= First @-@ person shooter =

First @-@ person shooter (FPS) is a video game genre centered on gun and projectile weapon @-@ based combat through a first @-@ person perspective ; that is , the player experiences the action through the eyes of the protagonist . The first @-@ person shooter shares common traits with other shooter games , which in turn fall under the heading action game . From the genre 's inception , advanced 3D or pseudo @-@ 3D graphics have challenged hardware development , and multiplayer gaming has been integral .

The first @-@ person shooter has since been traced as far back as Maze War , development of which began in 1973 , and 1974 's Spasim . After early , more playful titles like MIDI Maze in 1987 , the genre coalesced into a more wantonly violent form with 1992 's Wolfenstein 3D , which has been credited with creating the genre proper and the basic archetype upon which subsequent titles were based . One such title , and the progenitor of the genre 's wider mainstream acceptance and popularity was Doom , perhaps one of the most influential games in this genre ; for many years , the term Doom clone was used to designate this genre due to Doom 's influence . 1998 's Half @-@ Life ? along with its 2004 sequel Half @-@ Life 2 ? enhanced the narrative and puzzle elements . In 1999 , Half @-@ Life 's mod Counter @-@ Strike was released , and together with Doom is perhaps the most influential first @-@ person shooters . GoldenEye 007 (1997) was a landmark first @-@ person shooter for home consoles , while the Halo series heightened the console 's commercial and critical appeal as a platform for first @-@ person shooter titles . In the 21st century , the first @-@ person shooter is the most commercially viable video game genre , and has more market share of any other genre in the gaming industry . Several first @-@ person shooters have been popular games for eSports and competitive gaming competitions as well .

= = Definition = =

First @-@ person shooters are a type of three @-@ dimensional shooter game , featuring a first @-@ person point of view with which the player sees the action through the eyes of the player character . They are unlike third @-@ person shooters , in which the player can see (usually from behind) the character they are controlling . The primary design element is combat , mainly involving firearms .

First person @-@ shooter games are also often categorized as being distinct from light gun shooters , a similar genre with a first @-@ person perspective which use light gun peripherals , in contrast to first @-@ person shooters which use conventional input devices for movement . A more important key difference is that first @-@ person light @-@ gun shooters like Virtua Cop often feature " on @-@ rails " movement , whereas first @-@ person shooters like Doom give the player more freedom to roam .

The first @-@ person shooter may be considered a distinct genre in itself , or a type of shooter game , in turn a subgenre of the wider action game genre . Following the release of Doom in 1993 , games in this style were commonly termed " Doom clones " ; in time this term has largely been replaced by " first @-@ person shooter " . Wolfenstein 3D , released in 1992 , the year before Doom , has been credited with inventing the genre , but critics have since identified similar though less advanced games developed as far back as 1973 . There are occasional disagreements regarding the specific design elements which constitute a first @-@ person shooter . For example , Deus Ex or BioShock may be considered as first @-@ person shooters , but may also be considered role @-@ playing video games as they borrow from this genre extensively . Some commentators extend the definition to include combat flight simulators where the cockpit or vehicle takes place of the hands and weapons .

= = Game design = =

Like most shooter games , first @-@ person shooters involve an avatar , one or more ranged weapons , and a varying number of enemies . Because they take place in a 3D environment , these

games tend to be somewhat more realistic than 2D shooter games , and have more accurate representations of gravity , lighting , sound and collisions . First @-@ person shooters played on personal computers are most often controlled with a combination of a keyboard and mouse . This system has been claimed as superior to that found in console games , which frequently use two analog sticks : one used for running and sidestepping , the other for looking and aiming . It is common to display the character 's hands and weaponry in the main view , with a head @-@ up display showing health , ammunition and location details . Often , it is possible to overlay a map of the surrounding area .

