

= Dwarf Fortress =

Dwarf Fortress ( officially called Slaves to Armok : God of Blood Chapter II : Dwarf Fortress ) is a part construction and management simulation , part roguelike , indie video game created by Tarn and Zach Adams . Freeware and in development since 2002 , its first alpha version was released in 2006 and it received attention for being a two @-@ member project surviving solely on donations . The primary game mode is set in a procedurally generated fantasy world in which the player indirectly controls a group of dwarves , and attempts to construct a successful and wealthy underground fortress . Critics praised its complex , emergent gameplay but had mixed reactions to its difficulty . The game influenced Minecraft and was selected among other games to be featured in the Museum of Modern Art to show the history of video gaming in 2012 .

The game has text @-@ based graphics and is open @-@ ended with no main objectives . Before being played , the player has to generate worlds with continents , oceans and histories documenting civilizations . The main game mode , Fortress Mode , consists of selecting a suitable site from the generated @-@ world , establishing a successful colony or fortress , combating threats like goblin invasions , generating wealth and taking care of the dwarves . Each dwarf is modeled down to its individual personality , has likes or dislikes and specific trainable skills in various labors . The second main game mode , Adventure Mode , is a turn @-@ based , open @-@ ended roguelike where the player starts off as an adventurer in the world and is free to explore , complete quests , or even visit old abandoned fortresses . The combat system is anatomically detailed with combat logs describing organs getting pierced , fat getting bruised and limbs getting severed .

Prior to Dwarf Fortress , Tarn Adams was working on a project called Slaves to Armok : God of Blood which was a role @-@ playing game . By 2004 , Adams decided to shift from the original Armok to Dwarf Fortress after the former became difficult to maintain . Adams calls it his life 's work and said in 2011 , that version 1 @.@ 0 will not be ready for at least another 20 years , and even after that he would continue to work on it . The game has a cult following and an active online community . As there is no way to win , every fortress , no matter how successful , is usually destroyed somehow . This prompts the unofficial community motto : " Losing is Fun ! "

= = Gameplay = =

= = = Overview and game modes = = =

Dwarf Fortress has three primary game modes which take place in worlds created by the player , where most of the elements are randomly generated . Fortress Mode is a construction and management simulation of a colony of dwarves . There are no objectives , with the player being free to decide how to go about managing the colony and making them interact with the environment , thus making it an open @-@ ended and sandbox @-@ style game . Since there is no way to win , it only ends when the entire colony is defeated by the various possible threats or the player decides to abandon the fortress . The visuals are text @-@ based using code page 437 characters in various colors as graphics . Thus , it is fully of letters , numbers and symbols ; dwarves are represented by different colored smiling faces , a cat and dog are a white " c " and brown " d " , while a giant spider is a grey " S " .

Adventure Mode is a turn @-@ based , open @-@ ended roguelike where the player starts off as an adventurer . In Legends Mode , players can view maps , histories of each civilization and any figure who has lived or died in the generated world . Any noticeable achievement made by the player in any of the two game modes is recorded in the Legends . A testing arena is present , where players can simulate battles between selected units in various conditions .

= = = World generation = = =

The first step in Dwarf Fortress is generating a playable world ; only one game can be played per

world at a time . The player can adjust certain parameters governing size , savagery , mineral occurrences and the length of history . The map shows symbols representing roads , hills , towns and cities of the various civilizations , and it changes as the generation progresses . A midpoint displacement algorithm generates the world .

The process involves procedurally @-@ generated basic elements like elevation , rainfall , mineral distribution , drainage and temperature , using fractals ( which give it an overall natural look ) . For example , a high @-@ rainfall and low @-@ drainage area would make a swamp . Areas are thus categorized into biomes , which have two variables : savagery and alignment . They have their own specific type of plant and animal populations . The next phase is erosion ? which the drainage tries to simulate . Rivers are created by tracing their paths from the mountains ( which get eroded ) to its end which is usually an ocean ; some form into lakes . The salinity field defines oceans , mangroves or alluvial plains . Names are generated for the biomes and rivers . The names depend on the area 's good / evil variable ( the alignment ) and though in English , they are originally in one of the four in @-@ game languages of dwarves , elves , humans and goblins ; these are the four main races in any generated world .

