Crash Bandicoot is a platform video game developed by Naughty Dog and published by Sony Computer Entertainment for the PlayStation . It was originally released for the PlayStation on August 31 , 1996 , and was included in the Sony Greatest Hits line @-@ up . In 2007 , it was re @-@ released as a downloadable game on the PlayStation Network , and its remastered version is scheduled to be released for the PlayStation 4 in 2017 .

Crash Bandicoot is the first installment in the Crash Bandicoot series , chronicling the creation of the title character at the hands of the series antagonist Doctor Neo Cortex and his henchman Doctor Nitrus Brio . The game 's story follows Crash 's effort to stop Brio and Cortex 's plans for world domination , and to save his girlfriend Tawna , a female bandicoot also evolved by Brio and Cortex . Crash Bandicoot received generally positive reviews from critics , who praised the game 's graphics and unique visual style , but noted the game 's lack of innovation as a platform game . The game would later go on to become one of the best @-@ selling PlayStation video games .

#### = = Gameplay = =

The player controls Crash Bandicoot , who must traverse several levels in sequence in order to progress . The player is given a certain amount of lives , which are lost when Crash is attacked by an enemy , or falls into water or a pit . If all lives are lost at any point in the game , the " Game Over " screen will appear , at which point the player may continue from the last time they saved their progress .

Crash 's primary abilities are jumping and spinning . Most enemies may be defeated by jumping on them or spinning into them . An enemy that is attacked by Crash 's spin attack can be launched into another enemy that is on @-@ screen at the same time . These same techniques can be used to open the numerous boxes found in each stage . Most boxes in the game contain Wumpa Fruit , which give the player an extra life if 100 of them are collected . Another item found inside crates is the Witch Doctor 's Mask , which shields Crash from one enemy attack . Collecting three of these masks in a row grants Crash temporary invulnerability from all minor dangers . Arrow boxes ( marked with arrows pointing up ) propel Crash further than his ordinary jump can , while TNT boxes explode after a three @-@ second fuse when jumped on . Boxes with an exclamation mark (!) on them cause previously intangible objects in the area to solidify . Check Point boxes allow Crash to return to the point where the first Check Point box has been opened upon losing a life . If more than one Check Point box has been opened in a stage , Crash returns to the last Check Point box that has been opened .

Special tokens can also be found inside boxes . These tokens may feature the likenesses of Tawna , Doctor Neo Cortex or Doctor Nitrus Brio . When three tokens have been collected in one stage , the on @-@ screen action freezes and Crash is immediately teleported to a "Bonus Round" . In the Bonus Round , the player must break open a large number of boxes to earn Wumpa Fruit and special items such as keys to hidden areas . If Crash falls off the screen in the Bonus Round , he is transported back to the level he came from rather than losing a life . He is also transported back to the level if the Bonus Round has been successfully traversed .

If the player can complete an entire level without losing a life after breaking open a Check Point box , a special " Stage Clear " screen appears in which the player is informed of how well they 've done and if any special items have been earned . They are also shown how many boxes ( if any ) have been missed in the level . If a life has been lost during the stage , the player is simply returned to the world map . If the player manages to both complete a level without losing a life after breaking open a Check Point box and break open all of the boxes in that level , they are awarded a gem . Gems allow the player to enter new areas in previously completed levels that were not accessible before .

The playable protagonist character is Crash Bandicoot , a bandicoot who has been mutated by an invention called the Evolvo @-@ Ray . The main antagonist is Doctor Neo Cortex , a mad scientist who was often ridiculed by the scientific community for his outlandish theories and is now motivated to prove his tormentors wrong by creating a mutated army of animals to conquer the world . Cortex 's henchman is Doctor Nitrus Brio , the insecure creator of the Evolvo @-@ Ray . Crash 's love interest is Tawna , a female bandicoot about to undergo experimentation by the doctors . Helping Crash in his journey is an ancient witch doctor spirit by the name of Aku Aku , who has scattered masks of himself throughout the islands to grant Crash special invincibility powers .

