminals do not have a Menu key on their keyboard to prevent users from right-clicking (however, in many Windows applications, a similar functionality can be invoked with the Shift+F10 keyboard shortcut).

## **Miscellaneous**

Many, but not all, computer keyboards have a numeric keypad to the right of the alphabetic keyboard which contains numbers, basic mathematical symbols (e.g., addition, subtraction, etc.), and a few function keys.

On Japanese/Korean keyboards, there may be Language input keys for changing the language to use. Some keyboards have power management keys (e.g., power key, sleep key and wake key); Internet keys to access a web browser or E-mail; and/or multimedia keys, such as volume controls or keys that can be programmed by the user to launch a specified software or command like launching a game or minimize all windows.

## **Numeric keys**

When we calculate, we use these numeric keys to type numbers. Symbols concerned with calculations such as addition, subtraction, multiplication and division symbols are located in this group of keys. The enter key in this keys indicate the equal sign.

## **Multiple layouts**

It is possible to install multiple keyboard layouts within an operating system and switch between them, either through features implemented within the OS, or through an external application. Microsoft Windows,<sup>[7]</sup> Linux,<sup>[8]</sup> and Mac<sup>[9]</sup> provide support to add keyboard layouts and choose from them.

## **Layout changing software**

The character code produced by any key press is determined by the keyboard driver software. A key press generates a scancode which is interpreted as an

alphanumeric character or control function. Depending on operating systems, various application programs are available to create, add and switch among keyboard layouts. Many programs are available, some of which are language specific.

The arrangement of symbols of specific language can be customized. An existing keyboard layout can be edited, and a new layout can be created using this type of software.

For example, Ukelele for Mac,<sup>[10]</sup> The Microsoft Keyboard Layout Creator<sup>[11]</sup> and open-source Avro Keyboard for Windows provide the ability to customize the keyboard layout as desired.

## Alternative text-entering methods

Optical character recognition (OCR) is preferable to rekeying for converting existing text that is already written down but not in machine-readable format (for example, a Linotype-composed book from the 1940s). In other words, to convert the text from an image to editable text (that is, a string of character codes), a person could re-type it, or a computer could look at the image and deduce what each character is. OCR technology has already reached an impressive state (for example, Google Book Search) and promises more for the future.

Speech recognition converts speech into machine-readable text (that is, a string of character codes). This technology has also reached an advanced state and is implemented in various software products. For certain uses (e.g., transcription of medical or legal dictation; journalism; writing essays or novels) speech recognition is starting to replace the keyboard. However, the lack of privacy when issuing voice commands and dictation makes this kind of input unsuitable for many environments.

Pointing devices can be used to enter text or characters in contexts where using a physical keyboard would be inappropriate or impossible. These accessories typically present characters on a display, in a layout that provides fast access to the more frequently used characters or character combinations. Popular examples of this kind of input are Graffiti, Dasher and on-screen virtual keyboards.

## Other issues

### **Keystroke logging**

Unencrypted wireless bluetooth keyboards are known to be vulnerable to signal theft by placing a covert listening devices in the same room as the keyboard to sniff and record bluetooth packets for the purpose of logging keys typed by the user. Microsoft wireless keyboards 2011 and earlier have documented to have this vulnerability.

Keystroke logging (often called keylogging) is a method of capturing and recording user keystrokes. While it is used legally to measure employee productivity on certain clerical tasks, or by law enforcement agencies to find out about illegal activities, it is also used by hackers for various illegal or malicious acts. Hackers use keyloggers as a means to obtain passwords or encryption keys and thus bypass other security measures.

Keystroke logging can be achieved by both hardware and software means. Hardware key loggers are attached to the keyboard cable or installed inside standard keyboards. Software keyloggers work on the target computer's operating system and gain unauthorized access to the hardware, hook into the keyboard with functions provided by the OS, or use remote access software to transmit recorded data out of the target computer to a remote location. Some hackers also use wireless keylogger sniffers to collect packets of data being transferred from a wireless keyboard and its receiver, and then they crack the encryption key being used to secure wireless communications between the two devices.

