



# **AOZ STUDIO**

# **INTRODUCTION**

# 1. INTRODUCTION

*Welcome to AOZ Studio! My name is François Lionet, and I am the Founder Magician, father, mother and midwife of AOZ Studio.*

*Writing this intro takes me back 33 years, when I was doing the exactly the same thing, writing the intro of a manual for a computer language to make games. I called it STOS.*

*STOS was a revolution in computer programming in 1987. For the first time ever, anyone could create games on the most popular home machine available at the time, the Atari ST.*

*Making a game back then was a bit more complicated than it is today. To get anything out of machines with 16 bit processors, and clocks in Megahertz instead of Gigahertz, and really crude graphics, well, it was a challenge and there was nothing called a game engine.*

*Thirty-three years later, after I went on to create AMOS, Klik And Play, The Games Factory and Clickteam Fusion, STOS is still alive and in the heart of many fans, with a load of active users still exchanging ideas in dedicated groups on Facebook. And after all those years, here we are with AOZ Studio. It's a product written by a team that has learned few things during that one third of a century. "What not to do" and "how to make it simple."*

*Because simpler is better, simpler is faster. The language of AOZ Basic is a port of my original syntax of AMOS Basic, the second language I wrote in 1989 on the Amiga computer. AMOS was an even bigger success in Britain than STOS, helped by the incredible characteristics of the machine.*

*Thousands of children learned programming by making cool games and having fun. Many of them pursued their hobby into the software industry and became software engineers, famous games creators and high rollers in IT.*

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*In December 2018, I started to work on a project called AMOS-2. My vision, which is still the same as today, was to bring the comfort and simplicity of AMOS and STOS to modern machines. The beginning was tough, but thanks to the support of some good people on Patreon I am proudly writing this intro today.*

*During this journey, I have been joined by incredible people, Baptiste Pillot, Baptiste Bideaux, and Laurant Weill, the man who founded, amongst others companies, Loriciel, the original award-winning Number One game publisher of France, and entrepreneur extraordinaire.*

*The name has changed from AMOS-2 to AOA, but the vision remains the same: to provide a simple, comfortable and powerful engine for amazing game-development and much more. I hope you will agree with us, and find the development environment, the look and feel, and the deliberate simplicity of the design as comfortable as we do.*

***If you are new to programming, reading this intro, welcome!***

*Understand that you are about to have real power under your fingers. You will be able to make real games, with thousands of objects flying around in multi-dimensions. You will be able to publish them in one click on phones and on the Internet. And you will have access to an ever-growing library of extensions, graphics and resources. And as time goes by you'll gain more power, more game-oriented instructions, more magical elements using the incredible power of the net and Javascript.*

*We designed things so you can learn at your pace, starting from a one-line "Hello World" and then progress how far and how fast as you wish. You will find many tutorials to guide you, and our goal is that everyone can start from scratch. We want you to create your first bug-free program in under five minutes. After such a start, we hope you will be motivated to follow an accessible path of self-teaching, with a smooth learning curve, and instant gratifying results. You will be able to create, publish and share your creations online in a click!*

*And once you have understood the basics of Basic, you'll realize that after all it was not such a big deal to learn to program. We hope you will continue to design your own projects, maybe a game, a success, and even a career. Software Engineer is still as good a choice today as it was thirty years ago.*

*To end this introduction, I am incredibly happy to welcome Mel Croucher who contributed to write this manual for you. His name should ring a bell to many people because he founded the first computer games company in the UK, and he was the author of the user-manual of Easy-AMOS, still saluted today as one of the best ever written.*

*That's it! You are now part of the great family of Computer Magicians. Thank you for your interest. Everyone in the team wishes you many creative hours, and we can't wait to discover what you will create.*

*Francois*



## THANKS

Thanks to all the people on Francois's Patreon who believed in the project early on and thanks to the huge help from our community on Discord.

A Special thanks to Andy, Brian Flanagan, David Baldwin, Phil Bell, Wayne Johnson and others too numerous to mention, for the features you created, help with the manual, your support and creativity.

Thanks to Romain Campargue for his great graphics and animations and to Miko Alexander for his great audio samples. Both libraries are supplied to you free to use for your AOZ Studio programs.

**It's your turn now, join us on Discord and help us improve AOZ Studio. <https://discord.com/invite/JmFyFRA>**

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This Intro and the User Guide was written with love from A to Z by Baptiste and Laurant. Big thanks to Brian, Francois and Mel.



## 2. WHO YOU ARE

You want to create some computer magic. And you want to create your magic fast and easy. If you don't believe in the power of magic, don't worry, you've found AOA Studio, you're reading this, and very soon you'll become a Magician.



Maybe you're an absolute beginner. That's great, we're going to start at the absolute beginning for you. Maybe you're at school or a student who dreams of a career as a computer programmer. That's great too, because we're going to put you on the pathway to success. Check this image, because this paragraph is dedicated only to you.

