

**HOW VIDEO GAMES
ARE MADE**
part 3

↘ **John**
the man who did it all
Romero

AUTHOR Goran Račić



In this third, and final, part of our feature “How video games are made” we talk to John Romero, legendary developer with more than 30 years of experience and more than 130 games (including Wolfenstein 3D, Doom, Quake and, yes, Daikatana) under his belt. A true inspiration for the youth!





If it is true that every gamer has a spark for game development then John Romero is a forest fire on legs. Most famous for working on Wolfenstein 3D, Doom, Quake and being a half of two Johns, two guys who transformed the world of gaming, he has a lot more to his name. Like in the movies he was a kid genius who, in his early teens, ported a classified military Russian dogfight simulation from mainframe to minicomputer - while his stepfather was stationed at Royal Air Force in Alconbury, England, Romero was approached by an officer in charge of a military project...



Tom Hall, John Romero and Warren Spector - October 5th 1999



You can come from many disciplines to work on games, but the most powerful developers are also coders

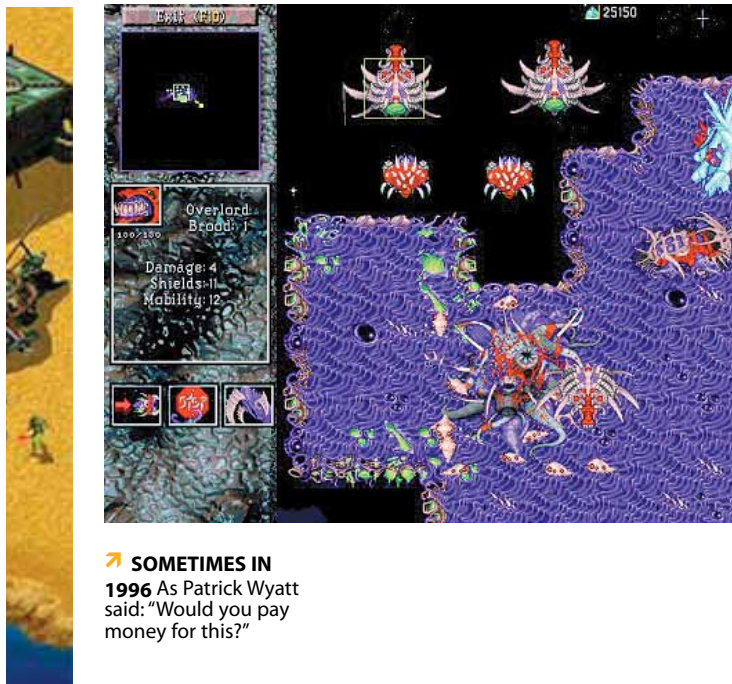
John Romero

▶ **WHILE PROGRAMMING ON** the Apple II, in 1984 he got his first game published by InCider magazine (his earlier games were published later) and that was the start of a streak that led to winning programming contests, getting his game featured on magazine covers and all that before he made it big. For most gamers "making it big" would be Romero's time at id Software but his rise started with a job at Origin Systems in 1987 (legendary development team bought, and subsequently destroyed, by EA) and continued with a gig at Softdisk in 1989 where he worked as a programmer for his Special Projects division until he managed to form a PC Gaming division. While there he befriended Tom Hall, extraordinary and possibly insane (depends who you ask) designer and programmer, and met and hired John Carmack. The final piece of the puzzle was Adrian Carmack (no relation to John) who worked as an artist - those guys later left Softdisk to form id Software, one of the most important developers ever and a secret love of PC gamers around the world. It turns out, id Software was just a stopping point for Romero who went to co-found Ion Storm (together with Tom Hall, and others), a company that made the beloved Deus Ex, fantastic Anachronox, and infamous Daikatana. John left before the company crumbled, founded more companies, worked for big names in the gaming business, made games for mobiles, and today works as CEO, coder and who knows what else at Loot Drop, a company making games for social networks. But with all that success his life was riddled with low points, personal and professional, that took him to places where people would just give up. It seems Romero doesn't have a beating heart in his chest but a sine function, which tells him that everything is going to be all right if he just presses on. He was down in the dumps, king of the world, programmer, designer, legendary developer, gamer extraordinaire, only true rock-star of game development, and we thank him for taking the time to share some of his thought with our readers.



