THE STORY BEHIND...

For this 'the story behind' Philip Oliver talks to Jon Silvera, the man behind FUZE, a new BASIC development system for the Nintendo Switch.

Philip Oliver: Please tell me a bit about your background?

Jon Silvera: My name is Jon Silvera, aka Jonboy aka 'The Video Kid' (Minehead ~1976-86). I grew up in Minehead which as most people will know is a picturesque seaside town in Somerset and home to a popular, then named Butlins, holiday camp. I practically lived in the amusement arcades which for me at the time was great fun, but it did mean my education suffered irreparably as a consequence.

I left school somewhat of a lost cause and generally got up-to no good. It was only thanks to a close friend (hey Colin) sharing his time, and family, with me while learning to program a BBC Micro that things took a very different turn indeed.

Something clicked — I could code! Before you could say 'two nibbles to a byte' I was teaching coding classes in Butlins to packed classes of kids and adults alike. We had a proper classroom with around twenty Spectrums and C64s to teach with.

We taught BASIC and even very simple machine code!

PO: What is FUZE?

JS : A couple of years later I left Minehead for London and ended up in retail and then publishing (remember eJay?). I bought and sold a business and setup a new one with my winnings.

FUZE Technologies Ltd.

began as a side project in 2012. The idea was to see if we could recreate the accessibility and intuitive interaction those old 80s 8-bit micros delivered in spades. Let's face it, back then we had more programmers than we knew what to do with!

While the Raspberry Pi and ASUS Tinkerboard are great platforms and have helped us to realise the

Below: The FUZE home screen — from here you have access to all the bits and pieces you need.
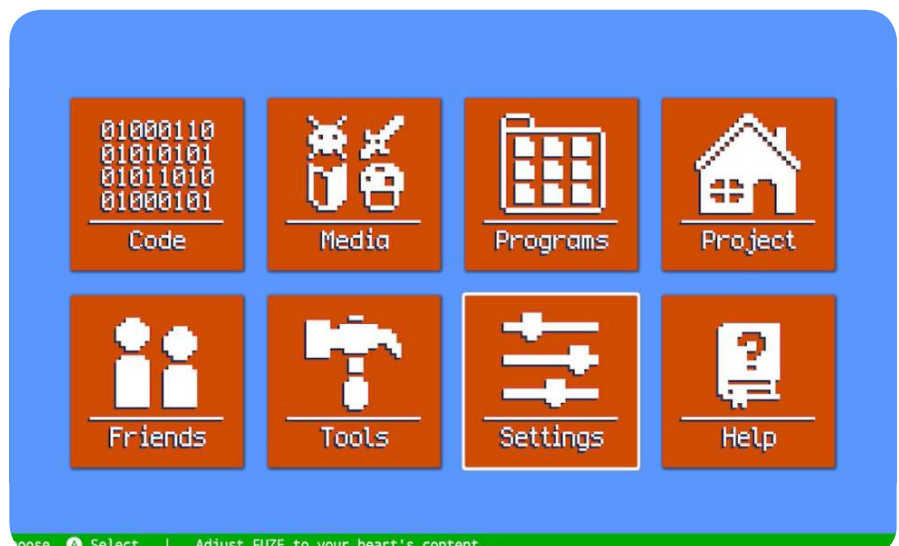
concept, it wasn't really the hardware we were after. We just needed something to run a modernised version of BASIC on.

Since then FUZE BASIC has evolved into a powerful language that remains as flexible and as easy-to-pickup as classic BASIC ever was.

FUZE was always intended to make learning to code as easy as possible and of course at the same time be challenging and fun.

PO : Why produce this for the Nintendo Switch?

JS: We've sold around 5,000 FUZE workstations, they are in use in schools and homes around the world. We've taught more than a hundred thousand children how to code using FUZE. This is all well and good, and we know our method works, but it's not reaching enough users to

Below: Code in all pretty colours — it never looked this nice on the ZX Spectrum.

make a significant impact to the state of 'learning to code' as it stands today.

When I was coding my Speccy, back in the day, I'd have a portable telly, very precariously suspended over my bed and I'd tap (ok, squidge!) away on my lap. I wrote many a demo like that!