The boss characters of the game include Papu Papu , an obese and short @-@ tempered chief of the native village; Ripper Roo , a demented kangaroo with razor @-@ sharp toenails; Koala Kong , a muscular but unintelligent koala; and Pinstripe Potoroo , Doctor Cortex 's tommy gun @-@ wielding bodyguard .

The game is set on the Wumpa Islands , a group of three fictional Australian islands owned by Doctor Neo Cortex . Levels are typically set in tribesmen 's villages , fortresses or beaches . Some levels on the second island also take place in temple ruins , bridges high above the mountains , and a volcanic mine . Levels on the third island feature much more industrial settings , including a large power plant and a castle .

$$= = = Story = = = =$$

With the aid of his assistant Doctor Nitrus Brio , Doctor Neo Cortex creates the Evolvo @-@ Ray , which he uses to mutate the various animals living on the islands into beasts with superhuman strength . They experiment on a peaceful bandicoot named Crash , who Cortex intends to be the military leader of his growing army of animal soldiers . Despite warnings from Brio , Cortex subjects Crash to the untested Cortex Vortex in an attempt to put him under his control . The experiment proves to be a failure as the Vortex rejects Crash . After Crash escapes Cortex 's castle by leaping out a window and falling into to the ocean below , Cortex prepares a female bandicoot named Tawna for experimentation .

Having grown attached to Tawna during their time in captivity , Crash resolves to rescue her and defeat Cortex . From the beach of N. Sanity Island , Crash makes his way through the nearby jungle and scales the wall of a giant wooden fortress , which is inhabited by the native tribe . Crash then enters the hut of tribe leader Papu Papu and is forced to defeat him in self @-@ defense after inadvertently waking him from his nap . Riding on the back of a wild hog , Crash escapes the pursuing villagers and climbs over the opposite fortress wall .

From there, Crash crosses to the second of Cortex 's islands. Wumpa Island, hosting a large tree, has been long abandoned and there is nothing more than a jungle, a lizard @-@ infested city, dilapidated bridges high in the mountains, and the ruins of an ancient temple. However, having discovered that Crash was making his way across the islands, Cortex dispatches the deranged Ripper Roo on the island in a temple at the start of a creek. Crash manages to cross the river and, after avoiding contact with his razor @-@ sharp toenails, knocks Ripper Roo out cold beside a waterfall, and successfully makes his way through the city and the temples. Crash also defeats another of Cortex 's mutants, Koala Kong, in a volcanic cave mine before finally crossing to the Cortex Island. Crash then navigates the Cortex Power station, a huge power plant that provides Cortex 's castle with energy while polluting the nearby area. When he reaches the factory core, Crash battles and defeats the CEO of Cortex Power, Pinstripe Potoroo, damaging the power plant.

Unable to enter Cortex 's castle after getting there via bridge, Crash climbs the tower walls, and enters the castle through the window he had previously escaped from. After making his way

through the dark hallways and the Castle 's many machines , Crash is confronted by Brio inside his laboratory . Brio uses chemicals to mutate himself into a monster . While Crash is successful in defeating Brio , the castle laboratory catches chemical fire during the struggle . Crash escapes to Cortex 's airship , where he confronts Cortex himself as the castle burns . Cortex attacks him with a plasma gun , but Crash deflects his own projectiles against him and sends Cortex falling out of the air . United with Tawna , they escape the burning castle on Cortex 's airship .

