

# Timeline

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| 1834 –              | Charles Babbage requests (and is denied) funding from the British government to build his Analytical Engine.   |
| 1843 –              | Ada Lovelace, as part of a lengthy essay about the Analytical Engine, writes an algorithm that is credited as the first computer program.  |
| 1860s –             | The first telegraph networks are established in Great Britain.   |
| 1874 –              | Remington sells the first commercially successful typewriters, invented by Christopher Sholes.   |
| 1889 –              | Herman Hollerith creates punched card machines to tabulate the 1890 U.S. Census.   |
| 1924 –              | The Computing-Tabulating-Recording Company is renamed “International Business Machines” (IBM).   |
| 1931 –              | Vannevar Bush invents the Differential Analyzer, a mechanical computer for solving differential equations.   |
| 1936 –              | In his paper <i>On Computable Numbers, with an Application to the Entscheidungsproblem</i> , Alan Turing describes a theoretical model of computation that is still studied today. |
| 1941 –              | In Germany, Konrad Zuse constructs the Z3 machine, an early electronic digital computer.   |
| 1942 –              | John Atanasoff and Clifford Berry invent a device later known as the Atanasoff-Berry Computer (ABC).   |
| April 9, 1943 –     | John Mauchly and J. Presper Eckert receive approval from the U.S. Army to build the ENIAC, the world’s first electronic, programmable, general-purpose computer.                   |
| September 2, 1945 – | Japan signs a peace treaty, formally ending World War II.  |
| February 15, 1946 – | The ENIAC is formally unveiled with much publicity.  |
| 1947 –              | The transistor is invented, allowing computers to become smaller and more reliable.  |
| December 1948 –     | The first commercial computer company, the Eckert-Mauchly Computer Corporation, is incorporated.   |
| November 4, 1952 –  | Dwight D. Eisenhower’s landslide victory in the 1952 U.S. presidential election is predicted on live television by a UNIVAC computer.  |
| 1953 –              | The first installation of “core memory” is done on the Whirlwind computer.   |
| April 1957 –        | The first version of FORTRAN, the first widely used high-level programming language, is released.  |
| 1960 –              | COBOL, a programming language intended for business applications, is released.   |
| November 1961 –     | CTSS, the first timesharing system, is installed at MIT.   |
| 1963 –              | SAGE, the first real-time computer air defense surveillance system, is fully deployed at an estimated cost of \$8 billion.   |
| 1963 –              | Ted Nelson coins the term <i>hypertext</i> .   |

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| <b>April 7, 1964 –</b>      | The IBM System/360 computer family is announced.  |
| <b>May 1, 1964 –</b>        | The BASIC programming language is invented by John Kemeny and Thomas Kurtz at Dartmouth College.  |
| <b>1964 –</b>               | After ten years of development, SABRE, the first computer-based airline reservations system, becomes fully operational.   |
| <b>March 22, 1965 –</b>     | The highly influential DEC PDP-8 minicomputer is announced.   |
| <b>October 1969 –</b>       | The Arpanet, the forerunner of the Internet, is created with four nodes: the University of California Los Angeles, Stanford Research Institute, the University of California Santa Barbara, and the University of Utah.     |
| <b>January 1970 –</b>       | The PDP-11 is announced. It becomes the best-selling minicomputer of all time and lays the architectural foundation for personal computers.   |
| <b>1970 –</b>               | Ken Thompson and Dennis Ritchie create the first version of the Unix operating system at AT&T Bell Labs.  |
| <b>1972 –</b>               | The C programming language is created at AT&T Bell Labs, as the implementation language for Unix.   |
| <b>October 19, 1973 –</b>   | Judge Earl Larson invalidates the ENIAC patent, placing the invention of the computer in the public domain.   |
| <b>January 1975 –</b>       | The Altair 8800 personal computer is featured on the cover of <i>Popular Electronics</i> magazine, sparking the interest of Harvard student Bill Gates.   |
| <b>July 1975 –</b>          | Microsoft releases its first product, a version of BASIC for the Altair 8800.   |
| <b>1977 –</b>               | Three highly influential home computers are released: the Apple II, Commodore PET, and TRS-80. In contrast to many other microcomputers of that time, these three required very little configuration to get up and running. |
| <b>December 1979 –</b>      | Steve Jobs visits Xerox PARC and learns about the Graphical User Interface (GUI) invented there.  |
| <b>July 27, 1980 –</b>      | Microsoft purchases 86-DOS from Seattle Computer Products for \$50,000, which became the basis for MS-DOS.  |
| <b>April 27, 1981 –</b>     | In an attempt to commercialize the GUI, Xerox announces the Star computer.  |
| <b>August 12, 1981 –</b>    | IBM announces the IBM Personal Computer, made mostly of third-party hardware and software.  |
| <b>1982 –</b>               | The French government distributes Minitel terminals to thousands of families and businesses, thus creating the first widespread national online service.  |
| <b>August 1982 –</b>        | The Commodore 64, the best-selling personal computer of all time, is released.  |
| <b>November 1982 –</b>      | Compaq reverse-engineers the IBM BIOS. Later, in March 1983, Compaq releases a 100 percent compatible PC Clone.   |
| <b>January 24, 1984 –</b>   | Apple releases the Macintosh computer, introducing the GUI to a much wider audience than before.  |
| <b>September 17, 1985 –</b> | Steve Jobs is forced out of Apple. He goes on to found a new computer company, NeXT.  |
| <b>November 20, 1985 –</b>  | Microsoft releases version 1.0 of the Windows operating system.   |
| <b>May 22, 1990 –</b>       | Microsoft announces version 3.0 of the Windows operating system. This is the first release of Windows that was considered good enough to be a competitive threat to the Macintosh.  |
| <b>December 1990 –</b>      | Tim Berners-Lee, inventor of the World Wide Web, creates the world's first website, info.cern.ch, at CERN, in Switzerland.  |