After a few minutes the world is populated and its history develops for the amount of in @-@ game years selected in the history parameter . Civilizations , races and religions spread and wars occur , with the " population " and " deaths " counters increasing . The ticker stops at the designated " years " value , at which point the world can be saved for use in any game mode . Should the player choose to retire a fortress or gets defeated , this world will persist and will become available for further games .

= = = Fortress mode = = =

= = = Basics = = =

When Fortress mode is selected , the player is given the option to choose the embark location in the world . The player can consider the environment , elevations , biome , soil types and mineral concentrations which can pose significant challenges to the development or survival of the fortress . Customizing the colony 's supplies , domestic animals and skills are available , but each dwarves ' mental and physical attributes are randomly generated . The game describes in detail each dwarf 's physical appearance , like hair and facial features . The mental abilities , individual preferences and desires are also randomly generated . Each dwarf 's relationships with others and the deities they worship can be viewed .

The player embarks with the expedition team ( seven dwarves , their livestock and supplies ) , and does not have direct control over them . In order to construct and operate the fortress , the player has to designate specific tasks to be performed and the dwarves will go about it . They can be assigned any labors , but their work still depends on their relative skill with it , which can increase . Some task categories are stone @-@ working , woodworking , metalworking , farming @-@ related and crafts @-@ making ; there are further combat @-@ related skills . They are categorized further , such as are leatherworking , butchery , clothesmaking , gem @-@ related , glassmaking , and clay @-@ related industries . Activities take place in workshops which need to be constructed ; for example , stills for brewing alcohol . The metal industry has a very important role because it produces weapons and armor for the military , trap components for defense , and high @-@ value furniture and decorations .

= = = Functional mechanics = = =

The player initially can see a top @-@ down view of the surface @-@ level of the fortress site ; each layer of a z @-@ axis level can be viewed when the player changes it . An entire underground level would be seen as its entire section of terrain while a mountain at the surface level would have only its section visible with the remaining surface landscape . Thus , for digging , the player can

designate , for every z @-@ level starting from the surface , staircases to be carved and at the final designated level , ending the staircase by making it dug into a room .

The geology in Dwarf Fortress is fairly accurate . Rocks like olivine or gabbro can be dug up . The topmost layer usually consists of sand , clay or plain soil ? this can be used for underground farming . Deeper levels will be layers of rock ; minerals appear in layers or clusters around the right depth . Gems like tourmalines appear in rare clusters . Water is simulated like falling sand , every space can contain up to seven levels of it . A tile having " one " level of water is the lowest while a tile with " seven " is full . There is a system for simulating temperature and heat . Fires can spread and burn dwarves and furniture . There are four basic seasons in an in @-@ game year : spring , summer , autumn and winter .

Mineral ores can be mined just like normal stone and the raw ore can be smelted to produce their corresponding metal bars . Different ores or metal bars can be alloyed together for higher quality materials . For steel production , flux stones are used to make pig iron bars and smelt it with regular iron and coal ( or charcoal ) . Specific metal items can be melted back to their respective bars . Without steel , the alloy bronze or regular iron are the next best suitable metals to use . Bronze requires two ores or bars of tin and copper . The metal adamantite , found deep below , is extremely light but very strong , making it excellent for sharp weapons and armor . Raw adamantite can be extracted into strands and can further be either woven in cloth or smelted into wafers .

== = Fortress management and growth == =

Underground farming has customized crops like " Plump Helmet " mushrooms , which can be brewed to make mushroom wine . As the fortress prospers , migrants come in larger numbers from the mountainhome ( the colony 's home civilization ) and will need further accommodation . Trading caravans , which can be from the various neighboring civilizations including the home civilization , visit the fortress on a yearly basis and are useful for getting supplies not available in the player 's fortress area . The role of bookkeeper , manager and broker can be assigned to any dwarf during early game . The bookkeeper maintains records of every item present in the fort , the manager auto @-@ assigns jobs and the broker deals with trading caravans . The production of crafts from any material are useful for trading . The caravans come from civilizations of elves and humans but depending on the embark region and history , they may be absent or sometimes even hostile .