Perhaps you are old enough to remember ancient magical languages called STOS and AMOS. That makes us very happy, because we wrote them, and we offer you a warm welcome home!

If you are one of those people who used our original language to program your Amiga computer in the last century, we have some really good news for you. All your old stuff is not only compatible with AOA, but now it can be enhanced and upgraded to run on any machine. There is a special What's New chapter for you near the end of the User Guide.

Whoever you are, you can be sure of one thing, which is that AOA will grow with you as you expand your knowledge and experience in coding.

Who are you? You're a great programmer, and all you have to do is discover it.

### 3. WHO WE ARE

Hello. We are François, Baptiste B., Laurant, Baptiste P., Brian Dave, Phil and many others who created AOZ Studio for you. We started using computers a long time ago, when we had the fantastic chance to learn all by ourselves, thanks to a simple computer language called BASIC. We created games, utilities and all sorts of fun stuff, and we got to understand the computer's guts. Then we became grown-up programmers, founders and managers of hi-tech companies.

Meanwhile, we realized that since those long-ago days everyone had become dependent on computers but let them take control. We found that the new generation who represent our future are not in control. They use computers every day, and yet hardly any of them can program or even begin to understand how their devices work. That's because installing development tools, and learning how to use them involves mastering some really complicated stuff. Inputs, outputs, displays, objects, syntax, tints, textures, sounds, etc. - there are so many new things to grasp at the same time it can take days to learn how to make a computer print a simple cry for help. Most people give up before they even begin. But not you. Remember, you're a future magician.

We created AOZ Studio with a mission. To help you take back control, to understand, learn, share your creations, and yes if you are interested find a job in the software industry. We want to help you succeed at it and to enjoy it all. So, even if you know nothing about programming but you want to publish an app, or a game, or the website of your dreams, you've come to the right place.

You can start from scratch. You can create your first bug-free program in five minutes.

## 4. WHAT AOZ IS

### A COMPUTER LANGUAGE

A computer program is written in a language made of a collection of instructions, each one performing an assigned task. For us the language is called AOZ.

When humans and computers want to communicate, they need a language that both sides can understand. AOZ is a great language for humans and computers to communicate with each other, made to be simple for humans and precise for computers.

There are plenty of other languages available, but few of them is as simple or powerful as AOZ, and none of them is such a delight to use thanks to the speed and simplicity of the IDE we call AOZ Studio.



IDE stands for Integrated Development Environment, and it provides you with all the tools you need to program. AOZ Studio is this software:

Some people spend years learning computer languages with famous names, like Java, Python, C# and Unity. With AOZ you can start by yourself and create a game, an app or a website really fast, even if you have zero coding experience. Best of all, you can publish your creations wherever and however you like.

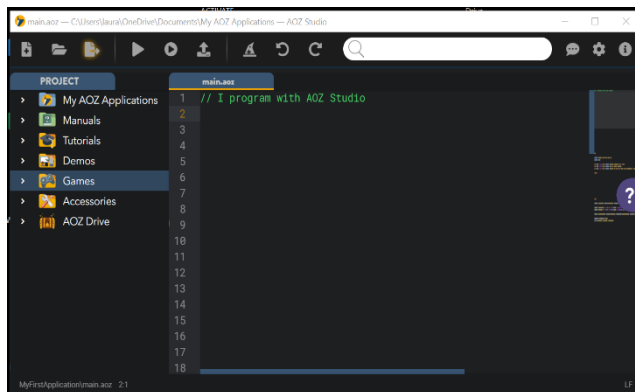
With AOZ you can do very many things. You can compute a huge amount of data, display thousands of amazing objects on your screen at once, and tell them exactly what to do. You can manipulate text and images any way you like, in fact you can create and manage an entire universe if that's what you want.



You can interact with a touch screen, mouse, joystick, read QR-codes, synthesize speech and handle voice recognition, add amazing sound effects and music tracks. With AOZ you have a huge number of really smart instructions to handle all your ideas.

## **ALL-PURPOSE**

And the good news is that it doesn't matter what sort of computer or device you're using. AOZ Studio is all-purpose, and so smart it allows your creations to run on any of them - on a smartphone, on a browser, a desktop, a pad, a laptop, and on any PC using Windows, MacOS or Linux.



# WHAT THIS USER GUIDE IS

The first thing to do is to read the User Guide. There are also full online instruction manuals, lots of demos, tutorials and a load of other stuff for you to use and enjoy, and it's all built into AOZ Studio. So don't be afraid to explore and try things out, but one advice, starts by reading the User guide.

By the time you get to the end of it you'll be familiar with where everything is and what everything does. You'll know how to find the tools to make your computer do exactly what you want it to do.

Our goal is to give you the most straightforward and most powerful tool for education, captivation and creation.

By the time you finish the User Guide you'll have proved to yourself that you can become a computer programmer. In fact, by the time you finish the first few pages you'll already be a programmer!

Welcome to AOZ Studio. Thank you for joining in the fun.

*Look at your AOZ Studio screen and open the Manuals folder to find the User Guide.*

