

= Sonic the Hedgehog ( 1991 video game ) =

Sonic the Hedgehog is a platform video game developed by Sonic Team and published by Sega for the Sega Genesis console . The game was first released in North America , Europe and Australia in June 1991 , and in Japan the following month . The game features an anthropomorphic hedgehog named Sonic in a quest to defeat Dr. Robotnik , a scientist who has imprisoned animals in robots and stolen the magical Chaos Emeralds . Sonic the Hedgehog 's gameplay involves collecting rings as a form of health and a simple control scheme , with jumping and attacking controlled by a single button .

The game 's development began in 1990 , when Sega ordered its AM8 development team to create a game featuring a mascot for the company . After considering a number of suggestions , the developers decided on a blue hedgehog with spikes along his head and spine and renamed themselves " Sonic Team " to match their character . Sonic the Hedgehog , designed for fast gameplay , was influenced by the games of Super Mario series creator , Shigeru Miyamoto . Sonic the Hedgehog uses a novel technique that allows Sonic 's sprite to roll along curved scenery , which originated in a tech demo created by the game 's programmer , Yuji Naka .

The game was well received by critics , who praised its visuals , music , and speed of gameplay . The game was also commercially successful , establishing the Genesis as a key player in the 16 @-@ bit era and allowing it to compete with Nintendo and their Super NES console . It has been ported a number of times , and inspired several clones , a successful franchise , and adaptations by other media .

= = Plot = =

In an attempt to steal the six Chaos Emeralds and harness their power , the game 's antagonist , Dr. Ivo Robotnik , has trapped the animal inhabitants of South Island in aggressive robots and stationary metal capsules . The player controls Sonic , who aims to halt Robotnik 's plans by freeing his animal friends and collecting the emeralds himself .

If the player collects all the Chaos Emeralds and completes the game , a reward ending sequence is shown . If all the emeralds are not collected , Robotnik taunts the player while juggling the Chaos Emeralds instead .

= = Gameplay = =

Sonic the Hedgehog is a 2D , side @-@ scrolling platformer , whose gameplay centers around Sonic 's ability to run at high speed through levels incorporating springs , slopes , high falls , and loop @-@ the @-@ loops . The levels contain hazards in the form of robots ( " badniks " in the Western game manuals ) inside of which Dr. Robotnik has trapped animals . Although destroying a robot frees the animal within , this is not required to complete the game . The player must avoid rows of sharp spikes , falling into bottomless pits , being crushed by moving walls or platforms , and drowning ( which can be avoided by breathing air bubbles periodically released from vents ) . Sonic 's main attack is his spin , where he curls into a ball and rotates rapidly ( damaging enemies and some obstacles ) . This can be performed by jumping in the air or rolling on the ground .

Scattered around each level map are gold rings , and collecting 100 rings rewards the player with an extra life . Rings are a layer of protection against hazards ; if Sonic has at least one ring when he collides with an enemy ( or obstacle ) , he will survive . However , all his rings will be scattered ; they will flicker and disappear in a few seconds if they are not picked up again . If Sonic is hit without any rings , he loses a life . Although shields and temporary invincibility may be collected to provide additional protection , certain hazards ( such as drowning , being crushed , falling down a bottomless pit or running out of time ) will cost Sonic a life regardless of rings or other protection .

The game is divided into six zones ( Green Hill , Marble , Spring Yard , Labyrinth , Star Light , and Scrap Brain ) , each with its own visual style and enemies . A player must navigate through each zone ( subdivided into three acts ) to progress . At the end of each zone 's third act , the player

confronts Dr. Robotnik ( who pilots a different vehicle each time ) in a boss fight . After the sixth zone , the player continues directly to the Final Zone for a last encounter with Robotnik .