Anti-spyware applications are able to detect many keyloggers and cleanse them. Responsible vendors of monitoring software support detection by anti-spyware programs, thus preventing abuse of the software. Enabling a firewall does not stop keyloggers per se, but can possibly prevent transmission of the logged material over the net if properly configured. Network monitors (also known as reverse-firewalls) can be used to alert the user whenever an application attempts to make a network connection. This gives the user the chance to prevent the keylogger from "phoning home" with his or her typed information. Automatic form-filling programs can prevent keylogging entirely by not using the keyboard at all. Most keyloggers can be fooled by

alternating between typing the login credentials and typing characters somewhere else in the focus window.<sup>[14]</sup>

Keyboards are also known to emit electromagnetic signatures that can be detected using special spying equipment to reconstruct the keys pressed on the keyboard. Neal O'Farrell, executive director of the Identity Theft Council, revealed to InformationWeek that "More than 25 years ago, a couple of former spooks showed me how they could capture a user's ATM PIN, from a van parked across the street, simply by capturing and decoding the electromagnetic signals generated by every keystroke," O'Farrell said. "They could even capture keystrokes from computers in nearby offices, but the technology wasn't sophisticated enough to focus in on any specific computer."

## Text editor

Editors like Leafpad are often included with operating systems as a default helper application for opening text files.

A **text editor** is a type of program used for editing plain text files.

Text editors are often provided with operating systems and software development packages, and can be used to change configuration files, documentation files and programming language source code.

## Plain text files vs. word processor files

There are important differences between plain text files created by a text editor and document files created by word processors such as Microsoft Word or WordPerfect.

- A plain text file uses a character encoding such as UTF-8 or ASCII to represent numbers, letters, and symbols. The only non-printing characters in the file that can be used to format the text are newline, tab, and formfeed. Plain text files are often displayed using a monospace font so horizontal alignment and columnar formatting is sometimes done using space characters.
- Word processor documents are generally stored in a binary format to allow for localization and formatted text, such as boldface, italics and multiple fonts, and to be structured into columns and tables.
- Although they are often viewed with formatting, documents using markup languages are stored in plain text files that contain a combination of human-readable text and markup tags. For example, web pages are plain text with HTML tags to achieve formatting when rendered by a web browser. Many web pages also contain embedded JavaScript that is interpreted by the browser.

Word processors were developed to allow formatting of text for presentation on a printed page, while text produced by text editors is generally used for other purposes, such as input data for a computer program.

When both formats are available, the user must select with care. Saving a plain text file in a word-processor format adds formatting information that can make the text unreadable by a program that expects plain text. Conversely, saving a word-processor document as plain text removes any formatting information.

## Types of text editors

Some text editors are small and simple, while others offer broad and complex functions. For example, Unix and Unix-like operating systems have the pico editor (or a variant), but many also include the Emacs editor. Microsoft Windows systems come with the simple Notepad, though many people—especially programmers—prefer other editors with more features. Under Apple Macintosh's classic Mac OS there was the native SimpleText, which was replaced in Mac OS X by TextEdit, which combines features of a text editor with those typical of a word processor such as rulers, margins and multiple font selection. These features are not available simultaneously, but must be switched by user command, or through the program automatically determining the file type.

Most word processors can read and write files in plain text format, allowing them to open files saved from text editors. Saving these files from a word processor, however, requires ensuring the file is written in plain text format, and that any text encoding or BOM settings won't obscure the file for its intended use. Non-WYSIWYG word processors, such as WordStar, are more easily pressed into service as text editors, and in fact were commonly used as such during the 1980s. The default file format of these word processors often resembles a markup language, with the basic format being plain text and visual formatting achieved using non-printing control characters or escape sequences. Later word processors like Microsoft Word store their files in a binary format and are almost never used to edit plain text files.

Some text editors can edit unusually large files such as log files or an entire dictionary placed in a single file. Simpler text editors may just read files into the computer's main memory. With larger files, this may be a slow process, and the entire file may not fit. Some text editors do not let the user start editing until this read-in is complete. Editing performance also often suffers in nonspecialized editors, with the editor taking seconds or even minutes to respond to keystrokes or navigation commands. By only storing the visible portion of large files in memory, editing performance improves.