[2] HOW ION STORM MADE STARCRAFT A BETTER GAME

▶ **ION STORM?** StarCraft? You mean, Blizzard!!! No, no, it will all be clear in just a second, sit tight. Well, in 1996. StarCraft was, according to Patrick Wyatt (former Blizzard's Vice President of Research and Development), considered to be just a game that will fill a hole in Blizzard's development cycle. But at E3 that year Blizzard set a booth close to Ion Storm's; and there it was, Dominion: Storm Over Gift 3, an RTS game Ion Storm bought from 7th Level. The game looked amazing, hundred times better than StarCraft. As shaken guys from Blizzard went back to the office, they had a lot to think about. Amongst all that thinking it was decided that StarCraft will become A-class title and not just a filler. StarCraft published a month before Dominion and shook the world of gaming; Dominion was soon forgotten. The first reason for that was, Ion Storm was deep in behind-the-scenes political games led by business guys (Romero and Hall were the game guys) and that was wracking havoc on game development. And the other reason was, that game at E3 that Blizzard guys saw was a fake - all on screen action was a pre-rendered movie. But no matter what, gamers all around the world can thank Ion Storm for giving Blizzard a much needed kick to make one of the best RTS games we have ever seen...



▶ **SOMETIMES IN 1996** As Patrick Wyatt said: "Would you pay money for this?"

With more than 130 games behind you - you were an original bedroom programmer, worked for someone else's company, was king of the industry, founded your own development team, and now you are indie with your latest endeavor, Loot Drop - is there some kind of design philosophy that is applicable to all of your games? Designing Doom isn't the same as designing games for social platforms.

John Romero: My design philosophy is pretty simple: Design something that's innovative in some form, learn something with every project I make, and work everyday to make life fun.

Many people forget you are a great programmer too - you've made lots of tools at id Software that were used for developing their titles - but is that a thing that helps you be a better designer, to know better what is possible or is that just a thing that constricts you (you know some of your ideas would be very hard to implement so you just drop them)?

JR: Well, in addition to writing dozens of entire games, the tools are very important, yes. In Doom, I wrote lots of code such as the save/load functions. Most importantly, every interaction with the environment I coded: flashing lights, switches, platforms, door, stairs rising, slime hurting, lava hurting, etc. Writing the tools for the game you're designing is the best development loop possible because you're making the game or level design easier through coding, and the tool becomes much easier for other designers to use.

In the old days you had to be a programmer - for example, Hideo Kojima, who didn't know how to program was looked upon as a third wheel in the company - to enter the videogame business, but today things are different. Do you think you can come from practically any walk of life or do you have to be a techno-geek at heart?

JR: You can come from many disciplines to work on games, but the most powerful developers are also coders. Because coders can make a game by themselves, otherwise, whatever your profession, a coder has to be involved to make your game. It's also much easier when the lead game designer can communicate to the lead programmer directly in code-speak.

Game design isn't just making rules for games but there is also Level Design. You exploded onto the scene by designing levels for most of the first episode of Doom, a big chunk

▶ **SUB STALKER** At Softdisk Romero created their first, but not his, double-resolution game



Writing the tools for the game you're designing is the best development loop possible

John Romero



[1] BATMAN AND ROBIN

▶ **ACCORDING TO BOOK "Masters of Doom"**, John Romero met Tom Hall at Softdisk and they became friends. In almost every venture Romero undertook, Hall was involved to some degree. "It's because he's an awesome game designer, a truly honest, friendly person, and he's hilarious. It's awesome working with Tom. We call ourselves hetero-lifemates, lol." Romero said of Hall. They have become like Batman and Robin...