= = = Combat and power @-@ ups = = =

First @-@ person shooters often focus on action gameplay , with fast @-@ paced and bloody firefights , though some place a greater emphasis on narrative , problem @-@ solving and logic puzzles . In addition to shooting , melee combat may also be used extensively . In some games , melee weapons are especially powerful , a reward for the risk the player must take in maneuvering his character into close proximity to the enemy . In other situations , a melee weapon may be less effective , but necessary as a last resort . " Tactical shooters " are more realistic , and require teamwork and strategy to succeed ; the player often commands a squad of characters , which may be controlled by the game or by human teammates .
First @-@ person shooters typically give players a choice of weapons , which have a large impact on how the player will play the game . Some game designs have realistic models of actual existing or historical weapons , incorporating their rate of fire , magazine size , ammunition amount , recoil and accuracy . Other first @-@ person shooter games may incorporate imaginative variations of weapons , including future prototypes , " alien technology " scenario defined weaponry , and / or utilizing a wide array of projectiles , from industrial labor tools to laser , energy , plasma , rocket and grenade launchers or crossbows . These many variations may also be applied to the tossing animations of grenades , rocks , spears and the such . Also more unconventional modes of destruction may be employed from the viewable users hands such as flames , electricity , telekinesis or other supernatural constructions . However , designers often allow characters to carry varying multiples of weapons with little to no reduction in speed or mobility , or perhaps more realistically , a pistol or smaller device and a long rifle or even limiting the player to only one weapon at a time . There are often options to trade up , upgrade or swap out in most games . Thus , the standards of realism varies between design elements . The protagonist can generally be healed and re @-@ armed by means of items such as first aid kits , simply by walking over them . Some games allow players to accumulate experience points similar to those found in role @-@ playing games , which can unlock new weapons and abilities .

= = = Level design = = =

First @-@ person shooters may be structurally composed of levels , or use the technique of a continuous narrative in which the game never leaves the first @-@ person perspective . Others feature large sandbox environments , which are not divided into levels and can be explored freely . In first @-@ person shooters , protagonists interact with the environment to varying degrees , from basics such as using doors , to problem solving puzzles based on a variety of interactive objects . In some games , the player can damage the environment , also to varying degrees : one common device is the use of barrels containing explosive material which the player can shoot , destroying them and harming nearby enemies . Other games feature environments which are extensively destructible , allowing for additional visual effects . The game world will often make use of science fiction , historic (particularly World War II) or modern military themes , with such antagonists as aliens , monsters , terrorists and soldiers of various types . Games feature multiple difficulty settings ; in harder modes , enemies are tougher , more aggressive and do more damage , and power @-@ ups are limited . In easier modes , the player can succeed through reaction times alone ; on more difficult settings , it is often necessary to memorize the levels through trial and error .

= = = Multiplayer = = =

First @-@ person shooters may feature a multiplayer mode , taking place on specialized levels . Some games are designed specifically for multiplayer gaming , and have very limited single player modes in which the player competes against game @-@ controlled characters termed " bots " . Massively multiplayer online first @-@ person shooters allow thousands of players to compete at once in a persistent world . Large scale multiplayer games allow multiple squads , with leaders issuing commands and a commander controlling the team 's overall strategy . Multiplayer games have a variety of different styles of match .

The classic types are the deathmatch (and its team @-@ based variant) in which players score points by killing other players ' characters ; and capture the flag , in which teams attempt to penetrate the opposing base , capture a flag and return it to their own base whilst preventing the other team from doing the same . Other game modes may involve attempting to capture enemy bases or areas of the map , attempting to take hold of an object for as long as possible while evading other players , or deathmatch variations involving limited lives or in which players fight over a particularly potent power @-@ up . These match types may also be customizable , allowing the players to vary weapons , health and power @-@ ups found on the map , as well as victory criteria . Games may allow players to choose between various classes , each with its own strengths , weaknesses , equipment and roles within a team .

= = History = =

= = = Origins : 1970s to late 1980s = = =

The earliest two documented first @-@ person shooter video games are Maze War and Spasim . Maze War features on @-@ foot gameplay that evokes modern first @-@ person shooter games . Development of the game began in 1973 and its exact date of completion is unknown . Spasim had a documented debut at the University of Illinois in 1974 . The game was a rudimentary space flight simulator , which featured a first @-@ person perspective . They were distinct from modern first @-@ person shooters , involving simple tile @-@ based movement where the player could only move from square to square and turn in 90 @-@ degree increments . Spasim led to more detailed combat flight simulators and eventually to a tank simulator , developed for the U.S. Army , in the later 1970s . These games were not available to consumers , however , and it was not until 1980 that a tank video game , Battlezone , was released in arcades . A version of the game was released in 1983 for home computers and became the first successful mass @-@ market game featuring a first @-@ person viewpoint and wireframe 3D graphics , presented using a vector graphics display .