The point was that you could code in your bedroom. It was something you could do while the family watched Dallas. It was something you could do after the TV shutdown
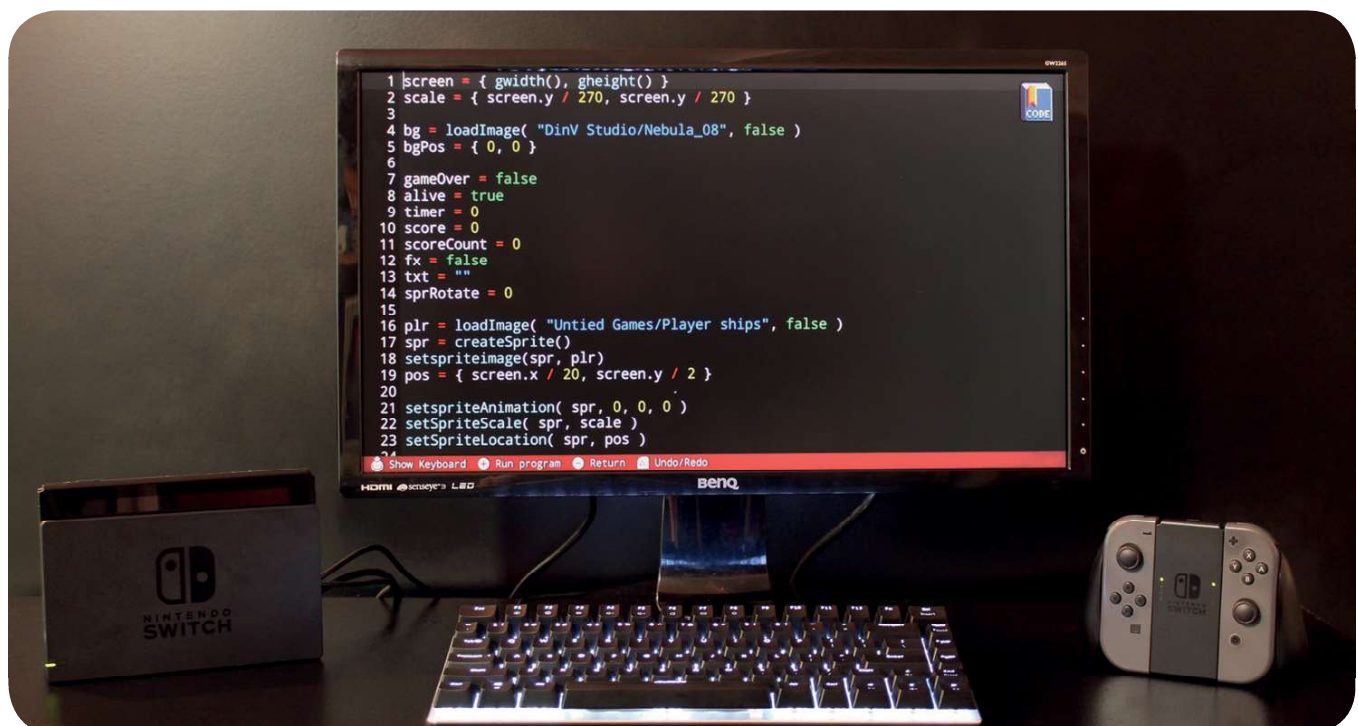
Above: The FUZE logo, on a purpose built keyboard that is used with the Raspberry Pi.

and everyone else had gone to bed.

It was the birth of 'The Bedroom Coder'.

The death of the 8-bit micro and their accessible coding environment pretty much led to the demise of the bedroom coder in my view, at least to the mass market coder anyway.

The Nintendo Switch is

perfect. Code anywhere, plug it into your TV and show off your creations to your family and friends, remove and hand them a controller so you can all play. Code in your bedroom, code on the sofa, code on the

Below: FUZE come with lots of assets already out of the box — it would be rude not to have Dizzy included!

goddamn loo if you want!

FUZE4 Nintendo Switch is the return of the Home Computer — If I could have it start up playing Kraftwerk then I would, it's just that they've not replied yet!