Dwarves need to be provided with food and drink ( mostly in the form of alcohol ) . A dwarf will get negative thoughts for drinking plain water and even for drinking the same type of alcohol , making it necessary to grow different crops for producing different drinks . Things like not having a separate bedroom can upset a dwarf . They may make friends and sometimes marry ; females give birth . Dwarves can get upset by sustaining injuries , having poor clothing , losing their pets , friends or relatives ; interacting with or seeing their corpses can aggravate this . A frustrated dwarf may break furniture or attack others . Continuous stress will cause them to throw tantrums and eventually go insane , whether going berserk and attacking their comrades in a homicidal rage , becoming suicidally depressed and jumping off a cliff , or simply going " stark raving mad " and stumbling around randomly until their untimely death . Their quality of life can be improved by giving them luxurious personal bedrooms and a well @-@ decorated dining room , medical care , and providing them with a variety of drinks and well @-@ cooked meals . A chain reaction where a single dwarf 's unhappiness causes the entire fortress 's population to start throwing tantrums can begin when one dwarf throws a tantrum , attacks and kills another one with many friends , which drastically affects the happiness of many more .

As the fortress expands and develops , new noble positions become available . While regular dwarves will be happy with simple rooms provided to them , dwarves appointed or elected to noble positions will need more luxurious accommodation . Nobles will even make demands and mandates , getting negative thoughts if they are not fulfilled . A justice system is present to punish criminals , for example , dwarves who injure or kill another dwarf or destroy furniture . Occasionally , a vampire dwarf , with a fake background history , may arrive with a migrant wave and start killing and feeding on the other citizens without being noticed .

Inspired or stressed dwarves will occasionally get into a " Strange Mood " . They will take over a workshop and go searching for the required materials to begin construction of an artifact . If they cannot find the materials , the dwarf will wait at the workshop , demanding it till it is available . After a few in @-@ game weeks , the work results in a legendary artifact , an item so masterfully crafted that it is usually worth more than a beginning fortress ' total wealth put together . These artifacts will be added to the world 's records and its exact description can be viewed . Through this entire period of being in a strange mood , a dwarf will not eat , drink or sleep and will eventually go insane if prolonged due to any reason .

= = = Threats , defense and dwelling deeper = = =

The first in @-@ game year will usually consist of kobold thieves and goblin snatchers trying to infiltrate the fortress . Thieves try to steal valuables while snatchers try to kidnap dwarven children to raise them as future soldiers . Goblin and kobold civilizations near the fortress will always be hostile and a source of frequent attacks . Wildlife is usually harmless , but depending on the fortress location , more fierce elephants , bears , unicorns , giant spiders and wolves may be a threat . Wealthier and more populated fortresses will get ambushes and sieges from neighboring goblin ( or other enemy ) civilization . A thriving fortress will attract certain mega @-@ beasts like hydras , titans or dragons , and randomly generated creatures called " Forgotten Beasts " . These unique creatures have randomized physical qualities and abilities , thus making them have the potential to be very powerful . Undead attack mainly in evil biomes or if the player embarks with a Necromancer Tower being near the site . Undead are harder to kill , and often reanimate once they are defeated with their body parts being separate units to fight .

Military squads can be assigned to a barracks to train in and a uniform ( armor and a weapon ) can be chosen . Squads can be directly commanded to attack enemies . Crossbows can be made for ranged attacks and a range with targets can be constructed for training . Walls can be carved into fortifications and be used by ranged @-@ units during attacks . Kennels can be made to train war animals like dogs . Players can use traps and engineering in addition to training an army . Traps can be made by constructing mechanisms and using metal or wood to construct large weapons like spikes , ax blades or cages . More complex lever @-@ operated and pressure plate @-@ triggering trap components are available .

The combat system in Dwarf Fortress is anatomically detailed . Combat is displayed by viewing the log which describes each weapon striking a specific part of the character 's body . Internal organs can get punctured , combatants can fall to the ground , vomit and lose body parts . Each dwarf has individually detailed limbs , each with damageable bone , fat , muscle and skin . Fat can be bruised without breaking bones and vice versa . Injuries sometimes can be permanent . There is a medical system where a hospital can be set up containing crutches for disabled dwarves , traction benches , plasters and cloth for casts and bandages , thread for suturing , and splints .

Digging deeper is usually done for finding magma , which as a fuel source , removes the player 's dependence on coal or wood . Another reason to dig deeper is for searching for specific raw materials , ores or gems . Magma pools or even bigger magma seas are found while digging into warm rock . Near magma seas , raw adamantite strata can be found . They are shaped like columns , which pass down through the entire magma sea . These columns are hollow and can be broken , revealing an entire shaft leading deeper into the underworld or hell . Underworld creatures are countless and can bring entire fortresses to ruin .

