

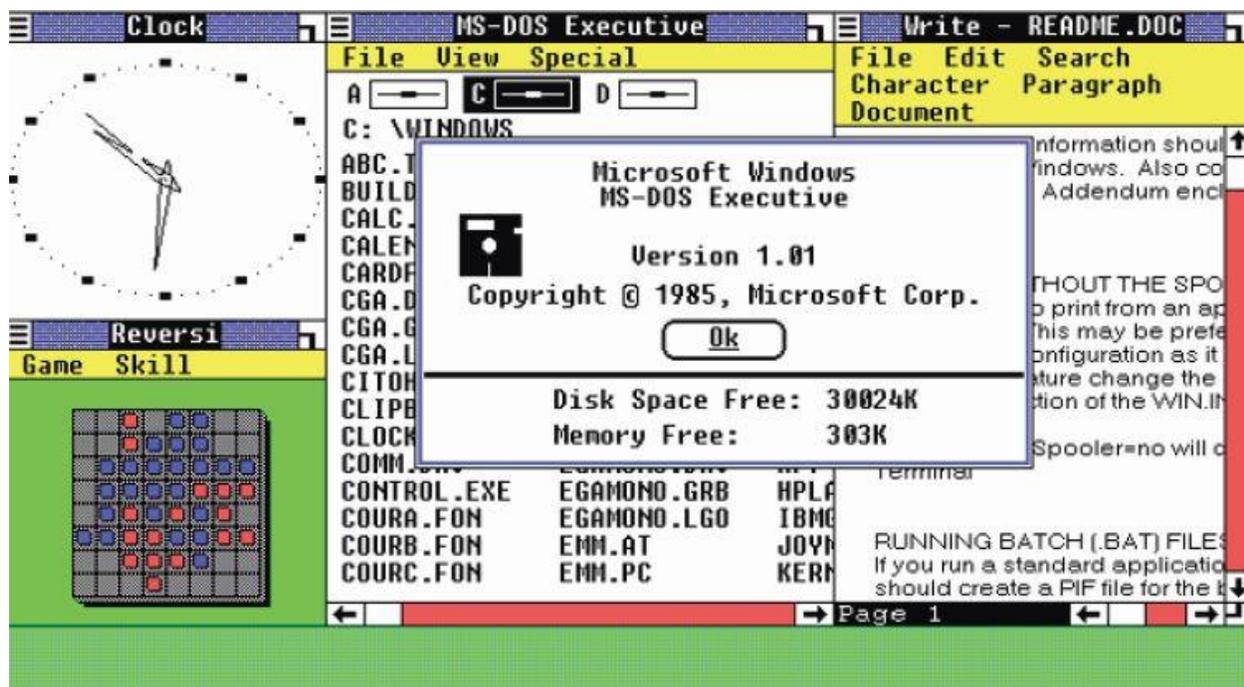
From Windows 1 to Windows 10

30 years of Windows evolution

Microsoft Windows has seen nine major versions since its first release in 1985. Over 29 years later, Windows looks very different but somehow familiar with elements that have survived the test of time, increases in computing power and – most recently – a shift from the keyboard and mouse to the touchscreen.

Here's a brief look at the history of Windows, from its birth at the hands of Bill Gates with Windows 1 to the latest arrival under new Microsoft chief executive Satya Nadella.

Windows 1



This is where it all started for Windows. The original Windows 1 was released in November 1985 and was Microsoft's first true attempt at a graphical user interface in 16-bit. Development was spearheaded by Microsoft founder Bill Gates and ran on top of MS-DOS, (Microsoft Disk Operating System) which relied on command-line input.

A little history here, the original DOS was written by a company called Seattle Computer Products who had created 86-DOS (86 Disk Operating System) which they licensed to Microsoft for \$25,000 in 1980 and eventually sold to them for \$50,000 in 1981. Microsoft in 1980 signed a contract with IBM to provide a PCDOS (personal computer disk operating system) based on the 86-DOS for the new line of personal computers IBM was producing .