= = = Early first @-@ person shooters : 1987 ? 1992 = = =

MIDI Maze , an early first @-@ person shooter released in 1987 for the Atari ST , featured maze @-@ based gameplay and character designs similar to Pac @-@ Man , but displayed in a first @-@ person perspective . Later ported to various systems - including the Game Boy and Super NES - under the title Faceball 2000 , it featured the first network multiplayer deathmatches , using a MIDI interface . It was a relatively minor game , but despite the inconvenience of connecting numerous machines together , its multiplayer mode gained a cult following : 1UP.com called it the " first multi @-@ player 3D shooter on a mainstream system " and the first " major LAN action game " .

Id Software 's Hovertank 3D pioneered ray casting technology in May 1991 to enable faster gameplay than 1980s vehicle simulators ; and six months later Catacomb 3 @-@ D introduced another advance , texture mapping , in November 1991 . The second game to use texture mapping was Ultima Underworld : The Stygian Abyss , a March 1992 action role @-@ playing game by Looking Glass Technologies that featured a first @-@ person viewpoint and an advanced graphics

engine . In October 1990 , id developer John Romero learned about texture mapping from a phone call to Paul Neurath . Romero described the texture mapping technique to id programmer John Carmack , who remarked , " I can do that . " , and would feel motivated by Looking Glass 's example to do the same in Catacomb 3 @-@ D. Catacomb 3 @-@ D also introduced the display of the protagonist 's hand and weapon (in this case , magical spells) on the screen , whereas previously aspects of the player 's avatar were not visible . The experience of developing Ultima Underworld would make it possible for Looking Glass to create the Thief and System Shock series years later .

= = = Rise in popularity : 1992 ? 1995 = = =

 Wolfenstein 3D (created by id Software and released in 1992) was an instant success , fueled largely by its shareware release , and has been credited with inventing the first @-@ person shooter genre . It was built on the ray casting technology pioneered in earlier games to create a revolutionary template for shooter game design , which first @-@ person shooters are still based upon today . Despite its violent themes , Wolfenstein largely escaped the controversy generated by the later Doom , although it was banned in Germany due to the use of Nazi iconography ; and the Super NES version replaced the enemy attack dogs with giant rats . Apogee Software , the publisher of Wolfenstein 3D , followed up its success with Blake Stone : Aliens of Gold in 1993 . The game was initially well @-@ received but sales rapidly declined in the wake of the success of id 's Doom , released a week later .
 Doom , released as shareware in 1993 , refined Wolfenstein 3D 's template by adding improved textures , variations in height (e.g. , stairs the player 's character could climb) and effects such as flickering lights and patches of total darkness , creating a more believable 3D environment than Wolfenstein 3D 's more monotonous and simplistic levels . Doom allowed competitive matches between multiple players , termed " deathmatches , " and the game was responsible for the word 's subsequent entry into the video gaming lexicon . The game became so popular that its multiplayer features began to cause problems for companies whose networks were used to play the game .
 Doom has been considered the most important first @-@ person shooter ever made . It was highly influential not only on subsequent shooter games but on video gaming in general , and has been available on almost every video gaming system since . Multiplayer gaming , which is now integral to the first @-@ person shooter genre , was first achieved successfully on a large scale with Doom . While its combination of gory violence , dark humor and hellish imagery garnered acclaim from critics , these attributes also generated criticism from religious groups , with other commentators labelling the game a " murder simulator . " There was further controversy when it emerged that the perpetrators of the Columbine High School massacre were fans of the game ; the families of several victims later unsuccessfully attempted to sue numerous video game companies - among them id Software - which the families claimed inspired the massacre .
 In 1994 , Raven Software released Heretic , which used a modified version of the Doom engine that allowed for vertical aiming , an inventory system to store and select items , and gibs . On the Macintosh , Bungie 's release , in the same year , of Marathon , and its subsequent sequels , set the standard for first @-@ person shooters on that platform . Marathon pioneered or was an early adopter of several new features such as freelook , dual @-@ wielded and dual @-@ function weapons , versatile multiplayer modes (such as King of the Hill , Kill the Man with the Ball , and cooperative play) , friendly NPCs , and a strong emphasis on storytelling in addition to the action . Star Wars : Dark Forces was released in 1995 after LucasArts decided Star Wars would make appropriate material for a game in the style of Doom . However , Star Wars : Dark Forces added several technical features that Doom lacked , such as the ability to crouch or look up and down , Apogee 's Duke Nukem 3D , released in 1996 , was " the last of the great , sprite @-@ based shooters " winning acclaim for its humor based around stylised machismo as well as its gameplay . However , some found the game 's (and later the whole series ') treatment of women to be derogatory and tasteless .