Some editors are programmable, meaning they can be customized for specific uses. One motive for customizing is to make a text editor use the commands of another text editor with which the user is more familiar, or to duplicate missing functionality the user has come to depend on. Software developers often use editor customizations tailored to the programming language or development environment they are working in. The programmability of some text editors is limited to enhancing the core editing functionality of the program, but Emacs can be extended far beyond editing text files—for web browsing, reading email, online chat, managing files or playing games. Emacs can even emulate Vi, its rival in the traditional editor wars of Unix culture.<sup>[4][5]</sup>

An important group of programmable editors uses REXX<sup>[6]</sup> as a scripting language. These "orthodox editors" contain a "command line" into which commands<sup>[7]</sup> and (REXX) macros can be typed. Most such editors are derivatives of ISPF/PDF EDIT or of XEDIT, IBM's flagship editor for VM/CMS. Among them are THE, KEDIT, X2, Uni-edit, and SEDIT.

A text editor written or customized for a specific use can determine what the user is editing and assist the user, often by completing programming terms and showing tooltips with relevant documentation. Many text editors for software developers include source code syntax highlighting and automatic indentation to make programs easier to read and write. Programming editors often let the user select the name of an include file, function or variable, then jump to its definition. Some also allow for easy navigation back to the original section of code by storing the initial cursor location or by displaying the requested definition in a popup window or temporary

buffer. Some editors implement this ability themselves, but often an auxiliary utility like `ctags` is used to locate the definitions.

## Typical features

- Find and replace – Text editors provide extensive facilities for searching and replacing text, either on groups of files or interactively. Advanced editors can use regular expressions to search and edit text or code.
- Cut, copy, and paste – most text editors provide methods to duplicate and move text within the file, or between files.
- Text formatting – Text editors often provide basic formatting features like line wrap, auto-indentation, bullet list formatting, comment formatting, syntax highlighting and so on.
- Undo and redo – As with word processors, text editors will provide a way to undo and redo the last edit. Often—especially with older text editors—there is only one level of edit history remembered and successively issuing the undo command will only "toggle" the last change. Modern or more complex editors usually provide a multiple level history such that issuing the undo command repeatedly will revert the document to successively older edits. A separate redo command will cycle the edits "forward" toward the most recent changes. The number of changes remembered depends upon the editor and is often configurable by the user.
- Data transformation – Reading or merging the contents of another text file into the file currently being edited. Some text editors provide a way to insert the output of a command issued to the operating system's shell.
- Ability to handle UTF-8 encoded text.
- Filtering – Some advanced text editors allow the editor to send all or sections of the file being edited to another utility and read the result back into the file in place of the lines being "filtered". This, for example, is useful for sorting a series of lines alphabetically or numerically, doing mathematical computations, and so on.
- Syntax highlighting – contextually highlights source code, markup languages, config files and other text that appears in an organized or predictable format. Editors generally allow users to customize the colors or styles used for each language element. Some text editors also allow users to install and use themes to change the look and feel of the editor's entire user interface.
- Extensibility - a text editor intended for use by programmers must provide some plugin mechanism, or be scriptable, so a programmer can customize the editor with features needed to manage individual software projects, customize functionality or key bindings for specific programming languages or version control systems, or conform to specific coding styles.

## Specialised editors

Some editors include special features and extra functions, for instance,

- Source code editors are text editors with additional functionality to facilitate the production of source code. These often feature user-programmable syntax highlighting and code navigation functions as well as coding tools or keyboard macros similar to an HTML editor (see below).
- Folding editors. This subclass includes so-called "orthodox editors" that are derivatives of Xedit. Editors that implement folding without programming-specific features are usually called outliners (see below).
- IDEs (integrated development environments) are designed to manage and streamline large programming projects. They are usually only used for programming as they contain many features unnecessary for simple text editing.
- World Wide Web authors are offered a variety of HTML editors dedicated to the task of creating web pages. These include: Dreamweaver, KompoZer and E Text Editor. Many offer the option of viewing a work in progress on a built-in HTML rendering engine or standard web browser. Most web development is done in a dynamic programming language such as Ruby or PHP using a source code editor or IDE. The HTML delivered by all but the simplest static web sites is stored as individual template files that are assembled by the software controlling the site and do not compose a complete HTML document.
- Mathematicians, physicists, and computer scientists often produce articles and books using TeX or LaTeX in plain text files. Such documents are often produced by a standard text editor, but some people use specialized TeX editors.
- Outliners. Also called tree-based editors, because they combine a hierarchical outline tree with a text editor. Folding (see above) can be considered a specialized form of outlining.
- Collaborative editors allow multiple users to work on the same document simultaneously from remote locations over a network. The changes made by individual users are tracked and merged into the document automatically to eliminate the possibility of conflicting edits. These editors also typically include an online chat component for discussion among editors.
- Simultaneous editing is a technique in End-user development research to edit all items in a multiple selection. It allows the user to manipulate all the selected items at once through direct manipulation. The Lapis text editor<sup>[8][9]</sup> and the *multi edit*<sup>[10]</sup> plugin for gedit are examples of this technique. The Lapis editor can also create an automatic multiple selection based on an example item.
- Distraction-free editors provide a minimalistic interface with the purpose of isolating the writer from the rest of the applications and operating system, thus being able to focus on the writing without distractions from interface elements like a toolbar or notification area.

