

= Development of Duke Nukem Forever =

The video game Duke Nukem Forever spent fifteen years in development , from 1996 to 2011 . It is a first @-@ person shooter for PC , PlayStation 3 and Xbox 360 , developed by 3D Realms , Triptych Games , Gearbox Software and Piranha Games . It is a sequel to the 1996 game Duke Nukem 3D , as part of the long @-@ running Duke Nukem video game series . Intended to be groundbreaking , Duke Nukem Forever has become infamous in the video games industry and was considered vaporware due to its severely protracted development schedule ; the game had been in development under 3D Realms since 1996 . Director George Broussard , one of the creators of the original Duke Nukem game , first announced the title 's development in April 1997 , and promotional information for the game was released in one form or another from 1997 until its release in 2011 .

After repeatedly announcing and deferring release dates , 3D Realms announced in 2001 that it would be released simply " when it 's done " . In May 2009 , 3D Realms was downsized for financial reasons , resulting in the loss of the game 's development team . Statements by the company indicated that the project was due to " go gold " soon with pictures of final development . Take @-@ Two Interactive , which owns the publishing rights to the game , filed a lawsuit in 2009 against 3D Realms over their " failure to finish development " . 3D Realms retorted that Take @-@ Two 's legal interest in the game is limited to their publishing right . The case was settled with prejudice and details undisclosed in May 2010 . On September 3 , 2010 , 14 years after the start of the development , Duke Nukem Forever was officially reported by 2K Games to be in development at Gearbox Software , with an expected release date of 2011 . The official release date was then revealed to be May 3 , 2011 , in North America , with a worldwide release following on May 6 , 2011 . This was however delayed by a month to June 10 internationally with a North American release on June 14 . Duke Nukem Forever was finally released after 15 years of development on June 10 , 2011 , to mostly negative reviews .

= = Background = =

Scott Miller was a lifelong gamer who released his text @-@ based video games as shareware in the 1980s . By 1988 , the shareware business was a \$ 10 to \$ 20 million a year market , but the distribution method had never been tried for video games . Miller found that gamers were not willing to pay for something they could get for free , so he came up with the idea of offering only the opening levels of his games ; players could purchase the game to receive the rest of the game . George Broussard , whom Miller met while he was in high school , joined Miller at his company , Apogee , which published and marketed games developed by other companies . While Miller was quiet , with a head for business , Broussard was an enthusiastic " creative impresario " . Apogee ( from which a new brand name was made in 1994 , 3D Realms ) grew from a small startup to a successful corporation . Among the titles they published was id Software 's Commander Keen in 1990 and Wolfenstein 3D in 1992 . Commander Keen met great success , leading to the development of many sidescrollers for the DOS platform , including many developed by Apogee and using the same engine that powered the Keen games , and Wolfenstein was highly successful , popularizing 3D gaming and establishing the first @-@ person shooter ( FPS ) genre .

By 1994 , Broussard began working on 3D Realms ' own first @-@ person shooter . Rather than the faceless marine of other games , players assumed the role of Duke Nukem , the title character of a pair of 2D platforms from Apogee , Duke Nukem and Duke Nukem II . Broussard described Duke as " a combo of John Wayne , Clint Eastwood , and Arnold Schwarzenegger . " After a year and a half of work , Duke Nukem 3D was released in January 1996 . Among game aspects that appealed to players were environmental interaction and adult @-@ oriented content ? including blood and strippers . Buoyed by the success , Broussard announced a follow @-@ up , Duke Nukem Forever .

= = Quake II engine , 1996 ? 1998 = =

Duke Nukem Forever was officially announced on April 28 , 1997 , with the intention of releasing the game no later than mid @-@ 1998 . Barely a year after the release of Duke Nukem 3D , the game 's graphics and its game engine , the Build engine , were antiquated . Id Software 's new Quake II engine was far superior to Build , so Broussard decided to license it . The price spent for the licensing rights was steep ? estimates were as high as \$ 500 @,@ 000 ? but Broussard reasoned that it would save time used to write a game engine from scratch . Broussard and Miller were flush with cash from the sales of Duke Nukem 3D and other games , so they decided to fund Duke Nukem Forever themselves , turning marketing and publishing rights over to GT Interactive .

In August and September , the first screenshots of Duke Nukem Forever were released in PC Gamer . However , 3D Realms did not receive the Quake II engine code until November 1997 , and the earlier screenshots were mock @-@ ups with the Quake engine that the team had made in their spare time . 3D Realms unveiled the first video footage of Duke Nukem Forever using the Quake II engine at the 1998 Electronic Entertainment Expo ( E3 ) conference . The trailer showed Duke fighting on the back of a moving truck and firefights with aliens . While critics were impressed , Broussard was not happy with the progress being made .