▶ **HAPPY TOGETHER** John Romero and Brenda Brathwaite were recently married by, you guessed it, Tom Hall

I still believe my style of abstract level design is more fun to play than any linear, realistic levels that I see nowadays

John Romero



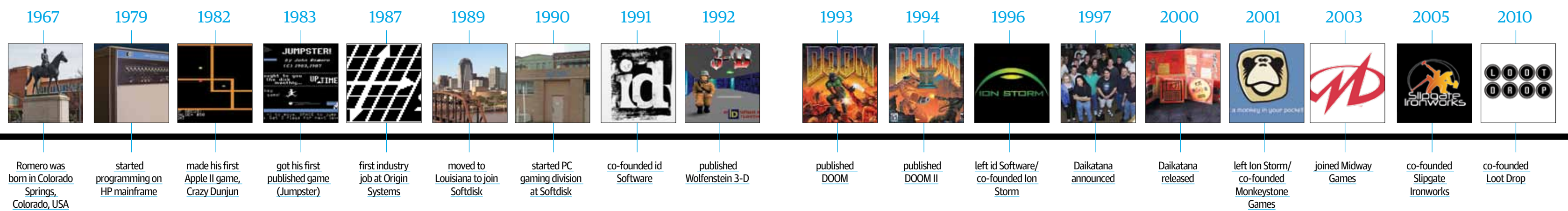
John with his son Michael in 1989; today Michael is a little bigger and works at Loot Drop

I try lots of different things, so many ideas are risky and could fail. That's all part of forging ahead and changing the industry - it won't change if you don't try

John Romero

[3]

TIMELINE



of Quake levels are your babies... in those days you were practically an architect. What is your view on today's level design and mostly linear (FPS) games? I remember that you and Tom Hall had fun with that at GDC 2011 at the Doom post-mortem.

JR: Yes, I've developed levels for all my games. Lots of Commander Keen levels, Wolfenstein 3D (and Spear of Destiny) levels, the first episode of DOOM, several DOOM II levels, and the majority of Quake's levels. I still believe my style of abstract level design is more fun to play than any linear, realistic levels that I see nowadays.

Today, at Loot Drop, you work, among others, with Tom Hall, Brenda Brathwaite (partner, veteran game developer and since recently Mrs. Romero - congratulations), Michael Romero (son from a first marriage) - is this the goal now? Creating games with people you love?

JR: Oh, definitely. Working with those closest to you (and fully qualified) is the best thing in the world.

After you left id Software, John Carmack said in an interview for Blue's News that you want to create an empire, and he just wants to create good programs. Is that still true? I mean, about the empire - is that an option in the future? Or was Carmack wrong back then when he said that?

JR: I did want to create a mini-empire at id, then I tried to create a powerful game developer at Ion Storm (120 employees). It didn't happen at either company. I tried again at Gazillion Entertainment in 2005 and we got up to 350 employees there. But I've found that I have the most fun in game development with really small teams, so I'm going to be focusing on that.

Speaking of things that could happen, what are your thoughts on the future of game development? I know it is hard to say, but it seems like there is a crisis on the horizon with AAA titles having to sell millions and millions of units just to break even. Is the future a future of indie development? Is crowdfunding a viable business practice or is it just a temporary fad fueled by nostalgia?

JR: Production values continue to climb on every platform. We now have more platforms than ever before with Social and Mobile, which have both gone through their v1.0 and v2.0 phases. Crowdfunding is awesome and changes the equation in a huge way for great ideas and known developers. People can vote with their money instead of just publishers who might not have



FERRARI TESTAROSSA
While Romero had a yellow one, Carmack decided that red was more up his alley - both were modified, so crazy fast cars were made even more crazier and faster

MAJOR MAYHEM
Romero wrote the game in 1985 but it was published in Nibble magazine's December 1987 issue

the right people in those key decision-making positions. AAA games will always exist.

