The **iPhone** is a line of <u>smartphones</u> developed and marketed by <u>Apple Inc.</u> that run <u>iOS</u>, the company's own <u>mobile operating system</u>. The <u>first-generation iPhone</u> was announced by then–Apple CEO and co-founder <u>Steve Jobs</u> on January 9, 2007, at <u>Macworld 2007</u>, and launched later that year. Since then, Apple has annually released new <u>iPhone</u> <u>models</u> and <u>iOS versions</u>; the most recent models being the <u>iPhone 17</u>, alongside the higher-end <u>iPhone 17 Pro</u> and 17 Pro Max, and the new <u>iPhone Air</u> (which replaced the <u>iPhone 16</u> Plus). As of July 2025, more than 3 billion iPhones have been sold, with Apple being the <u>largest vendor of mobile phones since 2023</u>.

Throughout its history, the iPhone has gained larger, higher-resolution displays, video-recording functionality, waterproofing, and many accessibility features. Up to the iPhone and 8 Plus, iPhones had a single button on the front panel, with the iPhone 5s and later integrating a Touch ID fingerprint sensor. Since the iPhone X, [note 2] iPhone models have switched to a nearly bezel-less front screen design with Face ID facial recognition in place of Touch ID for authentication, and increased use of gestures in place of the home button for navigation.

The iPhone, which operates using Apple's <u>proprietary</u> iOS software, is one of the two major smartphone <u>platforms</u> in the world, alongside <u>Android</u>. The first-generation iPhone was described by Steve Jobs as a "revolution" for the mobile phone industry. The iPhone has been credited with popularizing the <u>slate</u> smartphone form factor, and with creating a large market for smartphone apps, or "<u>app economy</u>"; laying the foundation for the <u>boom of the market for mobile devices</u>. In addition to the <u>apps that come pre-installed on iOS</u>, there are nearly 2 million apps available for download from Apple's mobile <u>distribution marketplace</u>, the <u>App Store</u>, as of August 2024.

History

Main article: <u>History of the iPhone</u>

2000s

Development of an <u>Apple</u> smartphone began in 2004, when the company started to gather a team of 1,000 employees led by hardware engineer <u>Tony Fadell</u>, software engineer <u>Scott Forstall</u>, and design officer <u>Jony Ive</u>,^[1] to work on the highly confidential "Project Purple". [2][3]

Then Apple CEO <u>Steve Jobs</u> steered the original focus away from a tablet (which was later revisited in the form of the <u>iPad</u>) towards a phone. [4] Apple created the device during a secretive collaboration with <u>Cingular Wireless</u> (later renamed <u>AT&T Mobility</u>) at an estimated development cost of US\$150 million over thirty months. [5] According to Jobs in

1998, the "i" word in "iMac" (and thereafter "iPod", "iPhone" and "iPad") stands for internet, individual, instruct, inform, and inspire. [6][7]

Apple rejected the "design by committee" approach that had yielded the Motorola ROKR E1, a largely unsuccessful "iTunes phone" made in collaboration with Motorola. Among other deficiencies, the ROKR E1's firmware limited storage to only 100 iTunes songs to avoid competing with Apple's iPod nano. [8][9] Cingular gave Apple the liberty to develop the iPhone's hardware and software in-house, a rare practice at the time, [10][11] and paid Apple a fraction of its monthly service revenue (until the iPhone 3G), [12] in exchange for four years of exclusive U.S. sales, until 2011. [13]

Jobs unveiled the <u>first-generation iPhone</u> to the public on January 9, 2007, at the <u>Macworld</u> 2007 convention at the <u>Moscone Center</u> in San Francisco. ^[14] The iPhone incorporated a 3.5-inch <u>multi-touch</u> display with few hardware buttons, and ran the <u>iPhone</u> OS operating system with a touch-friendly interface, then marketed as a version of <u>Mac OS X.</u> ^[15] It was the first mobile phone to use multi-touch technology. ^[16] The device launched on June 29, 2007, at a starting price of US\$499 in the United States, and required a two-year contract with <u>AT&T.</u> ^[17] The price was reduced by a third after two months. The resulting complaints forced Jobs to issue an apology and offer a partial rebate to <u>early purchasers</u> of the Phone. ^[18]

Worldwide iPhone availability:

iPhone available since its original release

iPhone available since the release of the iPhone 3G

On July 11, 2008, at Apple's <u>Worldwide Developers Conference</u> (WWDC) 2008, Apple announced the <u>iPhone 3G</u>, and expanded its launch-day availability to twenty-two countries, and it was eventually released in 70 countries and territories. [19][20] The iPhone 3G introduced faster <u>3G</u> connectivity, and a lower starting price of US\$199 (with a two-year AT&T contract). [21] It proved commercially popular, overtaking <u>Motorola RAZR V3</u> as the best selling cell phone in the U.S. by the end of 2008. [22] Its successor, the <u>iPhone 3GS</u>, was announced on June 8, 2009, at WWDC 2009, and introduced video recording functionality. [23]

2010s

The original iPhone on display under glass at the January 2007 Macworld show

The <u>iPhone 4</u> was announced on June 7, 2010, at WWDC 2010, and introduced a redesigned body incorporating a <u>stainless steel</u> frame and a rear glass panel.^[24] At release, the iPhone 4 was marketed as the "world's thinnest smartphone"; it uses the <u>Apple</u>

<u>A4</u> processor, being the first iPhone to use an Apple custom-designed chip. It introduced the <u>Retina display</u>, having four times the <u>display resolution</u> of preceding iPhones, and was the highest-resolution smartphone screen at release; [24] a front-facing camera was also introduced, enabling video calling functionality via <u>FaceTime</u>.