The FUZE coding environment is just as accessible as the 8-bit micro ever was — Code, Run, Debug,
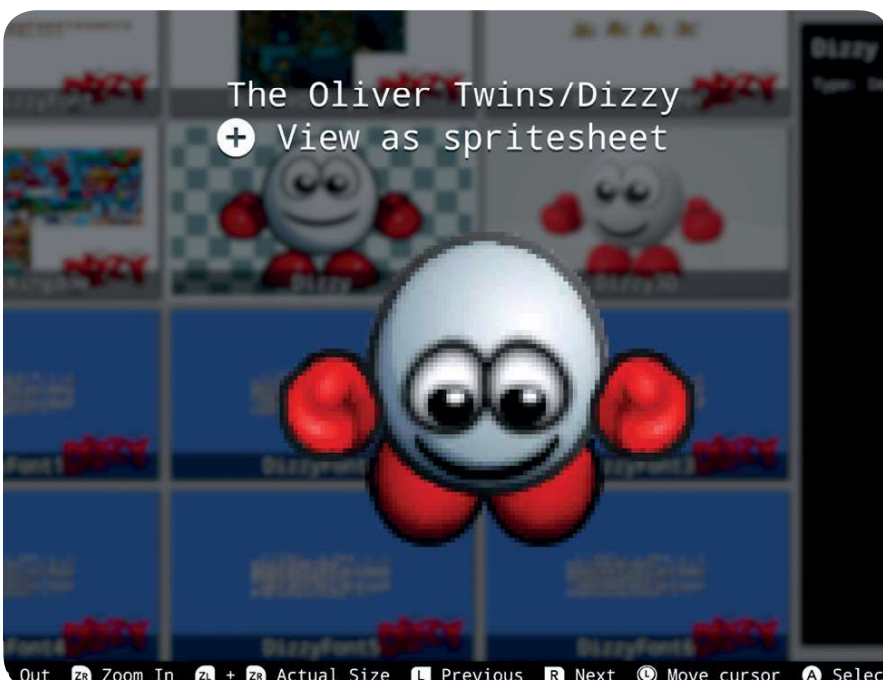
Above: The games that can be created using this environment do look incredible.

Play — simple and loads of fun.

There is one huge difference though. A 1 Mhz C64, BBC and Atari or a 4 Mhz Speccy and Amstrad with next to no memory, limited colours and sound, and horribly sloooow storage meant they were severely held back. It was hard, really hard to make good games back then.

Those limits are gone. Accelerated GPUs and Ghz CPUs with tonnes of RAM and storage, mean it's now not only possible but actually quite easy (!!) to create Doom or Mario Kart and just about any 2D game imaginable in a language very similar to classic BASIC.

PO: So who are you targeting? Are you hoping parents will buy it for their kids, or the kids will pester

few units.

We also hope to pick up those who want to just give coding a go but are put off by how complex it all looks to the outsider. These are my favourite prospects. They are like I was. I had no idea I could be a coder. I totally thought I wasn't smart enough. I was so wrong and it was only when I had a play, did I learn you didn't need to be good at maths and stuff, you just needed to be good at puzzles.

Coding is for thinkers, so anyone who likes thinking.. we'll take those to the bank!

PO: What's your motivation behind creating FUZE?

JS: I apologise if I come across as just too damn corny by being truly honest here? Look, I really was a troubled youth. I stole things, I smoked things, I did a whole load of things and I really didn't care for anything. Learning to code was the reason I turned a corner, the reason I started to believe in myself, like and even respect myself.

When we run our workshops in schools, I'm always on the lookout for a Jonboy, there's usually a few and I can't help but home in on them. When you see the waves of understanding wash over their faces. When they come up to you at the end and say Sir, that was amazing, I'm going to learn to code. Then when the teacher follows and says, 'that kid never speaks to anyone' or that they have never seen a class so engaged.

That's good. Really, really good.

CW: How did you get

their parents for it?

JS: Good question.. (sorry to patronise!) who will buy it? It strikes me that the Switch is popular across all ages. This might be due to its accessibility or it might be down to Mario and Zelda being phenomenal games but whatever it is, everyone's buying it!

Do you remember those arguments with your parents 'but please can I have a computer, pleeease.. I'll use it for my homework, I promise.. oh, and I'll need a Kempston Joystick too!' — well we're

hoping for a bit of that for sure. Although things are different now. Kids must learn to code, or at the very least they must develop 'computational thinking' and raise their 'digital skills' so perhaps it's not quite as much of a blag these days.

Also, becoming a programmer, especially a games programmer, was not seen positively back then whereas now.. it's cool and all because the 'geek' did inherit the Earth after all!

Switch owners are gamers. That's a 100% accurate stat. There are plenty of gamers who are coders who are Switch owners so that should net us a

inspired to get into the games industry?