= = Development = =

= = = Conception = = =

Before presenting Way of the Warrior to Mark Cerny of Universal Interactive Studios , Naughty Dog was signed on to the company for three additional games . In August 1994 , Jason Rubin and Andy Gavin began their move from Boston , Massachusetts to Los Angeles , California . Before leaving , Gavin and Rubin hired Dave Baggett , their first employee and a friend of Gavin 's from the Massachusetts Institute of Technology ; Baggett would not start working full @-@ time until January 1995 . During the trip , Gavin and Rubin studied arcade games intensely and noticed that racing , fighting and shooting games had begun making a transition into full 3D rendering . Sensing opportunity , they turned to their favorite video game genre , the character @-@ based action @-@ platform game , and asked themselves what a three @-@ dimensional version of such a game would be like . Because the player would be forced to constantly look at the character 's rear , the hypothetical game was jokingly called " Sonic 's Ass Game " . The basic technology for the game and the Crash Bandicoot series as a whole was created somewhere near Gary , Indiana . The rough game theory was designed near Colorado . Soon afterward , Gavin and Rubin threw out their previous game design for Al O. Saurus and Dinestein , a side @-@ scrolling video game based on time travel and scientists genetically merged with dinosaurs .

In August 1994 , Naughty Dog moved into the Universal Interactive Studios backlot and met with Mark Cerny . The group unanimously liked the "Sonic's Ass Game" idea and debated on what video game system the game would be for . Deciding that the 3DO Interactive Multiplayer , Atari Jaguar , Sega 32X , and Sega Saturn were unsatisfactory options due to poor sales and "clunky" development units , the team chose to develop the game for Sony's PlayStation due to the console 's "sexy" nature and the company 's lack of an existing competing mascot character . After signing a developer agreement with Sony , Naughty Dog paid \$ 35 @,@ 000 for a PlayStation development unit and received the unit in September 1994 . A development budget of \$ 1 @.@ 7 million was set for the game .

= = = Character and art design = = =

Before the development of Crash Bandicoot , Naughty Dog wanted to do what Sega and Warner Bros. did while designing their respective characters , Sonic the Hedgehog and the Tasmanian Devil , and incorporate an animal that was " cute , real , and no one really knew about " . The team purchased a field guide on Tasmanian mammals and selected the wombat , potoroo , and bandicoot as options . Gavin and Rubin went with " Willie the Wombat " as a temporary name for the starring character of the game . The name was never meant to be final due both to the name sounding " too dorky " and to the existence of a non @-@ video game property of the same name . The character was effectively a bandicoot by October 1994 , but was still referred to as " Willie the Wombat " as a final name had not been formulated yet . It was decided that the main character would be mute because past voices for video game characters were considered to be " lame , negative , and distracted from identification with them . " The villain of the game was created while Gavin , Rubin , Baggett , and Cerny were eating " mediocre Italian " near the Universal studios . Gavin idealized an " evil genius villain with a big head " who was " all about his attitude and his minions " . Rubin , having become fond of the animated television series Pinky and the Brain , imagined a " more

malevolent Brain " with minions resembling the weasel characters in Who Framed Roger Rabbit . After Gavin performed a " silly villain voice " depicting the attitude in mind for the character , the villain 's name , Doctor Neo Cortex , was instantly formulated .

To aid in the visual aspect of production, David Siller recruited Joe Pearson of Epoch Ink, who in turn recommended that Charles Zembillas of American Exitus be brought on board as well . Pearson and Zembillas would meet with Naughty Dog weekly to create the characters and environments of the game. Because the main character was Tasmanian, it was decided that the game would take place on a mysterious island where every possible type of environment could be found, with the added reasoning that an evil genius like Doctor Neo Cortex would require an island stronghold. On creating the levels for the game, Pearson first sketched each environment, designing and creating additional individual elements later. Pearson aimed for an organic, overgrown look to the game and worked to completely avoid straight lines and 90 @-@ degree corners . In January 1995, Rubin became concerned about the programmer @-@ to @-@ artist ratio and hired Bob Rafei and Taylor Kurosaki as additional artists . A Naughty Dog artist sketched every single background object in the game before it was modeled. Naughty Dog 's artists were tasked with making the best use of textures and reducing the amount of geometry. Dark and light elements were juxtaposed to create visual interest and separate geometry. The artists would squint when sketching, texturing, and playing the levels to make sure they could be played by light value alone. They ensured to use color correctly by choosing mutually accentuating colors as the theme for the "Lost City " and " Sunset Vista " levels . The interior of Cortex 's castle was designed to reflect the inside of his mind .