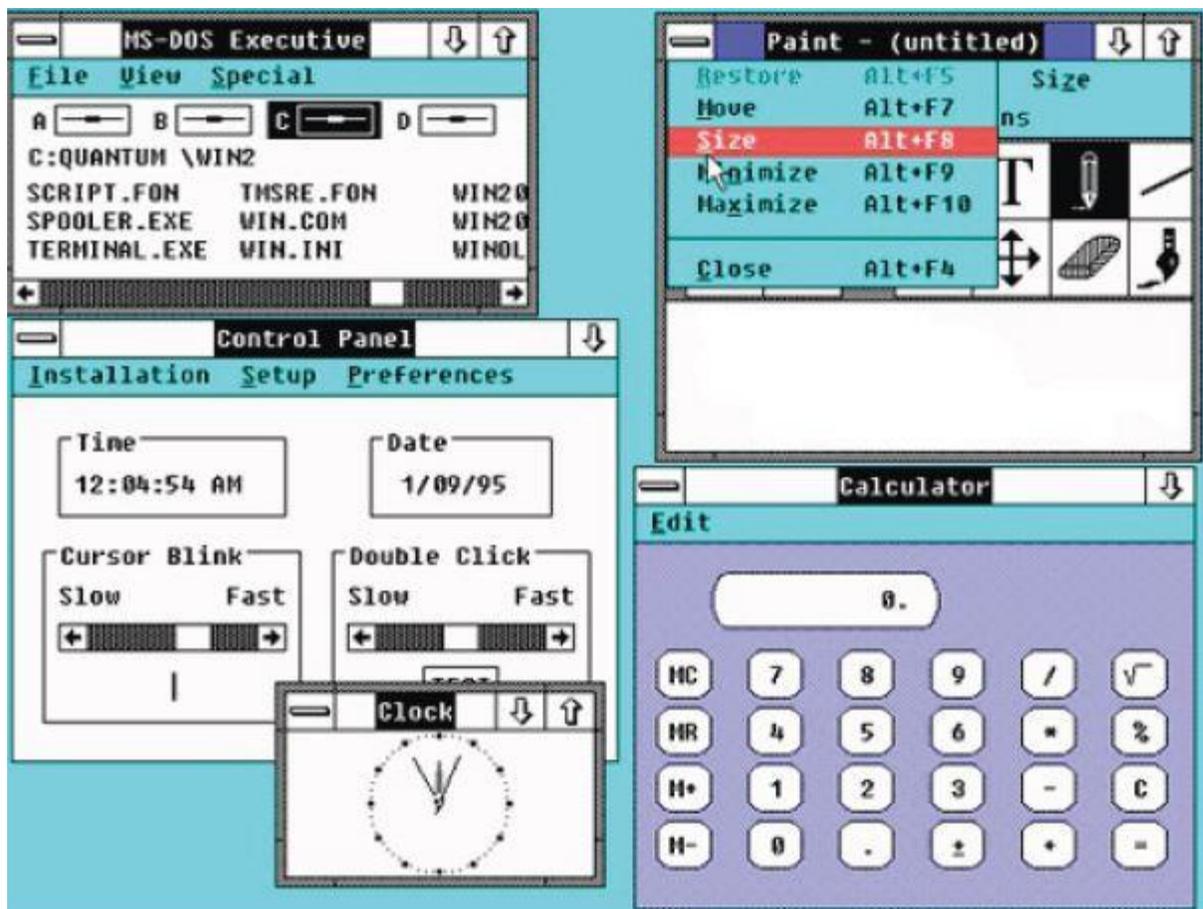
PC DOS version 1.0, which supported only floppy disks, was shipped when IBM first released their PC in August 1981. Microsoft then substantially rewrote the software to support subdirectories and hard disks; version 2.0 was released with the IBM PC-XT in March of 1983.

Microsoft retained the rights to the operating system and licensed it to other computer manufacturers, calling it MS-DOS. SCP later sued Microsoft, claiming that they had concealed its relationship with IBM in order to purchase the operating system cheaply. SCP ultimately settled out of court for almost \$1M!

The original Windows 1 was released in November 1985 and was Microsoft's first true attempt at a graphical user interface in 16-bit. Development was overseen by Microsoft founder Bill Gates and ran on top of MS-DOS, which relied on command-line input.

It was notable because it relied heavily on use of a mouse before the mouse was a common computer input device. To help users become familiar with this odd input system, Microsoft included a game, Reversi (visible in the screenshot) that relied on mouse control, not the keyboard, to get people used to moving the mouse around and clicking onscreen elements.