JS: It started when I was around eight. The very first 10p I dropped into a cabinet was the beginning. I loved Sea Wolf, Killer Shark, Boot Hill, Donkey Kong, Space Invaders, Asteroids, Gravitar, Tron, Gorf, Wardener, Bomb Jack, Crush Roller, Pac Man, Mr Do!, Berzerk, Galaxian, Arkanoid, Cosmic Alien, I'Robot, The Pit, Carnival, Pheonix, Zaxxon, Moon Cresta, Missile Command and so many more. Most of all though I loved Crazy Balloon and Defender.

Quite simply, I love, like I expect you all do, video games.

When I got into publishing software we started with Home & Garden design products — yay, yay! Then came eJay, almost a game, I mean you were playing at making music. It was actually awesome by the way.

I then got the rights to Div Games Studio and DarkBASIC & DB Pro. That was much more like it. I was a whisker away from getting the rights to Sudden Strike which went on to do very well but my boss wasn't so keen so I missed my chance. Things would have been very different if we had it.

In many ways I've never been out of it but I certainly never got to be a game developer.

FUZE4 Nintendo Switch is therefore a dream come true and the opportunity of a lifetime of which I am enormously grateful to my team for. Without any one cog in our little gearbox we'd be screwed.

I never would have imagined, while playing Donkey Kong, Super Mario Brothers and everything since that I'd be responsible for releasing a Nintendo title. It really is my proudest moment.

PO: What games do you hope to see kids make on FUZE?

JS: In our workshops we've seen just about everything, or at least that's what we thought. Recently one lad created a poo space invaders game. There is no end to a child's creativity. Their bounds are only restricted by the system they are using. We are going to see an incredible array of talent via FUZE4 Nintendo Switch — it has no bounds!

PO: What next for FUZE?
JS: Windows, PlayStation, Android, XBOX, Apple, Stadia etc.

Most of all is to nurture a supportive community encompassing all platforms. If we can grow this then we have created something very special.

PO: Well I hope FUZE is successful for you. Where can people buy it and how much will it cost?
JS: Thank you, me too!

FUZE4 Nintendo Switch will release in June and be available on the eShop for £29.99.

PO: Good Luck. Let's hope it does have the same effect on today's kids as those 80s computers had on us. Obviously, they'll be spoilt with the speed, memory and the ease of use!

JS: The speed is really something to behold. Real games without the engines, without any serious knowledge of coding and with all the gaming graphics and sounds at your disposal. We've even added a sharing system so they can easily share with their friends.

PO: I assume their friends need FUZE too, to run those games?

JS: Yes, that's right, for now at least. We'll find a way to make standalone compiled versions at some point.

PO: Will there be a central hub for sharing games too?

JS: Yes. This is a must. It is all about community and helping others to help others and so on.

I'd very much like this to be more than just the coding aspect though. We'll be looking to include game graphics and audio too. A one stop gaming haven.

PO: Will games written on one version work on other versions?

JS: That's the idea yes. There may be some issues when it comes to multiplayer or accessing unique aspects of one device on another but this will all be within the coders control.

PO: What about us older guys that grew up on 80s computers and still love them? Do you see a market for people to make retro games, like they always dreamed of doing back on their C64's, Spectrum's and BBC's?

JS: Erm In the last few months I've written an Asteroids / Geometry Wars clone, a Dungeon Master type, 2D styled side shooter and, if I do say so myself, a rather good 'I, Robot' demo.

So, yeah, you oldies are going to love it. Best of all you'll be creating games your grand kids (!) will be blown away by. No one saw that coming did they!

Thank you for giving this opportunity to tell my story. It's been quite the adventure I can tell you. I'd like to add, finally, a deeper thank you to my team. FUZE is, David Silvera (a fiendishly talented musician, tutor and my Son), Luke Mulcahy (a demon coder and just 19), Kat Deak (a wonderfully talented 3D artist), Rob Banks (er.. a bank robber), Lizzie Botelle (15 and man alive so smart), Molly Odedra-Silvera (A great tutor, social marketeer and my Daughter), Grace Odedra-Silvera (another great tutor and my second Daughter), Charlotte, Ben and Mica (more great tutors) and of course, me.. Jonboy, aka 'The Video Kid' from Minehead!

Below: The FUZE team.