The player begins with three lives ( power @-@ ups and rings add more ) , which are lost when Sonic collides with hazardous enemies ( or objects ) without rings , falls off @-@ screen or exceeds an act 's ten @-@ minute time limit . Lampposts acting as checkpoints allow Sonic to return to the most @-@ recently activated post when he loses a life . If he loses a life as a result of time running out but has another life , the timer will reset to 0 : 00 when he returns to the checkpoint . If all lives are lost at any point in the game , the game over screen will appear ( when the player can return to the beginning of the act with three lives , if they have any continues ) .

When Sonic reaches the end of act one or act two of a zone with at least fifty rings , a large ring appears through which he can jump to enter a Special Stage ( a " Secret Zone " in the original Genesis manual ) . In each of six Special Stages , Sonic bounces off the bumpers and walls of a rotating maze in spin attack . Although the player earns a continue with each 50 rings found , their main goal is to obtain the Chaos Emerald at the end of the maze without colliding with a " goal block " ( which ends the level ) .

= = Development = =

= = = Background and character design = = =

In 1990 , Sega ordered its in @-@ house development studio , AM8 , to develop a game featuring a mascot for the company . This was a position already held by the character Alex Kidd , but he was considered similar to Mario and deemed unsatisfactory ; Sega president Hayao Nakayama wanted a character as iconic as Mickey Mouse . Sega had competition from Nintendo and its mascot , Mario , in mind ; Nintendo was dominant at the time , particularly after the release of the successful Super Mario Bros. 3 , and Sega wanted a foothold in the industry . Although the company had some success with Genesis ports of its arcade titles , it knew this would not be enough .

AM8 developed ideas for characters , an engine , and gameplay mechanics . Development emphasized speed , so AM8 eliminated character designs not associated with fast animals , as well as fast creatures like kangaroos and squirrels . One idea , a rabbit able to grasp objects with prehensile ears , showed promise at first but was too complex for the available hardware . The team narrowed its search to animals that can roll into a ball , their idea for an attacking move . Designers then realized that this would not seem aggressive enough , so they focused on two animals with spikes : armadillos and hedgehogs . The hedgehog character , first proposed by Naoto Ohshima , prevailed , although the armadillo would later become the basis for Mighty the Armadillo ( who first appeared in 1993 's SegaSonic the Hedgehog ) . Ohshima has admitted since that he created Sonic 's basic design by combining Felix the Cat 's head with Mickey Mouse 's body .

Sonic was originally teal @-@ colored , then a light shade of blue , but he was changed to dark blue so he would stand out against certain backgrounds and to match the Sega logo . His shoes were colored red through the inspiration of Michael Jackson 's boots on the album cover for Bad and the outfit of Santa Claus , whom Ohshima saw as the most " famous character in the world " . Sonic 's spikes were emphasized to make him look sleeker , and he was given the ability to spin while jumping ( so attacking and jumping could be controlled with one button ) . The new character was originally named " Mr. Needlemouse " , but the eight @-@ member AM8 changed his name to " Sonic " and their studios to Sonic Team . Ideas proposed to flesh out the character included placing him in a rock band , giving him vampire fangs , and giving him a human girlfriend named Madonna , but Sega of America scrapped these ideas to keep his identity simple . Sega of America also expressed concerns that most Americans would not know what a hedgehog is and initially proposed a full @-@ scale recreation of the character , but compromised with Sonic Team to simply make design changes . The antagonist ended up being named " Dr. Eggman " in Japan and " Dr. Robotnik " in other regions as a result of a dispute between Sega 's American and Japanese divisions .

## == Programming and prototyping ==

With a satisfying protagonist completed, Sega turned to esteemed programmer Yuji Naka, who had impressed them through his work on *Phantasy Star* and the Genesis port of *Ghouls 'n Ghosts*. The gameplay originated with a tech demo by Naka, who developed an algorithm allowing a sprite to move smoothly on a curve by determining its position with a dot matrix. Naka's prototype was a platform game with a fast @-@ moving character rolling in a ball through a long, winding tube, and this concept was fleshed out with Oshima's character designs and levels by designer Hirokazu Yasuhara. Yasuhara originally intended to work on the game for three months due to the delay of his planned move to the United States by the outbreak of the Gulf War, but was engrossed in the project for nearly a year. His designs for levels were intended to attract both hardcore and casual gamers by integrating occasional challenging set pieces into the mostly accessible level design. The game's color scheme was influenced by the work of pop artist Eizin Suzuki, and the aesthetics of Green Hill were influenced by the geography of California.