Windows 2



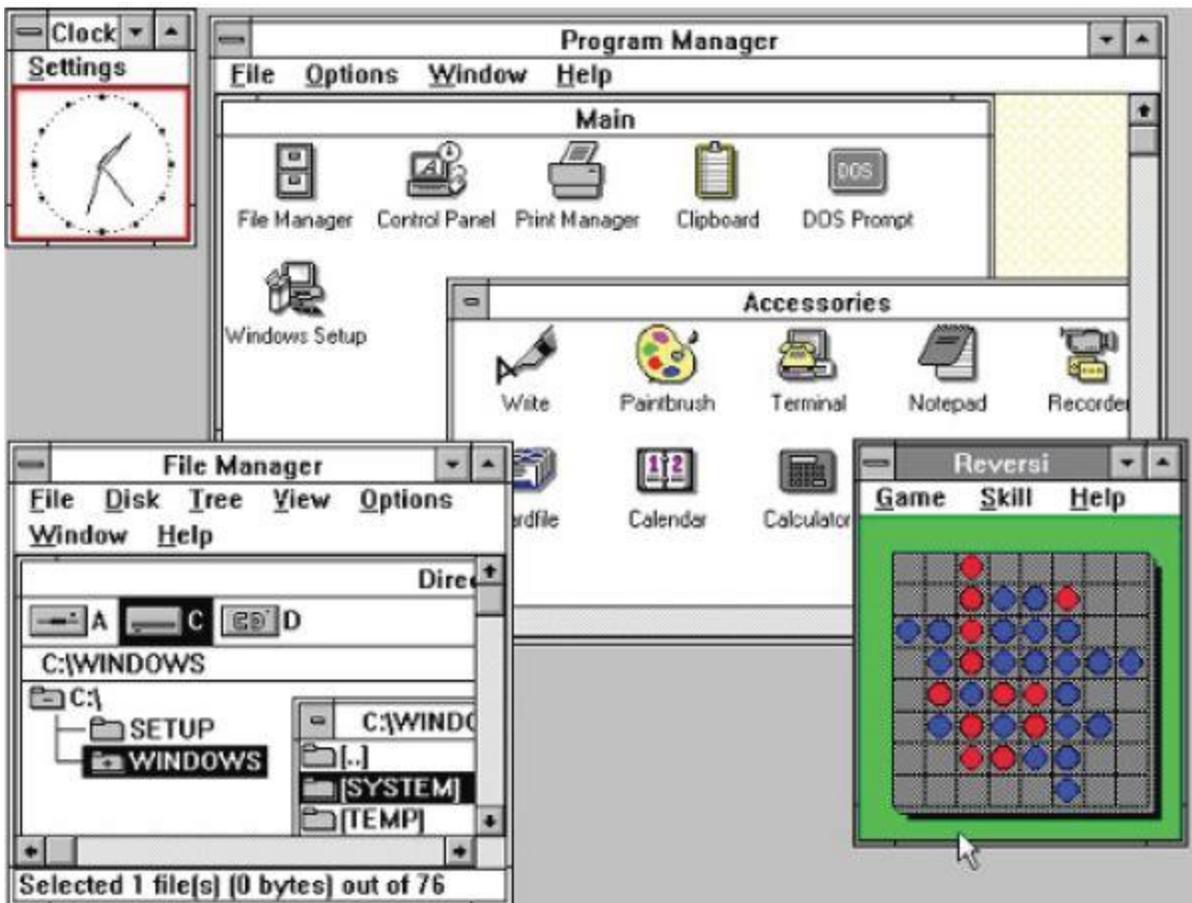
Windows 2, with overlapping windows.

Two years after the release of Windows 1, Microsoft's Windows 2 replaced it in December 1987. The big innovation for Windows 2 was that windows could overlap each other, and it introduced the ability to minimize or maximize windows instead of "iconizing" or "zooming".

The control panel, where various system settings and configuration options were collected together in one place, was introduced in Windows 2 and survives to this day.