I also have to ask - is there any chance we'll see another FPS with your stamp on it?

JR: Yes, most definitely. I'm getting ramped up to make another one. No date yet.

As a man who is credited with coining the word "deathmatch" how do you look upon the simplification of multiplayer FPS games? In the glory days of twitch gaming you really had to be fast (finger and mind) but with the era of slow military shooters (Call of Duty and Battlefield) many feel that skill isn't that essential anymore.

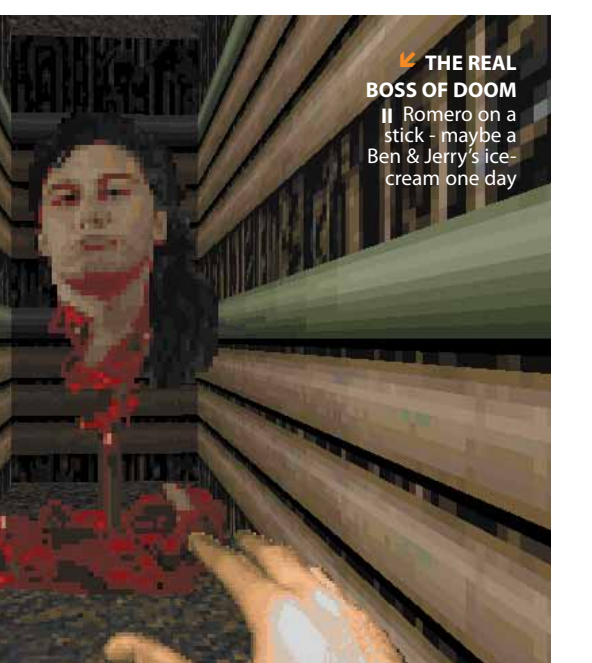
JR: I hate slow shooters. I want to feel skill in the game and be rewarded by using it. That may mean that my game has less players than the slow, bullet-sponge games of today, but that's fine. I want to make games that I like to play.

[4] THE REAL BOSS OF DOOM II

AS MANY, NOW OLDER, gamers know there is a secret, real, boss in Doom II. When you get to the last level (MAP30: Icon of Sin) there is a big demon head that you basically have to shoot in the brain. But, if you use no clip cheat (walk through objects) you can get inside the demon's head and there you will find John Romero's head on a stick.

It all started as a joke when id's artists Adrian Carmack and Kevin Cloud decided to use Romero's head as an art asset, and John Carmack then programmed the head on a stick to be an impact trigger that player would shoot at (but not see).

Romero, after he found out about the joke one late night, added his own touch with help of id's sound guy Bobby Prince; when player gets to the room with the final boss, a deep demonic voice can be heard. The voice is John Romero's (phased and reversed) saying: "To win the game, you must kill me, John Romero."



THE REAL BOSS OF DOOM II
Romero on a stick - maybe a Ben & Jerry's ice-cream one day

There are lots of people online saying developers are only worth as much as their last game. I haven't made a game and I really want to punch them in the face, but you, how do you feel about that? Are you even fazed by comments like that?

JR: I know where the comment comes from, for sure. When you've made as many games as I have, it doesn't seem like a fair assessment. I try lots of different things, so many ideas are risky and could fail. That's all part of forging ahead and changing the industry - it won't change if you don't try. So, I'm not so worried about failure. When I developed my first social game in 2010, it was a massive success with 25 million monthly players. That's a huge number, but most core gamers have no idea I even did that.

To wrap up, do you have any advice for people looking to get into game development? Any favorite platform? I see you are a fan of devices running iOS.

JR: Learn how to program in C, C++, Objective C, or C#. Make very small games, and finish them. I'm a huge Apple fan, so I love OS X and iOS.

Thank you again for your time and all the great games you made over the decades. We hope there will be many more.

JR: Thanks! You can bet that as long as I'm alive I'll be making games.