In designing the game mechanics, Naka was inspired by Shigeru Miyamoto, whose games he had enjoyed playing years earlier. Admiring the simplicity of Miyamoto's mechanics in complex environments, Naka decided that Sonic would be controlled with only a directional pad for movement and a single button for jumping. He also wanted his creation to be more action @-@ oriented than the Mario series; while playing *Super Mario Bros.*, he had wondered why the levels could not be cleared more quickly. Due to the need to demonstrate the Genesis' technological prowess, the developing game underwent extensive testing and redesign, a process taking over six months. The developers' efforts were rewarded; according to Yuji Naka, the game had the fastest @-@ ever character speed in a video game and a rotation effect in the special stages that was considered impossible on the console. The team intended to add a two @-@ player mode displayed via split @-@ screen, but Naka's programming knowledge was insufficient to implement this feature. However, such a mode would later appear in sequel *Sonic the Hedgehog 2* (1992), where the second player would control Sonic's best friend Miles "Tails" Prower. Naka, Oshima, and Yasuhara worked 19 hours a day on the project for several months.

Naka's relationship with Sega of Japan was tenuous during this time; he received little credit for his involvement in the game. He left the company shortly after the game's release, although Sega of America hired him later. Before leaving, however, he defied Sega of Japan's prohibition of developer credits by displaying a few names in black text on a black background, identifiable only by looking at the game's code.

## == Music ==

The music for *Sonic the Hedgehog* was composed and produced by Masato Nakamura, bassist and lead songwriter of the J @-@ pop band *Dreams Come True*. The game uses onboard Yamaha YM2612 and SN76489 programmable sound generators to produce a variety of stereo sound effects and music. It was originally intended to have a sound test menu with animations of Sonic breakdancing to the music of a "Sonic Band" of Sharps Chicken on guitar, Max Monkey on bass, Mach Rabbit on drums, and Vector the Crocodile on keyboard. The playable Vector became a recurring character in the series, also appearing in *Knuckles' Chaotix*, *Sonic Heroes*, and *Sonic Free Riders*. The development schedule scrapped the feature, and Yuji Naka replaced the test with the "Se @-@ ga!" chant used in TV commercials (which reportedly used one @-@ eighth of the memory of the four @-@ megabit cartridge).

On October 19, 2011, twenty years after the game's release, a three @-@ disc compilation of music from *Sonic the Hedgehog* and *Sonic the Hedgehog 2* was released in Japan. The first disc features original tracks from both games, the second contains Masato Nakamura's demo recordings and the third comprises songs by *Dreams Come True* and their Akon remixes.

## == Packaging and release ==

Game @-@ package illustrator Akira Watanabe said that his goal was to make the characters " colorful " , using clear lines and gradation to " finish them neatly " . According to Watanabe , the developers asked him to create a package design " similar to pop art ... without being particular to conventional packages " ? something " original " and " stylish " . The game was released in North America , Europe , and Australia on June 23 , 1991 , and in Japan on July 26 . Sega of America packaged it with American Genesis consoles , replacing Altered Beast . Genesis owners who bought their consoles before the switch could request free copies of Sonic the Hedgehog by mail . Sega of America created a large @-@ scale marketing campaign to promote the game and Sonic as a mascot for the company .