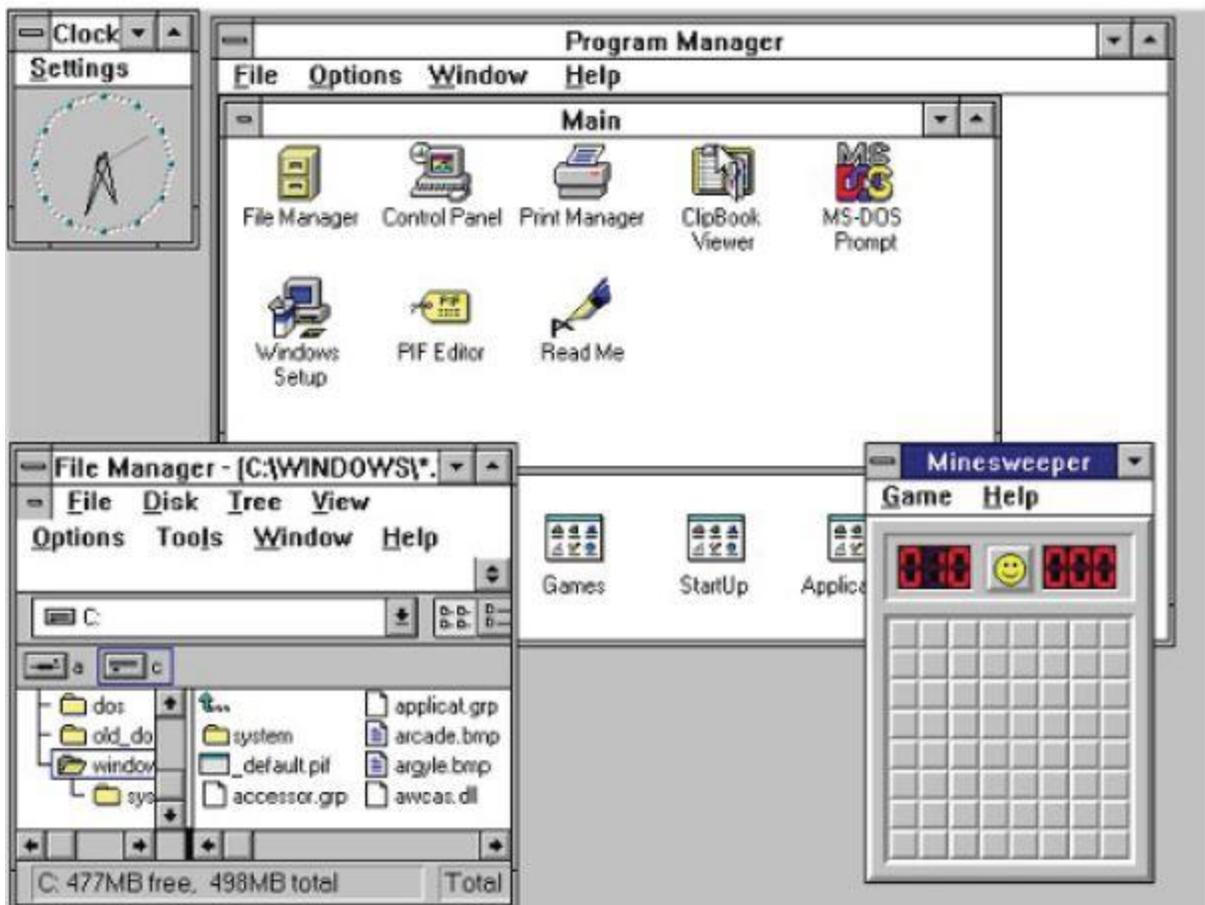
Microsoft Word and Excel also made their first appearances running on Windows 2.

Windows 3



The first Windows that required a hard drive launched in 1990. Windows 3 was the first version to see more widespread success and be considered a challenger to Apple's Macintosh and the Commodore Amiga graphical user interfaces, coming pre-installed on computers from PC-compatible manufacturers including Zenith Data Systems. Windows 3 introduced the ability to run MS-DOS programs in windows, which brought multitasking to legacy programs, and supported 256 colors bringing a more modern, colorful look to the interface.

More important - at least to the sum total of human time wasted - it introduced the card-moving time sink (and mouse use trainer) **Solitaire**. (How much time have you wasted on this?)



Windows 3.1

Windows 3.1 released in 1992 is notable because it introduced TrueType fonts making Windows a viable publishing platform for the first time. Minesweeper also made its first appearance.(See picture above).