= = = Adventure mode = = =

Adventure mode is a roguelike played in the generated world and unlike Fortress mode , it is turn @-@ based . In this mode , there is character creation similar to other role @-@ playing games . Players can choose a name , gender and spend points on the specific combat and physical skills , where the amount depends on whether the player chooses a peasant , hero or demigod . The player 's character starts off in a random town depending on their race and can interact with the various

non @-@ player characters ( NPCs ) . NPCs can give quests ( usually to slay an outlaw or megabeast ) , speak about the surrounding areas or offer to follow and help the player . Players can choose to explore any part of the generated world using quick @-@ travel mode . A player can find the area of their previously @-@ slain character , visit old abandoned fortresses , seek out the treasures and wield previously @-@ made artifacts . Instead of quitting , the character can be retired , and depending on the player 's achievements , their life events will be documented in the Legends Mode among the historical figures .

= = History = =

= = = Early development ( 2002 ? 2006 ) = = =

One of Tarn and Zach Adams ' early works was a text based adventure game called dragslay , written in the BASIC language and influenced by Dungeons and Dragons . This was the brothers ' first fantasy project . In high school , Tarn Adams taught himself the C programming language and developed it further. dragslay would later have an important influence on Dwarf Fortress . Adams explained his interest in fantasy games , that he had grown up " surrounded by that sort of thing ... along with generic sci @-@ fi , generic fantasy is part of our heritage . " Years later , before entering graduate school in mathematics , Adams began working on a project he called Slaves to Armok : God of Blood . It was named after a deity in dragslay , originally named for a variable " arm \_ ok " ? which counted the limbs the player still had attached . This new project was a two @-@ dimensional ( would later have 3D graphics ) isometric fantasy role @-@ playing game in which the player encountered and fought goblins .

Tarn took some time off Armok to work on small side @-@ projects , and another one which would inspire Dwarf Fortress was Mutant Miner . It was turn @-@ based loosely inspired by a game called Miner VGA . Mutant Miner involved the player digging underneath buildings , searching for ores and fighting monsters , and carrying radioactive " goo " back to the surface for application in growing extra limbs and gaining other abilities . Adams was dissatisfied with only having a single miner , and the game began to lag because it was turn @-@ based . Adams said :

[ I ] nstead of rewriting the game , I thought , well maybe it should be dwarves instead . And it should be real @-@ time to combat the [ lag ] problem . Now , you 'd be digging out minerals in a mountain , combating threats inside , and making little workshops . Then I thought , well , how should the high score list work ? We really like to keep records of plays . Not just high score lists , but expansive logs . So we 'll often try to think of ways to play with the idea . This time , the idea was to let your adventurer come into the fortress after you lose and find the goblets you 've made , and journals it generates .

= = = First release ( 2006 ) = = =

Adams began working on Dwarf Fortress in October 2002 , estimating that the project would take two months , but suspended development soon after , in order to finish his previous work , Armok . He explained that it began like the 1982 arcade game Dig Dug . The Adams brothers started the Bay 12 Games company , launching its website and releasing their games online . By 2004 , Adams announced on his website that he would be switching his main project to Dwarf Fortress after he struggled to continue working on Armok , after all its added features became harder to maintain . Adams explained that it would be a dwarf simulation game but he kept Adventure mode as a surprise feature , which was revealed during its release . At that time , his fan base consisted of a few dozen people and more came in when he made this announcement . He put up a PayPal button after a request from a fan ; similarly , a subscriber system was added later . In the next five months , they made around \$ 300 , which brought in only enough to cover the site 's \$ 20 hosting cost . He dubbed the game as Slaves to Armok , God of Blood II : Dwarf Fortress ; Adams explained that it was a sequel because it continued to work on much of Armok 's code but said its cumbersome

name was mostly " for kicks . "

Adams decided to focus on the game 's development full @-@ time during his first year of his math post @-@ doctorate at Texas A & M in 2006 . He quit it after a year and decided to use up his \$ 15 @,@ 000 savings . The university offered him \$ 50 @,@ 000 if he would stay another year . Adams agreed and commented on this , " I woke up the morning after I gave notice , like , I can actually make this work . " Adams expected he would have to get a job in order to support himself and use his savings because the game had not been released yet . Development continued till 8 August 2006 , when the first alpha version ( version 0.21.93.19a ) was released . Donations reached \$ 800 ? \$ 1000 in the following months , this average increased gradually until they were financially stable . He then decided to solely rely on donations .