= = Alternate versions and ports = =

= = = 8 @-@ bit version = = =

A version of Sonic the Hedgehog was developed by Ancient and released in 1991 for Sega 's 8 @-@ bit consoles , the Master System and Game Gear . Its plot and gameplay mechanics are similar to the 16 @-@ bit version , with different level themes and digital assets . The level design is flatter , with no vertical loops , and Sonic cannot re @-@ collect his rings after being hit . The game has a different soundtrack , composed by chiptune musician Yuzo Koshiro and including his compositions and adaptations of music from the 16 @-@ bit version . It was the final game released for the Master System in North America . The Master System version was re @-@ released for Wii 's Virtual Console service in North America on August 4 , 2008 , and in Europe on August 8 . The Game Gear version was re @-@ released for the Nintendo 3DS Virtual Console on June 13 , 2013 , and included as an unlockable game in Sonic Adventure DX : Director 's Cut for GameCube and Windows and Sonic Mega Collection Plus for PlayStation 2 , Xbox , and Windows .

= = = Sonic the Hedgehog Genesis = = =

A port , Sonic the Hedgehog Genesis , was released for the Game Boy Advance ( GBA ) on November 14 , 2006 in United States to mark the game 's fifteenth anniversary . It included several new features , such as the ability to save game progress , a level select option , and an Anniversary Mode with the Spin Dash move ( not originally implemented until Sonic the Hedgehog 2 ) . Its screen is slightly zoomed in , and adapted to the GBA 's widescreen aspect ratio . The game received poor reviews , with a Metacritic score of 33 percent ; the chief complaints concerned its poor conversion to the Game Boy Advance ( resulting in a slow frame rate ) , remixed chunky music , and poor preservation of the original gameplay .

= = = Compilation releases = = =

With its sequels for the Genesis , Sonic the Hedgehog has been ported for a wide range of home and handheld consoles and personal computers . It has appeared in Sonic Compilation ( 1995 ) for the Genesis , Sonic Jam ( 1997 ) for the Sega Saturn and Game.com , Sonic Mega Collection ( 2002 ) , Sonic Mega Collection Plus ( 2004 ) , Sonic 's Ultimate Genesis Collection ( 2009 ) for the Xbox 360 and PlayStation 3 , and Sonic Classic Collection ( 2010 ) for the Nintendo DS . Additionally , the game is an unlockable reward in the console versions of Sonic Generations .

= = = Downloadable releases = = =

Sonic the Hedgehog has been available for all three major seventh @-@ generation video game consoles . It was part of the Wii Virtual Console at the service 's 2006 introduction , and was released for the Xbox Live Arcade and PlayStation Network shortly afterwards . The game was released for the iPod Classic , iPod video , and video @-@ capable iPod Nano models in 2007 and

for Apple 's iOS service ( compatible iPhone and iPod touch models ) in April 2009 . Sonic the Hedgehog became available on GameTap in September 2009 . In October 2010 , it was released as a Microsoft Windows download which was ported to Steam . The game was ported to two online app services ( Google Play and the Amazon Appstore ) in December 2012 . A remastered mobile port , created using Christian Whitehead 's Retro Engine previously used in the 2011 rerelease of Sonic CD , was released on iOS , replacing the original port , on May 15 , 2013 with an Android version released the following day . The port features widescreen graphics , the optional ability to spin dash , a time attack mode , and the unlockable option to play as Tails or Knuckles the Echidna . The game was also released as part of the Nintendo 3DS 3D Classics line in May 2013 in Japan , and worldwide in December .

#### = = Reception = =

Sonic the Hedgehog was critically praised at its release and in retrospective reviews , with an 86 @-@ percent approval rating at the review aggregator GameRankings based on nine reviews . The game rivaled the Mario series , particularly Super Mario World ( which was recently released for Genesis rival Super Nintendo Entertainment System ) . Paul Rand of Computer and Video Games compared the two in depth and characterized Sonic the Hedgehog as being faster , with brighter colors , and Super Mario World as having more " depth of play " .

