## = Cortana (Halo) =

Cortana is a fictional synthetic intelligence character in the Halo video game series . Voiced by Jen Taylor , she appears in Halo : Combat Evolved and its sequels , Halo 2 , Halo 3 , Halo 4 and Halo 5 : Guardians . She also appears in a cutscene and the epilogue of the prequel Halo : Reach , as well as in several of the franchise 's novels and comics . During gameplay , Cortana provides backstory and tactical information to the player , who assumes the role of Master Chief Petty Officer John @-@ 117 . In the story , she is instrumental in preventing the activation of the Halo installations , which would have destroyed all sentient life in the galaxy .

Cortana 's original design was based on the Egyptian queen Nefertiti; the character 's holographic representation always takes the form of a woman . Bungie first introduced Cortana ? and Halo ? through the Cortana Letters , emails sent during Combat Evolved 's production in 1999 . Since then , the character has been used extensively to advertise the series . Cortana has been recognized for her sex appeal , believability , and character depth . The character was the inspiration for Microsoft 's intelligent personal assistant .

## = = Character design = =

The first Cortana was designed and modelled by Bungie artist Chris Hughes. Cortana 's original Halo model 's face was based on the sculpture of Egyptian Queen Nefertiti.

Voice actress Jen Taylor said that she remained somewhat distanced from the character , and she attended only one fan convention in six years after the release of Halo : Combat Evolved . Despite her role in voicing other video game characters , including Princess Peach , she is not a gamer . She felt that portraying Cortana was occasionally challenging because the character lacks a physical form and is " a computer . " Interviewed about Cortana in Halo 3 , Taylor said that " There 's a lot more drama and a lot less technical jargon this time around . I actually just finished a couple of lines that nearly had me in tears . " When choosing a voice actor for the character , Bungie originally wanted Cortana to have a British accent . Although this idea was later discarded , Cortana still uses British colloquialisms in Halo : Combat Evolved .

Halo Effect: An Unauthorized Look at the Most Successful Video Game of All Time, an essay on references to mythology in Halo and previous Bungie games, analyzed the significance of Cortana 's name, stating is a variant of Curtana, the sword used by the legendary Ogier the Dane, just as the titular Al character of Marathon 2: Durandal is apparently named after another legendary sword, Durendal. Curtana 's inscription reveals that the sword has the same " temper as Joyeuse and Durendal." Accordingly, some speculated before the release of Halo 3 whether the " smart " Cortana would follow Marathon 's Durandal in succumbing to rampancy, a concept invented by Bungie in which an Al character becomes insane by gaining too much knowledge.

## = = = Attributes = = =

Cortana is constructed from the cloned brain of Dr. Catherine Elizabeth Halsey , the creator of the SPARTAN Project; Halsey 's synaptic networks became the basis for Cortana 's processors . According to the Halo novels, Cortana is classified as a " smart " AI, meaning that her creative matrix is allowed to expand, in contrast to the limited matrix of other " dumb " AI characters in the stories . This ability allows Cortana to learn and adapt beyond her basic parameters, but at the cost of a limited " lifespan " of only seven years; eventually, she will fall to rampancy, a terminal state of being for Artificial intelligence constructs, in which the AI " develops delusions of godlike power ", as well as utter contempt for its mentally inferior makers. Rampant AI normally cannot return to their previous state and must be destroyed before they harm themselves and others around them, but Cortana could be saved if she and the Master Chief can get back to Dr. Halsey on Earth; because she was created using the living tissue of Dr. Halsey.

Cortana is highly skilled and capable of hacking alien computer systems and decoding transmissions and occasionally smug about her abilities . In Halo : The Fall of Reach she hacks into

Top Secret Office of Naval Intelligence (ONI) documents out of boredom. Her intellect occasionally causes her to be loquacious to a fault; in The Fall of Reach, Halsey notes that if she were to let Cortana continue with her hypothesis, then the AI would talk all day. The Doctor also sees Cortana as a teenage version of herself: smarter than her parents, always "talking, learning, and eager to share her knowledge." Cortana is also described as having a sardonic sense of humor; she often cracks jokes or wryly comments, even during combat. Her high spirits and lack of programming restrictions give her a set of behavioral "quirks" unique among most AI characters in the Halo universe. For example, she becomes irate and impatient when the Master Chief doubts her judgment in Halo: First Strike.