Programmable editors can usually be enhanced to perform any or all of these functions, but simpler editors focus on just one, or, like gPHPedit, are targeted at a single programming language.

# Word processor

A **word processor** is an electric or electronic device, or computer software application, that, as directed by the user, performs *word processing*: the composition, editing, formatting, and sometimes printing of any sort of written material. Word processing can also refer to advanced shorthand techniques, sometimes used in specialized contexts with a specially modified typewriter. The term was coined at IBM's Böblingen, West Germany Laboratory in the 1960s. Typical features of a modern word processor include font application, spell checking, grammar checking, a built-in thesaurus, automatic text correction, Web integration, and HTML exporting, among others. In its simplest form, a word processor is little more than a large Expensive Typewriter-like machine that makes correcting mistakes easy.

The word processor was a stand-alone office machine in the 1960s, combining the keyboard text-entry and printing functions of an electric typewriter, with a recording unit, either tape or floppy disk (as used by the Wang machine), and a bank of relays to perform basic formatting. Soon the word processor had a dedicated computer processor for the editing of text.<sup>[1]</sup> Although features and designs varied among manufacturers and models, and new features were added as technology advanced, word processors typically featured a monochrome display and the ability to save documents on memory cards or diskettes. Later models introduced innovations such as spell-checking programs, improved formatting options, and dot-matrix printing.

Word processors are descended from the Friden Flexowriter, which had two punched tape stations and permitted switching from one to the other (thus enabling what was called the "chain" or "form letter", one tape containing names and addresses, and the other the body of the letter to be sent). It did not wrap words, which was begun by IBM's Magnetic Tape Selectric Typewriter (later, Magnetic Card Selectric Typewriter). Word processing was one of the earliest applications for the personal computer in office productivity and was the most popular application on home and personal computers until the World Wide Web rose to prominence in the mid-1990s.

Although the early word processors evolved to use tag-based markup for document formatting, most modern word processors take advantage of a graphical user interface providing some form of what-you-see-is-what-you-get ("WYSIWYG") editing. Most are powerful systems consisting of one or more programs that can produce any arbitrary combination of images, graphics and text, the latter handled with type-setting capability.

Microsoft Word is the most widely used word processing software according to a user tracking system built into the software, Microsoft estimates that roughly half a billion people use the Microsoft Office suite, which includes Word. Many other word processing applications exist, including WordPerfect (which dominated the market from the mid-1980s to early-1990s on computers running Microsoft's MS-DOS operating system, and still (2014) is favored for legal applications) and open source applications OpenOffice.org Writer, LibreOffice Writer, AbiWord, KWord, and LyX. Web-based word processors, such as Office Web Apps or Google Docs, are a relatively new category.

<b>Alignment</b>	Alignment refers to the position of lines in a paragraph in relation to the documents left and right margins; i.e., whether they are left-aligned, centered, right-aligned, or justified (evenly spaced).
<b>Bold</b>	Bold characters appear on the screen in a higher intensity or in a different color than surrounding text. Bold characters on the printed page appear as darker characters or makes them appear "fatter." Bold should be used for emphasis, but like all formatting characteristics, should be used sparingly.
<b>Borders</b>	Borders are boxes that are placed around text, pages, and tables. Borders add emphasis or decoration to the enclosed data, and they can be in any number of formats.