= = Unreal engine , 1998 ? 2003 = =

Soon after the release of the Quake II engine , Epic Games had unveiled its own Unreal Engine . The Unreal Engine was more realistic than Quake II and was better suited to producing open spaces ? 3D Realms had been struggling to render the Nevada desert . Soon after E3 , a programmer suggested that they make the switch . After discussions , the developers unanimously agreed to the change , which would mean scrapping much of their work so far , including significant changes 3D Realms had made to the Quake Engine . In June 1998 , 14 months after the Quake II announcement , 3D Realms made the switch announcement . Broussard said that the game would not be " significantly delayed " by the switch , but that the project would be back to where it was at E3 " within a month to six weeks " . Broussard also said that no content seen in the E3 trailer would be lost . Chris Hargrove , one of the game 's programmers at the time , confided that the change amounted to a complete reboot of the project .

By the end of 1999 , Duke Nukem Forever had missed several release dates and was largely unfinished ; half the game 's weapons remained concepts . Broussard shot back at criticisms of the game 's lengthy development time as the price paid for developing complex modern games : A significant factor contributing to the game 's protracted development was that Broussard was continually looking to add new elements to the game . A running joke at 3D Realms was to stop Broussard from seeing a new video game , as he would want to include portions of it in Duke Nukem Forever . Later that year , Broussard decided to upgrade to a new version of the Unreal engine that was designed for multiplayer matches . Former employees recalled that Broussard did not have a plan for what the finished game would look like . At the same time , GT Interactive was facing higher @-@ than @-@ expected losses and hired Bear Stearns to look into selling the company or merging it . Later that year , Infogrames Entertainment announced it was purchasing a controlling interest in GT Interactive . The publishing rights for Duke Nukem Forever passed to Gathering of Developers in early December 2000 .

To placate anxious fans , Broussard decided to create another trailer for E3 2001 ? it was the first public look at the game in three years . The video showed a couple of minutes of in @-@ game footage , which notably showed the player moving in what appears to be Las Vegas and a certain level of interactivity ( the player buys a sandwich from a vending machine and pushes each individual button on a keypad with Duke 's outstretched finger ) . The trailer was impressive , and Duke Nukem was the talk of the convention ; IGN reported on the game 's graphics , saying , " Characters come to life with picturesque facial animations that are synced perfectly with speech , hair that swings as they bob their heads , eyes that follow gazes , and more . The particle effects system , meanwhile , boasts impressive explosion effects with shimmering fire , shattered glass , and blood spilt in every direction [ ... ] Add in real @-@ time lighting effects , interactive environments , and a variation in locales unequalled in any other first @-@ person shooter and you

begin to see and understand why Duke Nukem Forever has been one of the most hotly anticipated titles over the last couple of years . " Duke Nukem Forever looked as good or better than most games , and staff at 3D Realms recalled a sense of elation after the presentation ; " The video was just being eaten up by people , " one said . " We were so far ahead of other people at the time . " While many of the staff expected Broussard to make a push for finishing the game , however , he still did not have a finished product in mind . Following the death of one of Gathering of Developers ' co @-@ founders and continuing financial problems , the publishers ' Texas @-@ based offices were shut down and absorbed into parent company Take @-@ Two Interactive .

= = Conflict with Take @-@ Two , 2003 ? 2006 = =

By 2003 , only 18 people at 3D Realms were working on the game . One former employee said that Broussard and Miller were still operating on a " 1995 mentality " , before games became large @-@ team , big budget development affairs . Because they were financing the project themselves , the developers could also ignore pressure from their publisher ; their standard reply to when Duke Nukem Forever would ship was " when it 's done " . In 2003 , Take @-@ Two CEO Jeffrey Lapin reported that the game would not be out that year . He further said the company was writing off \$ 5 @.@ 5 million from its earnings due to Duke Nukem Forever 's lengthy development time . Broussard shot back that " Take @-@ Two needs to STFU ... We don 't want Take @-@ Two saying stupid @-@ ass things in public for the sole purposes of helping their stock . It 's our time and our money we are spending on the game . So either we 're absolutely stupid and clueless , or we believe in what we are working on . " Later that year , Lapin said 3D Realms had told him that Duke Nukem Forever was expected to be finished by the end of 2004 , or the beginning of 2005 .

In 2004 , video game website GameSpot reported that Duke Nukem Forever had switched to the Doom 3 engine . Many gaming news sites mailed Broussard , asking him to confirm or deny the rumor . After receiving no answer from him , they published the rumor as fact , but Broussard explicitly denied the rumor soon after . Soon after 3D Realms replaced the game 's Karma physics system with one designed by Meqon , a relatively unknown Swedish firm . Closed @-@ doors demonstrations of the technology suggested that the physics of Duke Nukem Forever would be a step up from the critically acclaimed Half @-@ Life 2 . Rumors suggested that the game would appear at 2005 E3 . While 3D Realms ' previously canceled Prey made an appearance , the rumors of Duke Nukem Forever 's appearance proved false .