= = = Development ( 2007 ? present ) = = =

Adams did not use the 3D graphics which Armok had since its development was hampered because of it . He cited the ease in development of features like fluid simulation , copyright issues with the art and more unhindered possibilities as further reasons for not using it . Being used to the text @-@ based graphics in roguelikes , he did not want graphical tilesets . The story @-@ generation originated first from Armok , although present to some extent in dragslay . Tarn and Zach would write different chapters of events they would like to see , mix it together and try to implement it . Most of this story writing is managed by Zach , who has a role in the game 's development . He graduated in ancient history and books like The Twelve Caesars and the writings of Assyrian kings influenced the game .

Tarn Adams was influenced by roguelike games like 1985 Hack because of its randomly generated levels and detailed mechanics . The body part and wound system was inspired by 1990 role @-@ playing game Cyberpunk 2020 . Adams cited Ultima series as the inspiration for his generated worlds . He prefers modeling on individual elements , rather than entire systems , for better simulations with the outcomes being under his control . During world generation , he made an algorithm to simulate rain shadows which occur in areas at the side of mountain deserts . For the distinct personalities of each unit , he took it from NEO PI @-@ R test of which he admitted knowing little about . The feature of carps eating dwarves was unexpected when the game was released . He had written them having the same size and carps were designed to be carnivorous . Adams composed the game 's flamenco @-@ inspired music .

A z @-@ axis was introduced in the 2008 release because he felt the limitations with a single plane increasing ; the feature of making various constructions like walls was also added at this time . In the earlier version , players could dig only into a mountainside and not underground because of having only one " z @-@ level " , thus it was considered " 2D " . This was significantly easier to maintain due to the limited playable area . Adams commented that this major change was further difficult to implement because of considering details like fluid mechanics and cave @-@ ins . In 2012 , more traps , abilities , syndromes , detailed cities and tombs were added in addition to vampiric and lycanthropic infections , necromancers and undead .

On his reliance on PayPal donations , Adams says he is content since he feels that people really like his work or they would not pay . Ever since its release , donations kept increasing and remaining stable except having a sudden increase during a new version update . He got \$ 50 @,@ 000 in 2010 following a major update after a long gap . Their expenses being low , he has maintained that he is happy as long as the game is self @-@ sustaining and will not charge for it . In 2011 , Adams refused a job offer from an unspecified major game developer and a \$ 300 @,@ 000 deal to license the name Dwarf Fortress from another company . Adams felt that this amount would not equate to the long @-@ term donations he would receive . Adams said that he prefers working on his own and not being part of the gaming industry . In 2013 , his average income was \$ 4000 a month and Adams said , " Barely in the black one month , a little in the red another month . ... It 's a risk I 'm willing to take , and really I couldn 't have it any other way . " He has spent no money on advertising and was happy when bloggers , reviewers like former game journalist Kieron Gillen from PC Gamer and Games for Windows , wrote about his game . In 2015 , Bay 12 Games set up a Patreon account

to help fund Dwarf Fortress .

On 11 June 2016 an event called Dwarfmoot was held at Mox Boarding House in Bellevue , Washington to celebrate the ten @-@ year anniversary of the game . It was organised by video game developer and fan Kinnon Stephens and attended by the Adams brothers .

= = = Further updates = = =

As of July 2016 , the latest update was version 0 @.@ 43 @.@ 05 , with it completing fourteen years in development despite being in alpha version . Adams says he has been able to maintain focus by shifting his attention to different aspects of the game , given its numerous varied features . While regular game development aim to perfect their work for release , he considers this a drawback since he continues exploring and learning while adding new features . Wired and Rock , Paper , Shotgun noted its sometimes funny but unintentional bug fixes , with PC Gamer saying it makes an entertaining RSS feed to subscribe to . Adams has two favorite bugs . One is about a farmer dwarf planting their own bed . The other involves a dwarven executioner , with broken arms unable to use his hammer , delivering punishments by biting his victims and tearing off their limbs , keeping one in his mouth for years .