As an artificial construct, Cortana has no physical form or being. Cortana always speaks with a smooth female voice, and she can communicate through comm systems and project a holographic image of herself from appropriate projectors, such as Holotanks, and appears holographically as a woman. Cortana is said to resemble her creator, Dr. Catherine Halsey, with a similar attitude "only unchecked by military and social protocol." In Halo: The Fall of Reach, Cortana is described as slender, with close @-@ cropped hair and a skin hue that varies from navy blue to lavender, depending on her mood. Numbers and symbols flash across her form when she is thinking. In Halo 4 Cortana has become more human in appearance with more subtle additions being added to her character model such as a gap being visible between her front teeth. Cortana was played by actress Mackenzie Mason using advanced facial rendering technology to capture movements in her face while speaking to add a more human look.

= = Appearances = =

= = = In video games = = =

Cortana first appears during the introductory cutscene of Halo: Combat Evolved. In the 2003 novelization of the game, Halo: The Flood, Cortana likewise plays an important role. Controlling the Pillar of Autumn 's defenses, Cortana destroys four Covenant targets before the ship 's weapons are disabled. Under the Cole Protocol, Captain Keyes, the Autumn 's commanding officer, prepares to abandon ship: the protocol mandates the evacuation of any Al constructs, thereby charging the Master Chief with safeguarding Cortana from the Covenant. When the Master Chief arrives on Halo, Cortana monitors the communications channels, helps direct human survivors scattered across the ring, and assists the Master Chief in the rescue of Captain Keyes from the Covenant ship Truth and Reconciliation. Inserted into Halo 's Control Room, Cortana looks for a way to activate Halo to use as a weapon against the Covenant but becomes visibly agitated and sends the Master Chief to find Captain Keyes. Cortana stays in Halo 's computer core as the Master Chief encounters the parasitic Flood and is conscripted by the Forerunner construct 343 Guilty Spark to activate Halo 's defenses . The Master Chief and Guilty Spark return to the Control Room intent on using the Index, the key to Halo, to eliminate the Flood, but Cortana reveals the truth that she has learned: Halo does not kill Flood, but their food. Activating Halo would destroy all sentient life in the galaxy. She takes the Index? thus becoming a target for 343 Guilty Spark? and plans with Master Chief to destroy Halo. They succeed after Cortana helps the Chief to detonate the Pillar of Autumn 's fusion reactors, causing an explosion powerful enough to destabilize the ringworld. The two escape in a fighter and witness the ring 's destruction.

Cortana appears next in Halo 2 at an awards ceremony for the heroes of Halo: Combat Evolved on the Earth defense platform Cairo Station. A Covenant fleet arrives, and Cortana takes control of the Cairo 's coilgun, the Magnetic Accelerator Cannon, to repel the invaders; she successfully deactivates a bomb that would have destroyed the station with the help of the Master Chief. Following the Master Chief 's decision to leave the station to " give the Covenant back their bomb ", Cortana chooses to accompany him despite thinking his plan crazy and guides him through New Mombasa in his attempt to capture the Prophet of Regret. Later, upon discovering Delta Halo, Cortana gives Commander Miranda Keyes access to all information on the original Halo and

provides intelligence to the Chief and United Nations Space Command (UNSC) Marines on the surface of the ring. When sent by the Flood leader, Gravemind, to the Covenant city @-@ ship of High Charity, Cortana stays put as the Master Chief follows the Prophet of Truth. She promises to detonate the crashed In Amber Clad's reactors to destroy the city and Halo if the ring is activated. The Arbiter, and Sergeant Major Avery Johnson avert the firing of Halo, but Cortana is left with Gravemind, who has by then overrun High Charity.

Cortana returns in the third installment in the Halo series , the 2007 Xbox 360 game Halo 3 . During gameplay , Cortana appears to the player in broken transmissions , often reciting lines from Fall of Reach and earlier games . Cortana manages to send a message to the Master Chief on Earth through a Flood @-@ infected ship . In her message , she states that Gravemind is unaware of the portal opened by a Forerunner artifact on Earth . Cortana continues to appear to the Chief , who later recovers her from Flood @-@ controlled High Charity . Surprised that the Chief has against all odds rescued her ( as promised ) Cortana produces the Index from Installation 04 , which she has kept as a souvenir . With it , Cortana activates a new ringworld being constructed . While the Flood are destroyed as planned , the slipspace portal through which Master Chief , the Arbiter , and Cortana attempt to escape collapses , thus stranding the Chief and Cortana . Cortana activates a distress beacon , but she knows that years could pass before rescue comes . As the Master Chief prepares to go into cryonic sleep to await rescue , Cortana confides to him that she will miss him . He replies to wake him when she needs him .