Broussard reported in a January 2006 interview that many of Duke Nukem Forever 's elements had been finished ; " we 're just basically pulling it all together and trying to make it fun " . Later that year Broussard demonstrated samples of the game , including an early level , a vehicle sequence , and a few test rooms . Among the features seen was the interactive use of an in @-@ game computer to send actual e @-@ mails . The developer seemed contrite and affected by the long delays ; while a journalist demoed the game Broussard referenced note cards and constantly apologized for the state of the game . In filing with the United States Securities and Exchange Commission , Take @-@ Two revealed they had renegotiated the Duke Nukem Forever deal , with the former publisher receiving \$ 4 @.@ 25 million instead of \$ 6 million on release of the game . Take @-@ Two offered a \$ 500 @,@ 000 bonus if Duke Nukem Forever was commercially released by December 31 , 2006 . However , Broussard denied the rumors that DNF would be released , saying that 3D Realms never cared for or asked for the bonus . He stated that he would " never ship a game early . "

Some of the staff were tired of the delays ? Duke Nukem Forever was the only 3D game many had worked on , giving them little to put on a resume , and as much of 3D Realms ' payment hinged on profit @-@ sharing after release , the continual delays meant deferred income . By August 2006 , between 7 ? 10 employees had left since 2005 , a majority of the Duke Nukem Forever team ( which in recent months had shrunk to around 18 staff ) . While Shacknews speculated that the departures would lead to further delays , 3D Realms denied the claims , stating that the employees had left over a number of months and that the game was still moving ahead . Creative director Raphael van Lierop , hired in 2007 , played through the completed content and realized that there was more finished than he expected . Lierop told Broussard that he felt they could push the game and " blow

everyone out of the water " , but Broussard responded that the game was still two years away from completion .

= = 3D Realms final years in development , 2007 ? 2009 = =

The long delay strained Broussard and Miller 's relationship , and by the end of 2006 , Broussard appeared to become serious about shipping the title . On January 25 and May 22 , 2007 , Broussard posted two Gamasutra job ads with small screenshots of Duke Nukem and an enemy , which he later confirmed were real in @-@ game screenshots . The team doubled in size within a short timeframe . Among the new hires was project lead Brian Hook , who became the first person to successfully resist Broussard 's requests for changes .

A new game trailer was released on December 19 , 2007 , the first teaser in more than six years . The video was made by 3D Realms employees as part of holiday festivities . While Broussard maintained the release date would be " when it 's done " , he added that " you can expect more frequent media releases [ and ] we have considerable work behind us " . While the Dallas Business Journal " confirmed " a 2008 release date for the game , Broussard later reported that this was based on a misunderstanding of " off the record " information . In @-@ game footage of the game appeared in 2008 premiere episode of The Jace Hall Show . Filmed entirely on hand @-@ held cameras but not originally expected to be publicly released , the video showed host Jason Hall playing through parts of a single level on a PC at 3D Realms ' offices . The footage was confirmed to have been shot six months prior to the episode air date and according to Broussard , contained outdated particle and combat effects that had since been replaced . The game did not make an appearance at E3 2008 , an event which Miller described as " irrelevant " .

While the game neared completion , the funding began to dry up . Having spent more than \$ 20 million of their own money , Broussard and Miller asked Take @-@ Two for \$ 6 million to complete the game . According to Broussard and Miller , Take @-@ Two initially agreed , but then only offered \$ 2 @.@ 5 million . Take @-@ Two maintained that they offered \$ 2 @.@ 5 million up front and another \$ 2 @.@ 5 million on completion . Broussard rejected the counteroffer , and on May 6 , 2009 , suspended all development .

= = DNF team laid off and 3D Realms downsized , 2009 ? 2010 = =

3D Realms laid off the DNF staff on May 8 , 2009 due to lack of funding , but inside sources claimed it would still operate as a smaller company . Development on DNF halted , and its fate was unknown . Publisher Take @-@ Two Interactive , in response , stated that they still held the publishing rights for Duke Nukem Forever , but they were not funding the game . Prior to and after the action , unreleased screenshots , concept art , pictures of models from the game and a goodbye message from 3D Realms were posted by alleged former employees . Similar leaks followed after May 8 , 2009 .