Reviewers noted the game 's colorful , detailed graphics . Rand called its color scheme " lively , but never garish " , praising the interaction of color with detail in the sprites , backgrounds , and animations and describing its graphics as the best available for the Genesis . Reviewer Boogie Man of GamePro called the intricate backgrounds " eye @-@ popping " and " gorgeous " , which was echoed by Mean Machines . According to the Lessers ( Hartley , Patricia , and Kirk ) of Dragon , " The graphics and animation in Sonic the Hedgehog make this a serious contender for the best video game of the year " and GameZone called the animation " some of the smoothest and fastest ... ever seen " . The music and sound effects were also well received ; Dragon called them " great " , and GameZone " amazing " . Rand noted " stacks of catchy tunes and jingles " , calling some of the sound effects " absolutely brilliant " . Although Mean Machines called the songs " vaguely appealing " , the game 's sound effects were better appreciated .

Critics cited the fast gameplay , unprecedented in platformers . GamePro 's Boogie Man noted its " lightning @-@ fast action " and , according to Electronic Gaming Monthly ( EGM ) , " If you thought the Enterprise was quick , wait till you see Sonic at warp speed . " The game 's difficulty was disputed , described as " impossible " by Rand and " average " by EGM . Rand said about the gameplay in general that it " plays like a dream " ; according to GameZone it would enchant players for hours , and Boogie Man praised Sonic Team 's ability to provide an engaging experience primarily from running and jumping . Although EGM , Dragon , and Paul of Mean Machines praised the level design ( especially the hidden rooms ) , Paul found losing all of one 's rings frustrating .

Sonic the Hedgehog has maintained its popularity , appearing on lists of the greatest video games of all time . Frank Provo of GameSpot described the game as " one of the best platformers of all time " , noting that despite technical issues in the Game Boy Advance port " after all these years , the underlying graphics , audio , and gameplay still hold up " . Lucas M. Thomas of IGN agreed that it stood the test of time : " You 'll be impressed by the clarity and color that come through ... Few people realize how difficult it was to create Sonic 's graphics engine , which allowed for the incredible rate of speed the game 's known for . But the technical achievement impressed back in ' 91 , and still does so today . " Mega ranked the game its third @-@ favorite Genesis title , and in 2001 Game Informer called it the 24th @-@ greatest game of all time . Sonic the Hedgehog has been a commercial success ; the original Genesis version sold over 15 million copies by February 2009 , and the mobile version had eight million paid downloads by 2008 .

#### = = Legacy = =

=== Effect on the industry ===

Primarily because of its Genesis bundling, Sonic the Hedgehog contributed to the console's North American popularity. During October–December 1991, the Genesis outsold the Super NES by a two-to-one ratio, and at its January 1992 peak claimed 65 percent of the market for 16-bit consoles. Although Nintendo eventually again overtook Sega, this was the first time since December 1985 that the company did not lead the console market.

Sonic the Hedgehog added speed and momentum-based physics to the standard platform formula. Set pieces and mechanics introduced by the game (such as loops, springs, and acceleration pads) have appeared in other games and become associated with the Sonic series.

A flood of "animal with attitude" platformers, each featuring a cartoon mascot, were released after Sonic the Hedgehog: Bubsy, Aero the Acro-Bat, James Pond 3, Earthworm Jim, Zero the Kamikaze Squirrel, Awesome Possum, Ty the Tasmanian Tiger, Gex. This carried into the PlayStation era with games like Punky Skunk and Crash Bandicoot.

=== Sequels and other media ===

The game's success led Sega to develop an extensive media franchise. A 1992 sequel, Sonic the Hedgehog 2, gave Sonic a best friend (and sidekick) named Miles "Tails" Prower and continued the fight against Dr. Robotnik. Sonic has generated dozens of additional games and a large cast of recurring characters (keeping Sonic and Robotnik as mainstays), surviving the end of Sega console manufacturing after the Dreamcast. The series has ventured from platformers to fighting, racing, role-playing, and sports games, and has expanded into anime and manga, cartoons and comic books, novels, and toys. Sonic the Hedgehog has become one of the best-selling video game franchises of all time, with over 150 million copies sold by May 2014. The game's first stage, Green Hill Zone, has also been repurposed for use in several other titles such as Sonic Adventure 2, Sonic Generations and the Super Smash Bros. series.