= = = Advances in 3D graphics : 1995 ? 1999 = = =

In 1994 , Exact released Geograph Seal for the Japanese Sharp X68000 home computer . An obscure import title as far as the Western market was concerned , it was nonetheless " a fully 3D polygonal first @-@ person shooter " with innovative platform game mechanics and " free @-@ roaming " outdoor environments . The following year , Exact released its successor for the PlayStation console , Jumping Flash ! , which placed more emphasis on its platform elements . Descent (released by Parallax Software in 1995) , a game in which the player pilots a spacecraft around caves and factory ducts , was a truly three @-@ dimensional first @-@ person shooter . It abandoned sprites and ray casting in favour of polygons and six degrees of freedom .

Shortly after the release of Duke Nukem 3D in 1996 , id Software released the much anticipated Quake . Like Doom , Quake was influential and genre @-@ defining , featuring fast @-@ paced , gory gameplay , but used 3D polygons instead of sprites . It was centered on online gaming and featured multiple match types still found in first @-@ person shooter games today . It was the first FPS game to have a following of player clans (although the concept had existed previously in MechWarrior 2 (Netmech) with its Battletech lore as well as amongst MUD players) , and would inspire popular LAN parties such as QuakeCon . The game 's popularity and use of 3D polygonal graphics also helped to expand the growing market for video card hardware ; and the additional support and encouragement for game modifications attracted players who wanted to tinker with the game and create their own modules .

Based on the James Bond film , Rare 's GoldenEye 007 was released in 1997 , and as of 2004 it was the best @-@ selling Nintendo 64 game in the United States . It was the first landmark console first @-@ person shooter and was highly acclaimed for its atmospheric single @-@ player levels and well designed multiplayer maps . It featured a sniper rifle , the ability to perform head @-@ shots , and the incorporation of stealth elements ; as well as Virtua Cop @-@ inspired features such as reloading , position @-@ dependent hit reaction animations , penalties for killing innocents , and an aiming system allowing players to aim at a precise spot on the screen .

Though not the first of its kind , Tom Clancy 's Rainbow Six started a popular trend of tactical first @-@ person shooters in 1998 . It featured a team @-@ based , realistic design and themes based around counter @-@ terrorism , requiring missions to be planned before execution and in it , a single hit was sometimes enough to kill a character . Medal of Honor , released in 1999 , started a long running proliferation of first @-@ person shooters set during World War II .

Valve 's Half @-@ Life was released in 1998 , based upon Quake 's graphics technology . Initially met with only mild anticipation , it went on to become an unprecedented commercial success . While previous first @-@ person shooters had focused on visceral gameplay with comparatively weak plots , Half @-@ Life had a strong narrative ; the game featured no cut scenes but remained in the first @-@ person perspective at all times . It featured innovations such as non @-@ enemy characters (featured somewhat earlier in titles such as Strife) but did not employ power @-@ ups in the traditional sense . Half @-@ Life was praised for its artificial intelligence , selection of weapons and attention to detail and " has since been recognized as one of the greatest games of all time " according to GameSpot . Its sequel Half @-@ Life 2 (released in 2004) , was less influential though " arguably a more impressive game " .

Starsiege : Tribes , also released in 1998 , was a multiplayer online shooter allowing more than 32 players in a single match . It featured team @-@ based gameplay with a variety of specialized roles , and an unusual jet pack feature . The game was highly popular and later imitated by games such as the Battlefield series . Id 's Quake III Arena and Epic 's Unreal Tournament , both released in 1999 , were popular for their frenetic and accessible online multiplayer modes ; both featured very limited single player gameplay . Counter @-@ Strike was also released in 1999 , a Half @-@ Life modification with a counter @-@ terrorism theme . The game and later version Counter @-@ Strike : Source (2004) went on to become by far the most popular multiplayer first @-@ person shooter and computer game modification ever , with over 90 @,@ 000 players competing online at any one time during its peak .