Tarn Adams considers Dwarf Fortress his life 's work , and has stated in 2011 that he does not expect version 1 @.@ 0 to be released for at least another twenty years , and even after that , he would still continue to update it . Adams calls his game an open @-@ ended " story generator " . The game 's code base is proprietary , and Adams has stated he has no plans to release it into the open source domain , citing the risk of them going into financial trouble . He acknowledged the role of the community in supporting its development and has endorsed third @-@ party tools , visualizers and interface code . He explained he would consider releasing its source if he could not maintain it anymore , seeing different game developers taking it up . He says that he does not mind any modifications as long as he is not put into risk .

Adams describes version 1 @.@ 0 having an Adventure mode that would be a regular role @-@ playing game , with changing plots and ordering subordinates to perform various tasks . Fortress mode would have a closer relationship with the outside generated world through war , trade and diplomacy . The world being bigger ; he envisions the game to have many more features like magic , a tutorial , and a better interface . According to him , a tutorial is a burden because of the additional need of updating it . He said of version 1 @.@ 0 , " sitting down with a fresh DF world would be like sitting down to read a middling fantasy author you haven 't read before , but with all the extras that being a video game provides , including the ability to write your own sequels . " Modern in @-@ game technologies and 3D graphics were fan requests Adams said he would never implement , yet showing ambivalence about the latter if the task was easy enough .

= = Reception = =

The game received attention mainly because of its emergent gameplay , text @-@ based graphics , complexity , poor interface and difficulty , with some reviewers describing playing the game from start as a steep learning curve ? with the meaning of a difficult learning process . It has been compared to other simulations games like SimCity and The Sims , Dungeon Keeper and roguelike games like NetHack . The game has not had much influence on the gaming industry because of its non @-@ commercial nature . It being a two @-@ man self @-@ sustaining project , and Adams ' independence and capability to follow his own ideas were highlighted . Gamasutra said , " There have been few indie gaming success stories as big as Dwarf Fortress " and Wired magazine , following one of its updates , described it as an " obtuse , wildly ambitious work @-@ in @-@ progress mashes the brutal dungeon crawling of roguelikes with the detail @-@ oriented creativity of city @-@ building sims . "

The depth and complexity were praised . Jonah Weiner from The New York Times stated , " Many simulation games offer players a bag of building blocks , but few dangle a bag as deep , or blocks as small and intricately interlocking , as Dwarf Fortress . " PC Gamer 's Steve Hogarty commented ,

" Dwarf Fortress 's reluctance to expend even a joule of energy in prettying itself results in astonishing hidden complexity . " Regarding the open @-@ ended nature and emergent gameplay , Rock , Paper , Shotgun 's Graham Smith concluded that its procedurally generated world combined with the every character simulated " down to the most minute detail " , the results are " often hilarious , occasionally tragic , and always surprising . " Mike Rose from Gamasutra said , " ... to an outsider looking in on this game so many years into development , with such a wide scope of features and potential play styles , it 's fair to say that getting into Dwarf Fortress is perhaps one of the most daunting tasks the video game industry as a whole can provide . "

The lack of graphics , poor interface and controls were seen as the reasons for the game 's difficulty . However , the reviewers also noted most of it having a role in gameplay and the argument that the text @-@ based graphics forces players to use their own imagination , making it more engaging . Weiner wrote , " [ the game ] may not look real , but once you 're hooked , it feels vast , enveloping , alive . A micro @-@ manager 's dream , the game gleefully blurs the distinction between painstaking labor and creative thrill . " Quintin Smith from Rock , Paper , Shotgun said , " The interface has a tough job to do , bless it , but getting it to do what you want is like teaching a beetle to cook . " Ars Technica 's Casey Johnston highlighted the difficulty in performing basic actions and felt that tinkering or experimenting ended up being unproductive ; she compared it to " trying to build a skyscraper by banging two rocks together " . She pointed out the lack of in @-@ game tutorial and said how players can learn by themselves in other games , which are also open @-@ ended or have intuitive mechanics , but in Dwarf Fortress , there is no autonomy " even after hours " of gameplay .

= = Community = =

Dwarf Fortress has attracted a significant cult following . Web communities on the game came up on Something Awful forums besides on Bay 12 Games . The game 's difficulty , with most fortresses eventually succumbing to various forms of defeat , and to encourage further experimentation through it led to its unofficial slogan " Losing is fun ! " Adams said that it was originally from the manual and there as a consolation for players to get a grip on the issue of permadeath . The game 's official podcast is called " Dwarf Fortress Talk " , where the brothers answer questions from players . They send out crayon drawings or short stories to the donors , customized to their requests and feature the highest donors on their website . Besides donations , Adams said some fans have given computers while others have directly helped him with the game development . A community member ported it to Mac and Linux for free and other volunteers handle the bug tracking system .