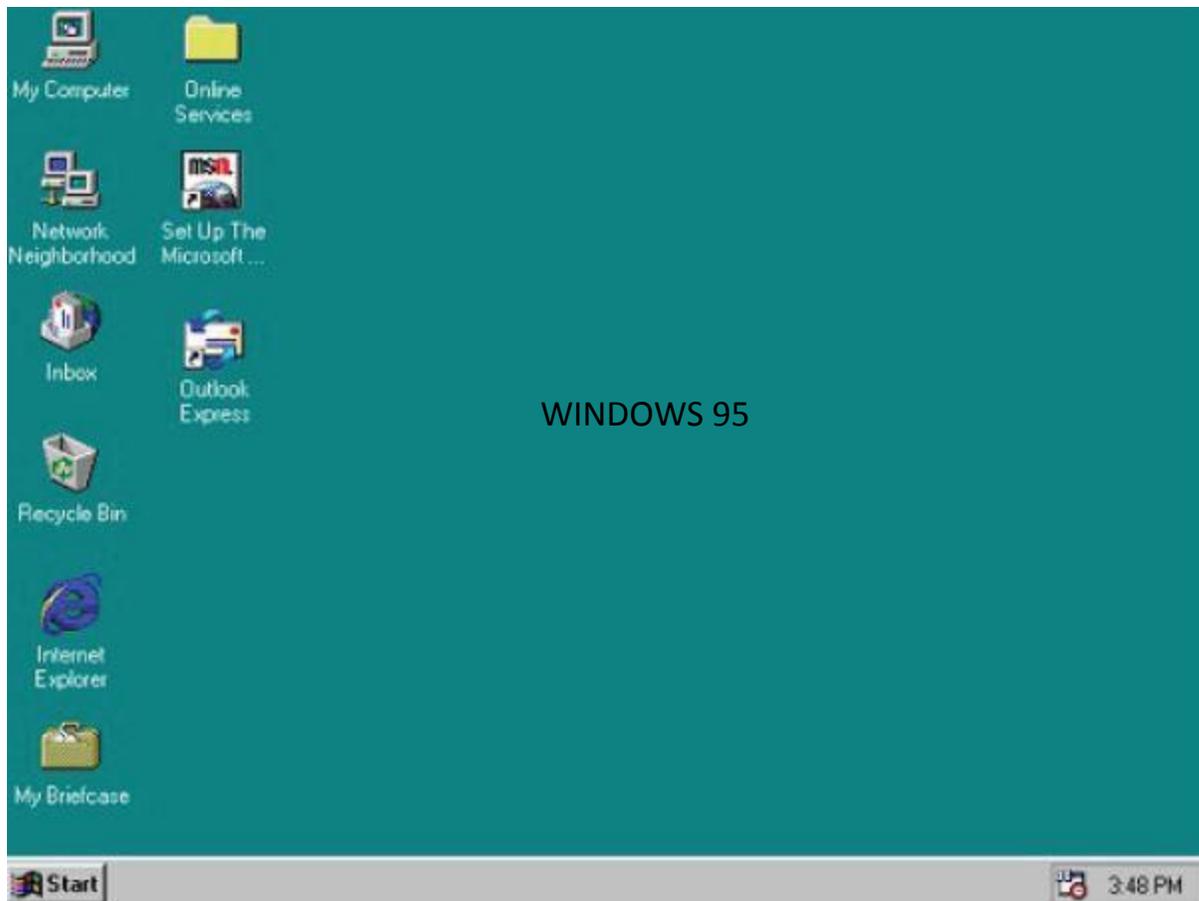
Windows 3.1 required 1MB of RAM to run and allowed supported MS-DOS programs to be controlled with a mouse for the first time. Windows 3.1 was also the first Windows to be distributed on a CD-ROM; although once installed on a hard drive it only took up 10 to 15MB, (a CD can typically store up to 700MB).

Windows 95

As the name implies, Windows 95 arrived in August 1995 and with it brought the first ever Start button and Start menu (launched with a gigantic advertising campaign that used the Rolling Stones' "Start Me Up" , and a couple of months later Friends stars Jennifer Aniston and Matthew Perry . Could it be any more up-to-date?)

It also introduced the concept of "plug and play" – connect a peripheral (such as a storage device) and the operating system finds the appropriate drivers for it and makes it work. That was the idea; it did not always work in practice!

Windows 95 also introduced a 32-bit environment, the task bar and focused on multitasking. MS-DOS still played



an important role for Windows 95, which required it to run some programs and elements. Internet Explorer also made its debut on Windows 95, but was not installed by default requiring the Windows 95 Plus! pack. Later revisions of Windows 95 included IE by default, as Netscape Navigator and NCSA Mosaic were popular at the time.

Windows 98

Released in June 1998, Windows 98 built on Windows 95 and brought with it IE 4, Outlook Express, Windows Address Book, Microsoft Chat and NetShow Player, which was replaced by Windows Media Player 6.2 in Windows 98 Second Edition in 1999.

Windows 98 introduced the back and forward navigation buttons and the address bar in Windows Explorer, amongst other things.

One of the biggest changes was the introduction of the Windows Driver Model for computer components and accessories – one driver to support all future versions of Windows.

USB support was much improved in Windows 98 and led to its widespread adoption, including USB hubs and USB mice.