= = = Online wars and return of the console : 2000 ? 2006 = = =

At the E3 game show in 1999 , Bungie unveiled a real @-@ time strategy game called Halo ; at the following E3 , an overhauled third @-@ person shooter version was displayed . In 2000 , Bungie was bought by Microsoft . Halo was then revamped and released as a first @-@ person shooter ; it was one of the launch titles for the Xbox console . It was a runaway critical and commercial success , and is considered a premier console first @-@ person shooter . It featured narrative and storyline reminiscent of Bungie 's earlier Marathon series but now told largely through in @-@ game dialog and cut scenes . It also received acclaim for its characters , both the protagonist , Master Chief and its alien antagonists . The sequel , Halo 2 (2004) , brought the popularity of online @-@ gaming to the console market through the medium of Xbox Live , on which it was the most played game for almost two years .

Deus Ex , released by Ion Storm in 2000 , featured a levelling system similar to that found in role @-@ playing games ; it also had multiple narratives depending on how the player completed missions and won acclaim for its serious , artistic style . The Resident Evil games Survivor in 2000 and Dead Aim in 2003 attempted to combine the light gun and first @-@ person shooter genres along with survival horror elements . Metroid Prime , released in 2002 for the Nintendo GameCube , a highly praised console first @-@ person shooter , incorporated action adventure elements such as jumping puzzles and built on the Metroid series of 2D side @-@ scrolling platform @-@ adventures . Taking a " massive stride forward for first @-@ person games " , the game emphasised its adventure elements rather than shooting and was credited by journalist Chris Kohler with " breaking the genre free from the clutches of Doom " .

World War II Online , released in 2001 , featured a persistent and " massively multiplayer environment " , although IGN said that " the full realization of that environment is probably still a few years away . " Battlefield 1942 , another World War II shooter released in 2002 , featured large scale battles incorporating aircraft , naval vessels , land vehicles and infantry combat . In 2003 , PlanetSide allowed hundreds of players at once to compete in a persistent world , and was also promoted as the " world 's first massively multiplayer online first person shooter . " Doom 3 , released in 2004 , placed a greater emphasis on horror and frightening the player than previous games in the series and was a critically acclaimed best seller , though some commentators felt it lacked gameplay substance and innovation , putting too much emphasis on impressive graphics . In 2005 , a film based on Doom featured a sequence that emulated the viewpoint and action of the first @-@ person shooter , but was critically derided as deliberately unintelligent and gratuitously violent .

In 2005 , F.E.A.R. was acclaimed for successfully combining first @-@ person shooter gameplay with a Japanese horror atmosphere . Later in 2007 , Irrational Games ' BioShock would be acclaimed by some commentators as the best game of that year for its innovation in artistry , narrative and design , with some calling it the " spiritual successor " to Irrational 's earlier System Shock 2 .

Finally , the Crytek games Far Cry (2004) and Crysis (2007) as well as Ubisoft 's Far Cry 2 (2008) would break new ground in terms of graphics and large , open @-@ ended level design , whereas Call of Duty 4 : Modern Warfare (2007) , Resistance : Fall of Man (2006) and its sequel Resistance 2 (2008) presented increasingly refined linear levels and narratives , with the fast pace and linearity of the Call of Duty games bearing a resemblance to rail shooters . In 2006 , GamaSutra reported the first @-@ person shooter as one of the biggest and fastest growing video game genres in terms of revenue for publishers .

= = = 2007 ? present = = =

In 2010 , researchers at Leiden University showed that playing first @-@ person shooter video games is associated with superior mental flexibility . Compared to non @-@ players , players of such games were found to require a significantly shorter reaction time while switching between complex tasks , possibly because they are required to develop a more responsive mindset to rapidly react to fast @-@ moving visual and auditory stimuli , and to shift back and forth between different

sub @-@ duties . The use of motion detecting game controllers ? particularly the Wii 's ? " promised to make FPS controls more approachable and precise with an interface as simple as literally pointing to aim " and thus " dramatically reshape the first @-@ person shooter . " However , technical difficulties pertinent to functions other than aiming ? such as maneuvering or reloading ? prevented their widespread use among first @-@ person shooters . The Pointman user interface combines a motion @-@ sensitive gamepad , head tracker and sliding foot pedals to increase the precision and level of control over one 's avatar in military first @-@ person shooter games .