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| <b>September 17, 1991</b> – | Linus Torvalds creates the first version of his open-source Unix clone, Linux. It is soon adopted as the kernel for the GNU operating system.   |
| <b>April 22, 1993</b> –     | Version 1.0 of Mosaic, the first widely used graphical web browser, is released.  |
| <b>January 1994</b> –       | Jerry Yang and David Filo form Yahoo, a popular online directory of web pages.  |
| <b>July 5, 1994</b> –       | Jeff Bezos founds Amazon.com as an online bookstore.  |
| <b>January 23, 1996</b> –   | The Java programming language is released. It is rapidly adopted by universities for teaching computer science.                                 |
| <b>February 7, 1997</b> –   | Apple acquires NeXT, bringing Steve Jobs back to the company he founded.  |
| <b>March 10, 1997</b> –     | Announcement of the Palm Pilot, an influential Personal Digital Assistant (PDA) that supports a simple form of handwriting recognition          |
| <b>August 15, 1998</b> –    | Apple releases the first generation of iMac computer.   |
| <b>September 4, 1998</b> –  | Google is founded by Larry Page and Sergey Brin.  |
| <b>April 3, 2000</b> –      | Judge Thomas P. Jackson declares Microsoft a monopoly and orders it to be split into two companies. This order was later appealed and softened. |
| <b>October 23, 2001</b> –   | Apple releases the iPod, a popular portable music player.   |
| <b>July 2002</b> –          | Amazon launches Amazon Web Services (AWS), one of the first providers of <i>cloud computing</i> .   |
| <b>February 4, 2004</b> –   | Mark Zuckerberg launches Facebook from his dorm room at Harvard.  |
| <b>January 9, 2007</b> –    | Apple releases the iPhone.  |
| <b>September 2008</b> –     | The first commercial Android-based smartphone, the HTC Dream, is released.  |
| <b>October 31, 2008</b> –   | Satoshi Nakamoto publishes a paper describing blockchain and bitcoin.   |
| <b>January 20, 2010</b> –   | Apple releases the iPad, quickly establishing a mass market for large-screen handheld “tablet” computers.                                       |
| <b>June 2012</b> –          | Tesla announces the Model S electric car, which has been described by CEO Elon Musk as “a very sophisticated computer on wheels.”               |
| <b>March 2014</b> –         | Facebook acquires Oculus, a maker of virtual reality (VR) headsets.   |
| <b>2020</b> –               | The COVID-19 pandemic forces many universities and workplaces to use remote communication technology such as Zoom and Microsoft Teams.          |
| <b>April 5, 2021</b> –      | The U.S. Supreme Court rules that Google’s use of the Java API in the Android operating system does not violate copyright.                      |