Users of the iPhone 4 reported dropped/disconnected telephone calls when holding their phones in a certain way, and this issue was nicknamed "antennagate". [25] In January 2011, as Apple's exclusivity agreement with AT&T was expiring, Verizon announced that they would be carrying the iPhone 4, with a model compatible with Verizon's CDMA network releasing on February 10. [26][27]

The <u>iPhone 4s</u> was announced on October 4, 2011, and introduced the <u>Siri virtual assistant</u>, a dual-core <u>A5</u> processor, and an 8 megapixel camera with <u>1080p</u> video recording functionality. The <u>iPhone 5</u> was announced on September 12, 2012, and introduced a larger 4-inch screen, up from the 3.5-inch screen of all previous iPhone models, as well as faster <u>4G LTE</u> connectivity. It also introduced a thinner and lighter body made of <u>aluminum alloy</u>, and the <u>30-pin dock connector</u> of previous iPhones was replaced with the new, reversible <u>Lightning</u> connector.

Bottom angle comparison between <u>iPhone 5c</u> (top), <u>iPhone 5s</u> (middle), and <u>iPhone 4s</u> (bottom)

The <u>iPhone 5s</u> and <u>iPhone 5c</u> were announced on September 10, 2013. The iPhone 5s included a <u>64-bit A7</u> processor, becoming the first ever 64-bit smartphone;^[29] it also introduced the <u>Touch ID</u> fingerprint authentication sensor.^[30] The iPhone 5c was a lowercost device that incorporated hardware from the iPhone 5, into a series of colorful plastic frames.^[31]

On September 9, 2014, Apple introduced the <u>iPhone 6</u> and iPhone 6 Plus, and included significantly larger screens than the iPhone 5s, at 4.7-inch and 5.5-inch respectively; both models also introduced mobile payment technology via <u>Apple Pay</u>. Optical image stabilization was introduced to the 6 Plus' camera. The <u>Apple Watch</u> was also introduced on the same day, and is a <u>smartwatch</u> that operates in conjunction with a connected iPhone. Some users experienced bending issues from normal use with the iPhone 6 and 6 Plus, particularly on the latter model, and this issue was nicknamed "<u>bendgate</u>". [33]

The <u>iPhone 6s</u> and 6s Plus were introduced on September 9, 2015, and included a more bend-resistant frame made of a stronger aluminum alloy, as well as a higher resolution 12 megapixel main camera capable of <u>4K</u> video recording. The <u>first-generation iPhone</u> <u>SE</u> was introduced on March 21, 2016, and was a low-cost device that incorporated newer hardware from the iPhone 6s, in the frame of the older iPhone 5s. [35]

The <u>iPhone 7</u> and 7 Plus were announced on September 7, 2016, which introduced larger camera sensors, <u>IP67</u>-certified water and dust resistance, and a quad-core <u>A10</u> <u>Fusion</u> processor utilizing <u>big.LITTLE</u> technology; the 3.5 mm <u>headphone jack</u> was removed, and was followed by the introduction of the <u>AirPods</u> wireless earbuds. Optical image stabilization was added to the 7's camera. A second telephoto camera lens was added on the 7 Plus, enabling two-times optical zoom, and "Portrait" photography mode which simulates <u>bokeh</u> in photos.

The iPhone 8, 8 Plus, and iPhone X were announced on September 12, 2017, in Apple's first event held at the Steve Jobs Theater in Apple Park. All models featured rear glass panel designs akin to the iPhone 4, wireless charging, and a hexa-core A11 Bionic chip with "Neural Engine" Al accelerator hardware. The iPhone X additionally introduced a 5.8-inch OLED "Super Retina" display with a "bezel-less" design, with a higher pixel density and contrast ratio than previous iPhones with LCD displays, and introduced a stronger frame made of stainless steel. It also introduced Face ID facial recognition authentication hardware, in a "notch" screen cutout, in place of Touch ID; [39][40] the home button was removed to achieve the "bezel-less" design, replacing it with a gesture-based navigation system. [41] At its US\$999 starting price, the iPhone X was the most expensive iPhone at launch. [42]