Cortana makes an appearance in the last levels of 2010 's Halo: Reach, which in the game 's universe takes place before Combat Evolved. When the Spartan group Noble Team receives orders to destroy important intelligence inside the military installation Sword Base, Cortana contacts Noble Team and sends them to an excavation site under the base. There, Halsey contacts the team and shows them a massive Forerunner structure buried beneath the surface. Halsey downloads Cortana and gives her to the soldier Noble 6, instructing the team to bring the AI to the UNSC ship Pillar of Autumn. While most of Noble Team 's six soldiers were killed, Noble 6 hands Cortana over to Captain Keyes and elects to stay behind and protect the ship while it makes its escape.

In the fourth game , the Xbox exclusive Halo 4 , Cortana wakes the Chief when Covenant forces attack the remains of the UNSC Forward Unto Dawn , then crashes with him on Requiem . Over the course of the game , Cortana begins showing strange signs and behavior : vocal and graphic glitches , irrational behavior and a tendency to become irritable or angered . Their cause is soon revealed : Cortana 's operation beyond her seven @-@ year lifespan and her interaction with the Halo installations and the Flood have caused her to become Rampant , a state of over @-@ knowledge that makes Als ' think ' themselves to death . Helped by the Master Chief and kept safe from the captain of the Infinity , who wishes to delete her , she helps in the battle against the Didact , a rogue Forerunner who hates humanity , and stops his scheme to convert the Earth and its people into his army using the Composer . In doing so , she has to fragment her various rampant personalities and upload them into the system , which first brings down the shields around the central core , then enables her to save Master Chief from the Didact . In a final act of love , she shields the Master Chief when he destroys the Composer , then , using the last of her energy to manifest as a solid hologram , she bids a final farewell to the Chief , managing to touch him for the first time .

Halo 5 shows Halsey explaining that Cortana has recovered from Rampancy and attained meta @-@ stability by gaining access to The Domain , a Forerunner database thought to have been destroyed after the firing of the Halo Array . How the UNSC and Halsey are aware that Cortana gained access to The Domain is unknown . She explains to Master Chief on Genesis that she survived by falling through slipspace , and likens the Domain to the "Water Of Life for Al 's " . Her goal now is to preserve an ever lasting peace by subjugating all biological life . Whether this is a direct reaction to her link with The Domain , influence from The Didact ( as their goals are now extremely similar ) or some other external influence is yet to be known . With all Promethean troops and most Forerunner tech now under her command , and believing she cannot trust the Chief , who tries to reason with her , she converts most , if not all of the UNSC 's Al constructs to her cause and begins her assault by plunging Humanity into a new Dark Age , using the Guardian 's EMP abilities

to shut off most UNSC technology, except The Infinity which barely escapes with Roland, the ship 's AI, still intact and seemingly loyal. In the Legendary Ending, a Halo ring can be seen activating accompanied by Cortana humming. Whether she found it or built it is unknown although, considering she has access to the Domain, the Guardians, Forerunner tech and a multitude of different AI constructs at her disposal, building her own ring is not out of the realms of possibility.

= = = In novels = = =

The origin of Cortana is not explained in the video games, but in the Halo novels. Her first chronological appearance in the story is in Halo: The Fall of Reach, a 2001 prequel to the first Halo game. Dr. Halsey allows Cortana to choose which SPARTAN @-@ II soldier to accompany on an upcoming mission; Cortana picks the Master Chief, whom she believes is her best match. Cortana makes a reference to this event via voiceover in Halo 3 during a cinematic before gameplay begins. Cortana and the Spartans are assigned a near @-@ suicidal mission: to take the cruiser Pillar of Autumn to the home world of the Covenant, an alliance of alien races, and capture one of their Prophets to force a truce. Cortana 's role is to act as a mission specialist, hacking the Covenant systems and piloting the captured Covenant ship. Before the mission, Cortana helps the Master Chief to survive the near @-@ lethal exercises designed to test the Chief 's MJOLNIR battle armor. Afterward, she plants incriminating evidence in the files of Colonel Ackerson, the ONI operative who nearly killed both of them, as revenge. When the Covenant attacks the planet Reach, one of the largest planetary military bases besides Earth, Cortana guides the Pillar of Autumn based on star charts on a Forerunner tablet, thus bringing them to Halo. During Halo: The Flood, Cortana serves the same role she did in Halo: Combat Evolved, but her role is expanded such as showing her saving the Master Chief's life from a Flood Infection Form at one point.