# = = = Graphics = = =

The PlayStation had a 512 x 240 video mode and used up video memory that would normally be used for textures , but was effective in rendering shaded ( if untextured ) polygons . Rubin pointed out that since the polygons on the characters were just a few pixels in size , shaded characters would look better than textured ones . Thus , polygons were emphasized over textures ; this was advantageous in that it allowed the programmers more polygons to work with and allowed them to work around the PlayStation 's lack of texture correction or polygon clipping . To give the game more of a resemblance to an animated cartoon , vertex animation was implemented rather than the standard skeletal animation with " one @-@ joint " weighting ; this allowed the programmers to use the more sophisticated three @-@ to @-@ four @-@ joint weighting available in PowerAnimator . Because the PlayStation was unable to match this at runtime , the location of every vertex was stored in every frame at 30 frames a second . Gavin , Baggett , and Cerny attempted to invent assembly language vertex compressors for this manner of animation ; Cerny 's version was the most successful and the most complicated .

To obtain the graphic details seen in the game, Rubin, Gavin, and Baggett researched visibility calculation in video games that followed Doom and concluded that extensive pre @-@ calculation of visibility would allow the game to render a larger number of polygons. Following experimentation in free @-@ roaming camera control, the team settled with a branching rail camera that would follow along next to, behind, or in front of the character, generally looking at him, moving on a "track" through the world. Because only 800 polygons could be visible on the screen at a time, parts of the game 's landscape would be hidden from view using trees, cliffs, walls, and twists and turns in the environment. Because the production used an entirely Silicon Graphics and IRIX @-@ based tool pipeline, the programmers used \$ 100 @,@ 000 Silicon Graphics workstations instead of the \$ 3 @,@ 000 personal computers that were the standard at the time. Gavin created an algorithmic texture packer that would deal with the fact that the 512 x 240 video mode left too little texture memory. Meanwhile, Baggett created bidirectional 10x compressors that would reduce the 128 @-@ megabyte levels down to 12 megabytes and allow them to be compatible with the PlayStation 's 2 @-@ megabyte random access memory. The levels proved to be so large that the first test level created could not be loaded into Alias PowerAnimator and had to be cut up into 16 chunks. Each chunk took about 10 minutes to load even on a 256 @-@ megabyte machine. To remedy the situation, Baggett created the DLE, a level design tool where component parts of a level were entered into a text file , with a series of Adobe Photoshop layers indicating how the parts were combined . To code the characters and gameplay of the game , Andy Gavin and Dave Baggett created the programming language " Game @-@ Oriented Object LISP " ( GOOL ) using LISP syntax .

= = = Level design = = =

The first two test levels created for the game did not ship in the final version for being too open and featuring too many polygons. During the summer of 1995, the team focused on creating levels that were functional as well as fun and used the Cortex factory levels to experiment on this goal; the mechanical setting allowed the team to forego the complex and organic forest designs and distill the two @-@ axis gameplay in an attempt to make it fun . Their first two successful levels ( " Heavy Machinery " and " Generator Room " ) utilized 2.5D gameplay and featured basic techniques previously used in Donkey Kong Country, such as steam vents, drop platforms, bouncy pads, heated pipes and enemy characters that would move back and forth, all of which would be arranged in progressively more difficult combinations as the level went on . " Willie " 's jumping, spinning and bonking machanisms were refined in these two levels . The level " Cortex Power " incorporates the original "Sonic's ass" point of view (behind the character and over his shoulder) featured in the two test levels. After working on those three levels, the first successful jungle @-@ themed level ( later titled " Jungle Rollers " ) was created from pieces of the failed first test level arranged into a corridor between trees. From that point forward, two to three levels would be created for each level theme featured, with the first level featuring an introductionary set of challenges and later levels adding new obstacles ( such as dropping and moving platforms in the second jungle @-@ themed level ) to increase the difficulty .