Players and members of the community have often written creative interpretations of game events . Fans have made diaries , short videos , comics and audio depicting their stories whether it involved success or defeat . Besides testing the game , sharing it with others and supporting it through donations , they make suggestions , help newcomers , share stories , and information in the Bay 12 Games forums . They maintain the dedicated wiki ; there are also fan @-@ organized podcasts and meet @-@ ups . Adams commented about some fans who donated but have not played the game ? just there for reading the stories . In 2006 , a saga called " Boatmurdered " where fans passed around a single fortress and each played the game and saved it before sending it to another , was portrayed in detail from the start to its destructive end . This spread around gaming sites and boosted the game 's popularity .

On the game 's community , Tarn Adams said , " They are the reason I 've been able to make the step from hobbyist to full @-@ time developer . I 'm lucky to be able to run with whatever ideas we have and try new things . " On players sending him forum posts or emails detailing their stories or events that happened during the game , Adams said , " It 's really gratifying , because it 's one of the things we set out to do is to get people to write these narratives about their game . " Adams has admitted that some feats of the community surprised even him . Adams stated that the most impressive thing he had ever seen done with the game was when a player managed to create a Turing @-@ complete 8 @-@ bit calculator powered by dwarves .

There have been tutorials on YouTube with one being a 15 @-@ part series , and another 12 @-@



part written series called " The Complete and Utter Newby Tutorial for Dwarf Fortress " . There are third @-@ party utilities for the game like " Dwarf Therapist " which helps the player in managing toggling labors and skills . Another one called " Stonesense " with the help of " DFHack " , a library , can render the game in a 3D isometric view . A " DF to Minecraft " utility was developed where players could load their in @-@ game works to be able to view it while playing Minecraft . An illustrated guide to the game , called Getting Started with Dwarf Fortress : Learn to play the most complex video game ever made was released by technology publisher O 'Reilly Media in 2012 written by Peter Tyson . Containing 240 pages , it has a foreword from Adams and is updated along with the game 's development .

= = Legacy = =

The game influenced Minecraft , which reviewers considered a more user @-@ friendly version of Dwarf Fortress . Adams says he is thankful for the Minecraft developers citing his game because that drew more players . There have been other games inspired by the game but they have largely failed to replicate its visual style and depth . Homages to the game appear in the World of Warcraft . In July 2014 , the game won a poll conducted by Turtle Beach as the community 's most " Beautiful Game " ; games were nominated by fans posting videos , images or text , and a list was compiled by the community which also contained The Legend of Zelda : The Wind Waker , Far Cry 3 and The Last of Us . Justin Ma , one of the developers of FTL : Faster Than Light , commented on its use of text @-@ based graphics , " Part of the reason Dwarf Fortress can include a breadth of mechanics unseen in other games is because complex mechanics are expressed in the most simple of visual forms . " Gaslamp Games cited it as one their main influences for the game Clockwork Empires .

In March 2013 , the Museum of Modern Art in New York City exhibited Dwarf Fortress among other games selected to depict the history of video gaming . As new updates are made available , the Museum of Modern Art instantly downloads them and archives them in their secure server . Curator of the exhibition , Paola Antonelli , said she was amazed by the combination of " beautiful aesthetics " and " mind @-@ boggling " complexity in the game .

Game designer Craig Ellsworth commended Dwarf Fortress for having a uniquely long " staying power " . According to Ellsworth , it will not be replaced by any other more advanced game of its genre , partly because of it being the pioneer of its own and since it is on PC ; console games get replaced faster . He wrote , " There is simply no such thing as a flashier Dwarf Fortress , and there can 't be , by definition . " Other reasons , according to him , were it being free and its long development period with its design to be " never @-@ ending " . He predicted the game will be most popular at its final release , with its legacy being more than just historic value . He pointed out that people like the game in its present condition ; they will continue playing it more ardently , as long as it keeps developing , especially with new additions and features . He compared it to the board game Monopoly and the card game Magic : The Gathering . Ellsworth finally said that the game is either a " one @-@ time fluke " or will inspire " a rise of ultra @-@ small indies " with similar financial setups .