Windows ME

Dubbed “one to skip” by the media it is considered a low point in the Windows series by many– at least, until they saw Windows Vista – Windows Millennium Edition was the last Windows to be based on MS-DOS, and the last in the Windows 9x line.

Released in September 2000, it was the consumer-aimed operating system twinned with Windows 2000 aimed at the enterprise market. It introduced some important concepts to consumers, including more automated system recovery tools.

IE 5.5, Windows Media Player 7 and Windows Movie Maker all made their appearance for the first time.

Autocomplete also appeared in Windows Explorer, but the operating system was notorious for being buggy, failing to install properly and being generally poor.

Fortunately for Microsoft Windows XP followed this dud and restored their reputation (see following).



Windows 2000



burning, autoplay from CDs and other media, plus various automated update and recovery tools, that unlike Windows ME actually worked.

Windows XP was the longest running Microsoft operating system, seeing three major updates and support up until April 2014 – 13 years from its original release date. Windows XP was still used on an estimated 430 million PCs when it was discontinued.

Its biggest problem was security: though it had a firewall built in, it was turned off by default. Windows XP's huge popularity turned out to be a boon for hackers and criminals, who exploited its flaws, especially in Internet Explorer, mercilessly - leading Bill Gates to initiate a "Trustworthy Computing" initiative and the subsequent issuance of Service Pack updates that hardened XP against attack substantially.

Windows XP stayed the course for close to six years before being replaced by Windows Vista in January 2007.

Windows Vista



Vista updated the look and feel of Windows with more focus on transparent elements, search and security. Its development, under the codename "Longhorn", was troubled, with ambitious elements abandoned in order to get it into production.

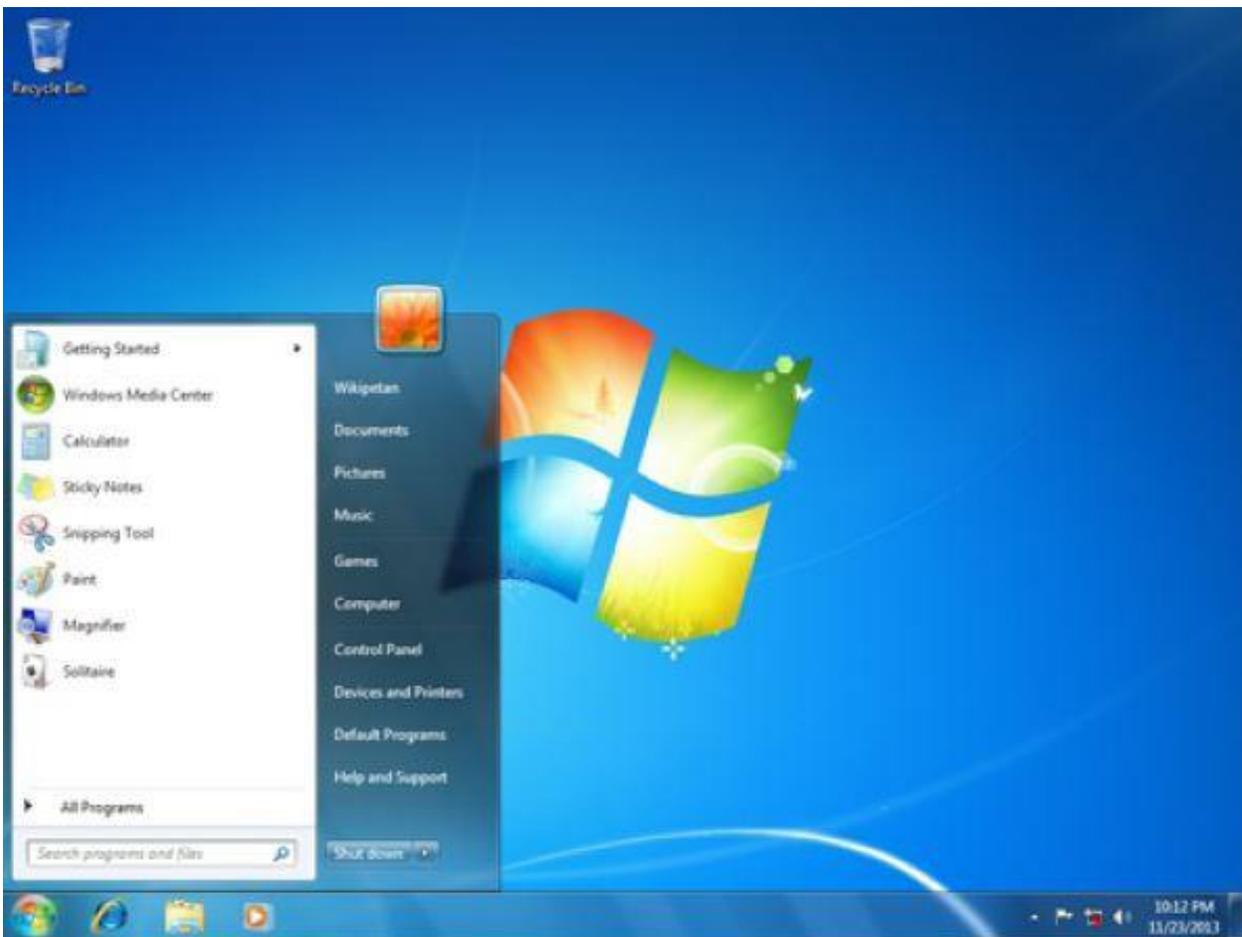
It was buggy, burdened the user with hundreds of requests for app permissions under "User Account Control" – the outcome of the Trustworthy Computing initiative, which now meant that users had to approve or