Take @-@ Two filed a lawsuit against 3D Realms over their failure to complete Duke Nukem Forever , citing that they paid \$ 12 million to Infogrames in 2000 to acquire the publishing rights . 3D Realms argued , however , that they never received that money , as it was a direct agreement between Infogrames and Take @-@ Two . The lawsuit seemed to be over a contractual breach , but not regarding the \$ 12 million mentioned above . Take @-@ Two asked for a restraining order and a preliminary injunction , to make 3D Realms keep the Duke Nukem Forever assets intact during proceedings , but the court denied the publisher 's request for a temporary restraining order . In December 2009 , Apogee CEO Scott Miller clarified that " we 've never said that Duke Nukem Forever has ceased development , [ though ] we released the internal team , but that doesn 't correlate to the demise of the project . "

3D Realms made plans to hire an " external " developer to complete the progress while continuing to downsize itself , resulting in development on another title known as Duke Begins being halted . An unofficial compilation of gameplay footage was also released in December 2009 . By 2010 , 3D Realms and Take @-@ Two had settled the lawsuit and dismissed it with prejudice .

= = Gearbox revival and release , 2010 ? 2011 = =

Despite the discontinuation of internal game development at 3D Realms , development of the game did not cease entirely . Nine ex @-@ employees including key personnel like Allen Blum , continued game development throughout 2009 from their homes . These employees would later become Triptych Games , an independent studio housed in the same building as Gearbox , with whom they collaborated on the project .

After ceasing internal game development , 3D Realms approached noted game developers Gearbox Software and asked them if they were interested in helping Triptych Games polish the nearly finished PC version and port it to the consoles . Gearbox CEO Randy Pitchford , who had worked on an expansion to Duke Nukem 3D and very briefly on Forever before he left to found Gearbox , felt that " Duke can 't die " and decided that he was going to help " in Duke ? s time of need . " He started providing funding for the game and contacted 2K Games ' president to persuade his company that Gearbox and Triptych can complete the development of the game and get it released on all platforms in time . Duke Nukem Forever was originally intended to be a PC exclusive game , however 2K and Gearbox had hired Piranha Games to port the game designed for PC to Xbox 360 and PlayStation 3 and added a Multiplayer in order to raise sales .

The game was officially re @-@ announced at the Penny Arcade Expo 2010 on September 3 , 2010 . It was the first time in the game 's development history that gamers were able to actually try the game ? according to Pitchford , " the line has gotten up to four hours long to see the game " . Gearbox Software subsequently purchased the Duke Nukem intellectual property from 3D Realms , and 2K Games held the exclusive long @-@ term publishing rights of the game .

Development was almost complete with only minor polishing to be done before the game was to be released in 2011 . A playable demo of Duke Nukem Forever was released once Gearbox figured out the timing , with purchasers of the Game of the Year Edition of Borderlands gaining early access . The demo is unexpectedly different from the versions available at PAX and Firstlook . Those that purchased Borderlands on Valve 's Steam prior to October 12 , 2010 got the code for the demo without the need to buy the Game of the Year edition of the game . Duke Nukem Forever was initially scheduled for release on May 3 in the United States and May 6 internationally and after another delay was finally released on June 14 in North America and June 10 worldwide , nearly four weeks after the game had ' gone gold ' within 15 years .

= = Press coverage = =

Wired News has awarded Duke Nukem Forever its Vaporware Award several times . It placed second in June 2000 and topped the list in 2001 and 2002 . Wired magazine created the Vaporware Lifetime Achievement Award exclusively for DNF and awarded it in 2003 . George Broussard accepted the award , simply stating , " We 're undeniably late and we know it . " In 2004 , the game did not make the top 10 ; Wired editors said that they had given DNF the Lifetime Achievement Award to get it off of the list . However , upon readers ' demands , Wired changed its mind , and DNF won first place in 2005 , 2006 , and 2007 . In 2008 , Wired staff officially considered removing DNF from their annual list , citing that " even the best jokes get old eventually " , only to reconsider upon viewing the handheld camera footage of the game in The Jace Hall Show , awarding the game with first place once again . In 2009 , Wired published Wired News ' Vaporware Awards 2009 : Duke Nukem Forever was excluded from consideration on the grounds that the project was finally dead . Duke made a comeback with an unprecedented 11th place award on Wired 's 2010 Vaporware list . When the GameSpy editors compiled a list of the " Top 25 Dumbest Moments in Gaming History " in June 2003 , Duke Nukem Forever placed # 18 . Duke Nukem Forever has drawn a number of jokes related to its development timeline . The video gaming media and public in general have routinely suggested several names in place of Forever , calling it " Never " , " ( Taking ) Forever " , " Whenever " , " ForNever " , " Neverever " , and " If Ever " . The game has also been ridiculed as Duke Nukem : Forever In Development , " Either this is the longest game ever in production or an

elaborate in @-@ joke at the expense of the industry " .

= = Additional references = =