While playing the game during development , Rubin realized that there were many empty areas in the game due to the PlayStation 's inability to process numerous on @-@ screen enemy characters at the same time . Additionally , test players were solving the game 's puzzles too fast . In an attempt to remedy this , the "Wumpa Fruit "pickup was created ( the fruits themselves were rendered in 3D into a series of textures ) , but was not exciting enough on its own . On a Saturday in January 1996 , Gavin coded the "crates "while Rubin modeled a few basic crates and an exploding TNT crate and drew quick textures . The first few crates were placed in the game six hours later , and many more would be placed during the following days .

= = = Post @-@ production = = =

In September 1995 , Andy Gavin and Taylor Kurosaki took footage from the game and spent two days editing it into a two @-@ minute " preview tape " , which would be deliberately leaked to a friend at Sony Computer Entertainment so that the company may view it . Due to management issues at Sony , it wouldn 't be until March 1996 that Sony would agree to publish the game , which went into the alpha stage in April 1996 . While preparing for the game 's demonstration at the Electronic Entertainment Expo , the team decided to finally rename the title character " Crash Bandicoot " ( the particular name being credited to Dave Baggett and Taylor Kurosaki ) , with his surname being based on his canonical species and his first name stemming from the visceral reaction to the character 's destruction of boxes ( " Dash " , " Smash " , and " Bash " were other potential names ) . The marketing director of Universal Interactive Studios insisted that the game and character be named " Wuzzle / Wez / Wezzy the Wombat " or " Ozzie the Ottsel " . The name Crash Bandicoot prevailed after Naughty Dog threatened to leave the production . The same director also objected to the character of Crash 's love interest Tawna on " basic sexist principles " .

The music of Crash Bandicoot was a last @-@ minute aspect added to the game before its showing at the Electronic Entertainment Expo . The producer of Universal Interactive proposed that rather than conventional music , an " urban chaotic symphony " would be created by Andy Gavin causing random sound effects ( such as bird vocalizations , vehicle horns , grunts , and flatulence ) to be randomly selected and combined . When this proposal was rejected , David Siller introduced

the team to the music production company Mutato Muzika and its founder Mark Mothersbaugh . Following this introduction , Mothersbaugh selected Josh Mancell to compose the music for the game based on his previous work on Johnny Mnemonic : The Interactive Movie . Mothersbaugh advised Mancell throughout the soundtrack 's demo stages , after which all composition duties of Crash Bandicoot and Naughty Dog 's subsequent six titles were delegated to Mancell . Mouse on Mars , A Guy Called Gerald , Aphex Twin and Juan Atkins served as influences on Mancell 's " simple but kind of off @-@ kilter " melodies . Dave Baggett served as the soundtrack 's producer . The sound effects were created by Mike Gollom , Ron Horwitz and Kevin Spears of Universal Sound Studios . The voices in the game were provided by Brendan O 'Brien .

In a continuing attempt by Universal Interactive to take credit for Crash Bandicoot , Naughty Dog was told that it was not " allowed " to go to the first Electronic Entertainment Expo . In addition , there were leaked copies of the temporary box cover and press materials for the Electronic Entertainment Expo , upon which the Naughty Dog logo , in violation of the contract between Naughty Dog and Universal Interactive , was omitted . In response , Jason Rubin drafted and printed 1 @,@ 000 copies of a document entitled " Naughty Dog , creator and developer of Crash Bandicoot " to hand out in front of the Crash Bandicoot display at the Electronic Entertainment Expo . Beforehand , Rubin passed out the flyers " for review " to Universal Interactive , angering its president . Crash Bandicoot was first shown at the Electronic Entertainment Expo on May 1996 and was met with enthusiastic reactions .