disapprove attempts by programs to make various changes. The problem with UAC was that it led to complacency, with people clicking “yes” to almost anything - taking security back to the pre-UAC state. It also ran slowly on older computers despite them being deemed as “Vista Ready” - a labelling that saw it sued because not all versions of Vista could run on PCs with that label.

PC gamers saw a boost from Vista’s inclusion of Microsoft’s DirectX 10 technology.

Windows Media Player 11 and IE 7 debuted, along with Windows Defender an anti-spyware programme. Vista also included speech recognition, Windows DVD Maker and Photo Gallery, as well as being the first Windows to be distributed on DVD. Later a version of Windows Vista without Windows Media Player was created in response to antitrust investigations.

Windows 7



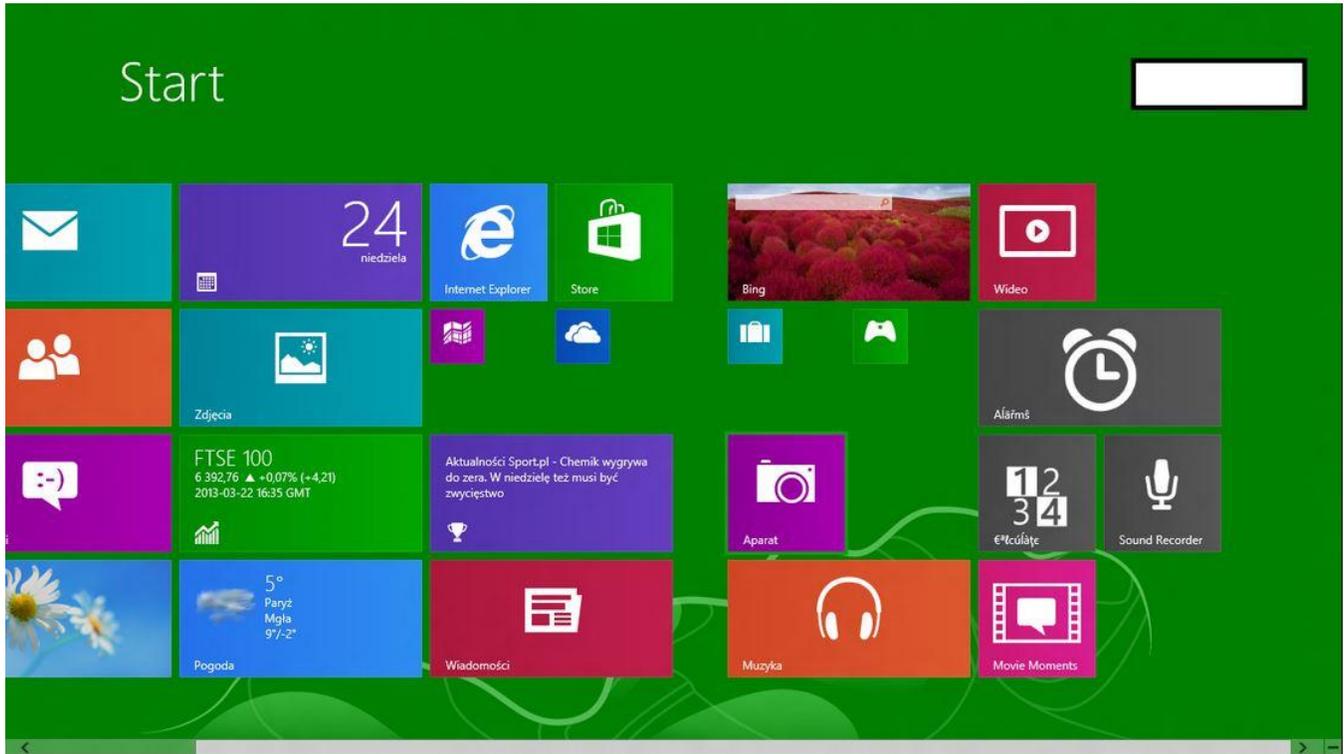
Considered by many as what Windows Vista should have been, Windows 7 was first released in October 2009. It was intended to fix all the problems and criticism faced by Vista, with slight tweaks to its appearance and a concentration on user-friendly features and less “dialogue box overload”.