<b>Cell</b>	A cell is the intersection of a row and a column in a table.
<b>Center Alignment</b>	With center alignment, each line of a paragraph is centered between the left and right margins or indents.
<b>Centering</b>	Centering is the placement of a line of text in the center of the screen or page where the left-most and right-most characters in the line are the same distance from the left and right margins.
<b>Clip Art</b>	Clip art consists of pre-designed images that can be placed within a document.
<b>Columns</b>	In a document, columns refers to the formatting of text so that it flows side-by-side on a page like a newspaper.
<b>Drag-and-drop</b>	Drag-and-drop is a feature that allows you to move or copy information without using the Windows Clipboard. To use it, you simply drag a selected item from one location to another. It is best used for moving or copying small items short distances.
<b>Drag-select</b>	Use drag-select to select text. With the I-beam mouse pointer, click before the text you want to select, and drag to the end of the text you want to select. The selected text appears highlighted (with a dark background) and is ready to be changed.
<b>Font</b>	A font is a style and size of type, such as Times New Roman, 12 point, bold. A font is a set of all the characters available in one typeface and size, including uppercase and lowercase letters, punctuation, and numerals
<b>Font Formatting</b>	Font Formatting changes the appearance of the text. Font formatting includes enhancements such as font style (bolding, centering, and underlining), point size (12 pt), and font typeface (Times New Roman, Arial, and Courier).
<b>Footer</b>	A footer is the contents of an area located within the bottom margin of a page
<b>Formulas</b>	Word allows you to perform simple calculations that follow the syntax of Excel formulas. If you need to perform more complex calculations, you can also insert an Excel worksheet into Word.
<b>Frame</b>	A frame is a container for text and graphics that can be placed anywhere within a document, including the margins, and which forces existing text to wrap around it.
<b>Header</b>	A header is the contents of an area located within the top margin of a page.
<b>Inline Picture</b>	Use an inline picture when you want the picture to be connected to the text around it, so that when you insert or remove any text in the document, the picture moves with its text. To define a picture as an inline picture, you turn off the Float over text option.
<b>Italic</b>	Italic characters appear on the screen slightly tilted to the right. Italics is usually used to provide special emphasis to text.
<b>Justification</b>	Justification determines how lines and characters within those lines are printed. With full justification, all lines start at the left margin and end at the right margin.

<b>Line Spacing</b>	Line spacing refers to the number of lines used by each line of text. In single-line spacing, each line of text is followed by another line of text, and there are no blank lines in between. In double-line spacing, each line of text is followed by a blank line.
<b>Margin</b>	The margin is the amount of blank space, usually measured in inches or characters, above and below and to the right and left of the main body of a document.
<b>Margins</b>	Margins are the areas that border the printed portion of a page along its top, sides, and bottom.
<b>Merge Cells</b>	Use the Merge Cells command on the Table menu to combine selected cells in a row. This results in a single cell with the combined width of the original cells.
<b>Page Layout View</b>	Page Layout View shows the document's margins, headers and footers, frames, and other elements, thus providing a more accurate representation of what a document will look like when it is printed.
<b>Pop-up Window</b>	When you click a dotted-line hot spot, a separate window "pops up" on your screen. When you are done reading the information in the pop-up window, you can click anywhere to close it.
<b>Print Preview</b>	Print Preview in Word allows you to see how your document will look on the page before it is printed.
<b>Rows</b>	In a table, a row is a horizontal series of cells.
<b>Rulers</b>	The rulers are located below the formatting toolbar and on the left side of the screen. They are used to place and show tabs, margins, indents, and cell dimensions.
<b>Scaling</b>	Scaling describes the resizing of a graphic proportionally by width and height.
<b>Shading</b>	Shading is a Word option that lets you apply varying degrees of grayness as well as patterns to the backgrounds of selected text.
<b>Spacing</b>	Spacing refers to the space above and below a paragraph. Spacing is measured in points.
<b>Tab</b>	Tab is the key you press to move the insertion point to the next indicated tab stop. Word automatically sets tabs every half inch.
<b>Tool</b>	A tool is a shortcut button, usually shown on a bar near the top of a window, that provides quick access to a commonly used command.
<b>Wizard</b>	A wizard is a feature of Microsoft applications that lets you work through a series of dialog boxes to help you complete a task.
<b>Wrapping Text</b>	Wrapping text is an automatic feature of Word. When you reach the end of a line while typing, Word forces the text to break onto a new line.