Picture of the cameras on the iPhone 13 Pro

The <u>iPhone XR</u>, <u>iPhone XS</u>, and XS Max were announced on September 12, 2018. All models featured the "Smart HDR" computational photography system, and a significantly more powerful "Neural Engine". The XS Max introduced a larger 6.5-inch screen. The iPhone XR included a 6.1-inch LCD "Liquid Retina" display, with a "bezel-less" design similar to the iPhone X, but does not include a second telephoto lens; it was made available in a series of vibrant colors, akin to the iPhone 5c, and was a lower-cost device compared to the iPhone X and XS. [44]

The <u>iPhone 11</u>, <u>11 Pro</u>, and 11 Pro Max were announced on September 10, 2019. The iPhone 11 was the successor to the iPhone XR, while the iPhone 11 Pro and 11 Pro Max succeeded the iPhone XS and XS Max. All models gained an Ultra-Wide lens, enabling two-times optical zoom out, as well as larger batteries for longer battery life. [45][46] The <u>second-generation iPhone SE</u> was introduced on April 17, 2020, and was a low-cost device that incorporated newer hardware from the iPhone 11, in the frame of the older iPhone 8, while retaining the home button and the Touch ID sensor. [47]

2020s

The <u>iPhone 12</u>, 12 Mini, <u>12 Pro</u>, and 12 Pro Max were announced via a <u>livestream</u> event on October 13, 2020. All models featured OLED "Super Retina XDR" displays, introduced faster <u>5G</u> connectivity, and the <u>MagSafe</u> magnetic charging and accessory system; a slimmer flat-edged design was also introduced, which combined with stronger <u>glass-ceramic</u> front glass, added better drop protection compared to previous iPhones. [48][49] The iPhone 12 Mini introduced a smaller 5.4-inch screen, while the 12 Pro and 12 Pro Max had larger screens of 6.1-inch and 6.7-inch respectively. The iPhone 12 Pro and 12 Pro Max additionally added a <u>Lidar</u> sensor for better accuracy in <u>augumented reality</u> (AR) applications.

The <u>iPhone 13</u>, 13 Mini, <u>13 Pro</u>, and 13 Pro Max were announced via a livestream event on September 14, 2021. All models featured larger camera sensors, larger batteries for longer battery life, and a narrower "notch" screen cutout. ^[50] The iPhone 13 Pro and 13 Pro Max additionally introduced smoother adaptive 120 Hz <u>refresh rate</u> "ProMotion" technology in its OLED display, and three-times optical zoom in the telephoto lens. ^[51] The low-cost <u>third-generation iPhone SE</u> was introduced on March 8, 2022, and incorporated the <u>A15</u> <u>Bionic</u> chip from the iPhone 13, but otherwise retained similar hardware to the second-generation iPhone SE.

The <u>iPhone 14</u>, 14 Plus, <u>14 Pro</u>, and 14 Pro Max were announced on September 7, 2022. All models introduced <u>satellite phone</u> emergency calling functionality. A new 14 Plus model introduced the large 6.7-inch screen size, first seen on the iPhone 12 Pro Max, into a lower-cost device. The iPhone 14 Pro and 14 Pro Max additionally introduced a higher-resolution 48-megapixel main camera, the first increase in megapixel count since the iPhone 6s; it also introduced <u>always-on display</u> technology to the <u>lock screen</u>, and an interactive status bar interface integrated in a redesigned screen cutout, entitled "Dynamic Island". [53]

The <u>iPhone 15</u>, 15 Plus, <u>15 Pro</u>, and 15 Pro Max were announced on September 12, 2023. Starting with this group of devices, all models switch to using <u>USB-C</u> as their power connector to comply with <u>European Commission</u> regulations, replacing Apple's proprietary <u>Lightning</u> connector after eleven years of use in previous models. ^[54] The 15 and 15 plus now feature the Dynamic Island, which debuted with the iPhone 14 Pro (effectively retiring the "notch" display cutout), a 48-megapixel main camera, slightly curved edges, and a color-infused frosted glass back. ^{[55][56][57]} The 15 Pro and Pro Max also replace the mute switch with the "Action" button, and stainless-steel material to titanium. ^[57]

The <u>iPhone 16</u>, 16 Plus, <u>16 Pro</u>, and 16 Pro Max were announced on September 9, 2024. The former two introduced a vertical camera layout with refined "Fusion" and Ultra-Wide cameras. The 16 Pro and Pro Max have larger 6.3-inch and 6.9-inch displays, a 48-

megapixel Ultra-Wide camera, and the largest batteries in an iPhone up to that point. [59] All models now include access to new Apple Intelligence Al features, [60] a refined thermal system, support for Wi-Fi 7, and a new button dubbed the "Camera Control", allowing easier access to camera features. On February 19, 2025, the 16e was announced as the newest member of the 16 family. This model is going to have a longer battery life thanks to the A18 chip and the new Apple C1, which is the first cellular modem designed by Apple. [61] It will have a 6.1-inch screen, and the same 48-megapixel camera as previous models, but lacks the wider shot option due to its cheaper purchasing price. [62]

The <u>iPhone 17</u>, <u>17 Pro</u>, 17 Pro Max, and <u>iPhone Air</u> were announced on September 9, 2025.