It was faster, more stable and easier to use, becoming the operating system most users and business would upgrade to from Windows XP, forgoing Vista entirely.

Handwriting recognition debuted in 7, as did the ability to “snap” windows to the tops or sides of the screen, allowing faster more automatic window resizing.

Windows 7 saw Microsoft hit in Europe with antitrust investigations over the pre-installing of IE, which led to a browser ballot screen being shown to new users allowing them to choose, which browser to install on first boot.

Windows 8



Windows 8 focused more on touch than a keyboard and mouse and this did not go down well with many users.

Released in October 2012, Windows 8 was Microsoft’s most radical overhaul of the Windows interface, ditching the Start button and Start menu in favor of a more touch-friendly Start screen.

The new tiled interface saw program icons and live tiles, which displayed at-a-glance information normally associated with “widgets”, replace the lists of programs and icons. A desktop was still included, which resembled Windows 7.

Windows 8 was faster than previous versions of Windows and included support for the new, much faster USB 3.0 devices. The Windows Store, which offers universal Windows apps that run in a full-screen mode only, was introduced. Programs could still be installed from third parties like other iterations of Windows, but they could only access the traditional desktop interface of Windows.

Many did not welcome this radical overhaul. Microsoft attempted to tread a fine line between touchscreen support and desktop users, but ultimately desktop users wanting to control Windows with a traditional mouse and keyboard and not a touchscreen felt Windows 8 was a step back. There were also too few touchscreens in

use, or on offer, to make its touch-oriented interface useful or even necessary - despite the parallel rise of tablets such as the iPad, and smartphones, which had begun outselling PCs by the end of 2010.

Windows RT, which runs on ARM-based processors traditionally found in smartphones and non-PC tablets, was introduced at the same time as Windows 8 with the Microsoft Surface tablet. It looked and felt like Windows 8, but could not run traditional Windows applications, instead solely relying on the Windows Store for third-party applications.

Windows 8.1



A free point release to Windows 8 introduced in October 2013, Windows 8.1 marked a shift towards yearly software updates from Microsoft and included the first step in Microsoft's U-turn around its new visual interface.

Windows 8.1 re-introduced the Start button, which brought up the Start screen from the desktop view of Windows 8.1. Users can also choose to boot directly into the desktop of Windows 8.1, which was more suitable for those using a desktop computer with a mouse and keyboard than the touch-focused Start screen.

This version has appeased many users who were unhappy without the traditional start button and did not have a touch screen but users of Windows 7 have stayed away from versions 8 and 8.1 in droves.

Microsoft has indicated the next version will be Windows 10. There has been a lot of speculation as to why there is no version 9 but that is all it is, speculation.

Windows 10



Announced on 30 September 2014, Windows 10 has only been released as a test version for select users to try. The “technical preview” is very much still a work in progress.

Windows 10 represents another step in Microsoft’s U-turn, bringing back the Start menu and more balance to traditional desktop computer users.

Some interesting features include the ability to switch between a keyboard and mouse mode and a tablet mode, for those computers like the Surface Pro 3 with a detachable keyboard.

Windows 10 – despite being the ninth version of Windows – is designed to unify all Windows platforms across multiple devices, including Windows Phone and tablets, with universal apps that can be downloaded from the Windows Store and run on all Windows devices. This is a big step forward in unifying all devices under the Windows platform and in direct contrast to the Apple way of having separate operating systems for computers and tablets and phones.

Windows 10 will not be available until 2015; an announcement is likely after Microsoft’s Build developer conference in April, so for now Windows 8.1 is the latest version of Windows.

Thanks to Wikipedia for some of the screen shots shown and to Sam Gibbs for inspiration.