Eric Nylund 's 2003 novel Halo: First Strike takes place immediately after the events of Halo: Combat Evolved. Cortana and the Master Chief, seemingly the sole survivors of the events of Halo, discover a small number of other UNSC personnel have in fact escaped the ring. Cortana helps to take control of a Covenant cruiser, Ascendant Justice, and later returns to Earth with the remaining survivors after destroying the Covenant space station Unyielding Hierophant. In this novel, Cortana gains the ability to create imperfect clones of her program. A clone that the Master Chief and his Spartan Blue Team bring to Unyielding Hierophant eventually re @-@ clones itself hundreds of times to aid the Spartans in completing their mission.

= = = In promotion = = =

Bungie first introduced the Halo series publicly in 1999 by sending the Cortana Letters , a series of cryptic email messages , to the maintainer of marathon.bungie.org , a fan site for one of Bungie 's previous series , the Marathon Trilogy . The strategic use of cryptic messages in a publicity campaign was repeated in I Love Bees , a promotion for Halo 2 . Although Bungie does not consider most of the letters to be canon , Cortana speaks many of the same lines in Halo 3 . According to C. J. Cowan , Bungie 's director of cinematics , the studio used the character here to give story clues without actually revealing the story .

Cortana has been turned into an action figure twice to promote Halo . The first was released as a seven @-@ inch ( 178 mm ) miniature as part of the Halo : Combat Evolved series of action figures . The character is also featured in the first series of Halo 3 action figures , distributed by McFarlane Toys . In an interview , McLees noted that the first action figure was supposed to convey an older appearance than was depicted in the games . This was accomplished by making the figure look a little buxom , despite McLees ' direct request to reduce the mass of the figure . She explains that the sculptor appeared reluctant to make the change and that time constraints ultimately left the design intact .

= = = Windows Digital Assistant = = =

Microsoft developed its virtual assistant for the Windows Phone operating system under the codename Cortana , but retained the name for the final product following a strong response in the developer community . The voice actor of Cortana in the games , Jen Taylor , provides the voice for the virtual assistant . Microsoft released a beta for Cortana in April 2014 with the developer release of Windows Phone 8 @.@ 1 . Microsoft also released Cortana virtual assistant on the Xbox One , Windows Phone 8 @.@ 1 , and Windows 10 .

## = = Reception = =

When Cortana 's role greatly expanded in Halo 3 , Fairfax New Zealand noted that the character "has inexplicably had a sexy makeover . " According to Cinema Blend , the "love story "between Master Chief and Cortana in this game provides "a focus to the game that an epic war between species can not accomplish . As Chief , the player needs something to anchor them into the story , and that happens to be Cortana . "

Part of Cortana 's appeal has lain in her good looks . In 2007 , the character was ranked as ninth on the list of top " Xbox babes " by Team Xbox , featured by GameDaily 's " Babe of the Week " , and listed as the sixth most " disturbingly sexual game character " by Games.net. In 2008 , GameDaily ranked her as the 38th " hottest game babe . " In 2009 , 1UP.com ranked the character as the fifth best video game computer , noting that as Cortana 's sanity waned in the video games , her clothing appeared to decrease as well . In 2010 , GameTrailers included her on their countdown of the top 10 " babes who are out of your league " at number two . In 2011 , UGO.com included her on the list of the 50 " video game hotties " , calling her " a certified hottie " in spite of being " just ... a big pile of ones and zeroes . " In the " battle of the beauties " feature , Complex chose her over GLaDOS for her more human @-@ like voice . In 2012 , MSN included her among the 20 " hottest women in video game history " while Revision3 ranked her the third sexiest " video game girl . " Thanh Niên ranked her as the fourth most sexy female video game character in 2015 .

Aside from appearance , the media found other aspects to praise . In 2007 , Cortana was named one of the 50 greatest female characters by Tom 's Hardware for the character 's determination and fearlessness , which meshed perfectly with the game 's protagonist . In 2010 , Cracked.com ranked her as first on the list of the supporting characters in video games . In 2011 , UGO.com ranked her as the second best video game companion , while Maximum PC included her in the list of the 25 of gaming 's greatest sidekicks .