# = = = Japanese distribution = = =

In preparation for presenting Crash Bandicoot to Sony 's Japanese division , Gavin spent a month studying anime and manga , reading English @-@ language books on the subject , watching Japanese films and observing competitive characters in video games . Upon Naughty Dog 's first meeting with the executives of Sony Computer Entertainment Japan , the executives handed Naughty Dog a document that compared Crash with Mario and Nights into Dreams .... Although Crash was rated favorably in the graphics department , the main character and the game 's non @-@ Japanese " heritage " were seen as weak points . The renderings of the character made specifically for the meeting also proved unimpressive . During a break following the initial meeting , Gavin approached Charlotte Francis , the artist responsible for the renderings , and gave her fifteen minutes to adjust Crash 's facial structures . Sony Japan bought Crash for Japanese distribution after being shown the modified printout . Pop @-@ up text instructions given by Aku Aku were added for the Japanese version of the game .

### = = Reception = =

Crash Bandicoot received generally favorable reviews from critics, with much of the positive comments going to the graphics. Dave Halverson of GameFan referred to the visuals as "the best graphics that exist in a game " and the design and animations of the title character as " 100 % perfection " . John Scalzo of Gaming Target described the environments as " colorful and detailed " and mentioned the snowy bridge and temple levels as his favorites. However, he noted that the boss characters appeared to be noticeably polygonal compared to the other characters due to their large size. Nevertheless, he added that this flaw was excusable because of the game 's age and that the game 's graphics were near perfect otherwise . A reviewer for Game Revolution singled out the scaling technology for praise and declared it to be " the new standard for Playstation action games the same way SGI did for 16 @-@ bitters after Donkey Kong Country . " Additionally , he described the texture @-@ mapping precision as " awesome " , the shading as " almost too well done " ( the reviewer claimed it made the game more difficult by making the pits appear to be shadows and vice versa ) , the polygon movements as " very smooth and fluid " , the " quirky mannerisms " of the title character as " always refreshing " and the backgrounds as " breathtakingly beautiful ( especially the waterfall stages ) " . However , the reviewer said that the ability to adjust the camera angle even slightly " would have been a definite plus (at times the ground itself is at 75

degree angle while Crash constantly moves at 90 degrees , putting a slight strain on the eyes ) . " A reviewer for IGN noted that " gorgeous backgrounds and silky smooth animation make this one of the best @-@ looking titles available for the PlayStation .

The gameplay received mixed responses . Both John Scalzo and the Game Revolution reviewer compared the gameplay to Donkey Kong Country , with Scalzo describing the game as having a "familiar , yet unique " quality that he attributed to Naughty Dog 's design , while the Game Revolution reviewer concluded that the game " fails to achieve anything really new or revolutionary " as a platform game . The IGN reviewer said that the game " isn 't a revolution in platform game design . It 's pretty much your standard platform game " . However , he noted the game 's " surprisingly deep " depth of field and use of different perspectives as exceptions to the platforming formula . Jim Sterling of Destructoid.com stated that the game has aged poorly since its initial release and cited the lack of DualShock thumbsticks , a poor camera as well as substandard jumping and spinning controls .

As of November 2003, Crash Bandicoot has sold over 6 @.@ 8 million units worldwide, making it one of the best selling PlayStation video games of all time. The game 's success lead to its inclusion for the Sony Greatest Hits. Crash Bandicoot was the first non @-@ Japanese game to receive a " Gold Prize " in Japan for sales of over 500 @,@ 000 units. The game spent nearly two years on the NPD TRSTS top 20 PlayStation sales charts before finally dropping off on September 1998.

#### = = Sequels = =

Crash Bandicoot was followed by two direct sequels , Crash Bandicoot 2 : Cortex Strikes Back and Crash Bandicoot : Warped , as well as a kart racing game , Crash Team Racing , all for the PlayStation and all developed by Naughty Dog , with Crash Team Racing the final Crash Bandicoot game developed by the company before moving onto the Jak and Daxter series . After Crash Team Racing , Eurocom developed the final Crash Bandicoot game for the PlayStation , the party game Crash Bash .