

What is the Best Way for Children to Learn Computer Programming?

Dr Alex Davidovic

One of the defining characteristics of today's society is that the computers and mobile devices are the integral and natural part of life for all new generations of children. Whether you and I like it or not, they will continue to spend lots of time in front of a screen.

Because of this it is now more important than ever for children to have a creative outlet, which is way, way better than playing the shoot-them-up games, and because of the growing importance of computers in our lives, knowing how to program is a great and important skill to have, regardless of the career choice.

In fact, knowing a programming language has always been considered an asset, but up until now possessed only by the few, as if they had some mystical power because they have the ability to fully control and command computers. How can we turn this into a modern day equivalent of the karate or violin lessons for our children and secure an asset for their future?

The good news is that after lots of testing, improving and retesting, we now know that children as young as 12 can master the programming concepts in just 2 weeks, provided that the 3 key prerequisites are being met:

- The right programming language
- The right tool, and
- The right learning methodology.

“For the first time, children as young as 12 are able to grasp the programming concepts and in just 2 weeks with the carefully crafted [“Computer Programming for Kids”](#) course that uses [Antechinus JavaScript Editor](#), the integrated development environment (IDE) developed by C Point, to teach the material previously reserved only for adults.”

When it Comes to Learning to Program, not All Languages are Created Equal

Here I'll go on a limb and say that the best language available today to learn programming is JavaScript. Why? The simple answer is: because it has all the benefits of a modern programming language without the unnecessary complexity. It is a language that is instantly interpreted, and does not require a compiler or a linker. In this regard, for the learning purposes it is much better than C#, C++ or Java. Secondly, JavaScript does not need a web server to run. Unlike PHP or Python, JavaScript is not executed on the server, it's a client-side language.

At the same time, JavaScript is supported by literally all the web browsers with no exceptions, and it works on all operating systems, on Windows, Mac and mobile devices. It is immensely popular and used in web pages - to power them or just make them interactive or more interesting, in stand-alone

apps and programs, and even to create .NET libraries that are then reused by other programming languages.

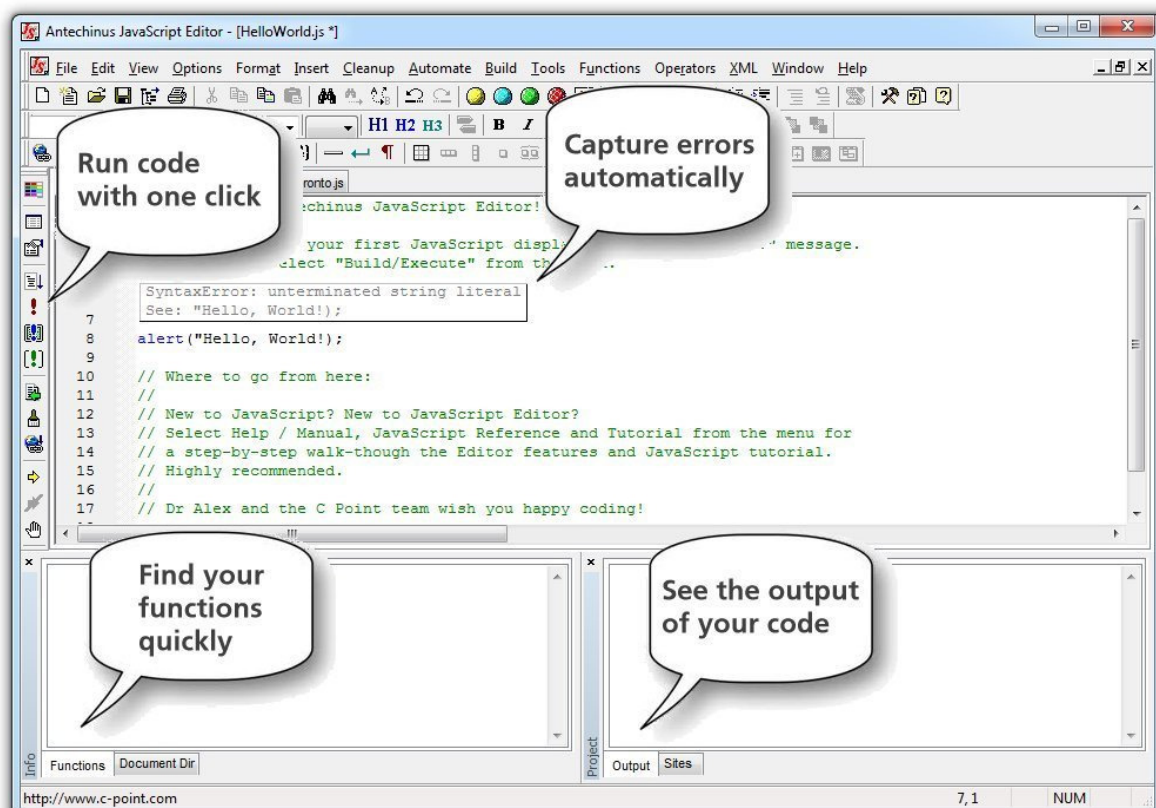
In short, JavaScript is not just the best language for the purpose of learning programming, but also an exceptionally valuable one to know. And once you know how to program, learning any other programming language is a breeze.

Complicated Tools Offer too Many Distractions to Facilitate the Effective Learning

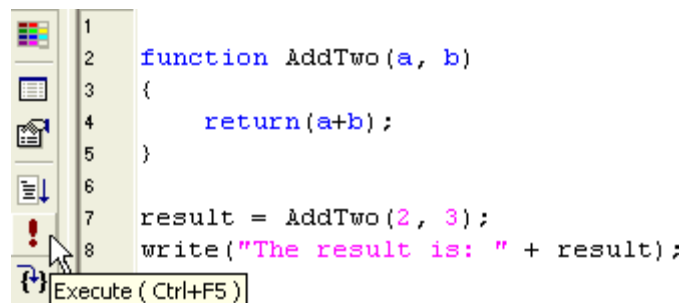
The second important consideration is which tool to use to learn JavaScript programming. The programming tools and editors are becoming more powerful but more complicated too, which is to be expected. However, navigating through the complexities of the tool is just too much for the young mind, which is why programming used to be reserved for much older children or for young adults.

The solution is again going for the simplicity and eliminating the unnecessary. To learn programming, the two essentials are

- a) The **syntax checker** so that you can quickly find and fix the errors, if there are any, and
- b) The ability to easily **run the programming examples** and the programs you write yourself.

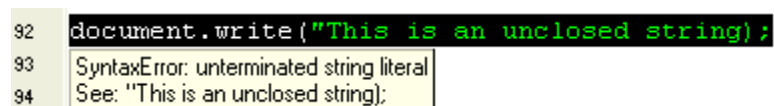


Now the tool called [Antechinus JavaScript Editor](#) is currently the only program in the world that allows you to instantly run the selected piece of JavaScript code, with one click, right in the editor. You don't even need to put JavaScript in the context of a web page like with other editors. One click is literally all it takes. As an illustration, the Hello World program, which is traditionally the first program when you learn a new programming language, is in JavaScript just one line of code, which you execute with a single click.



This means that you can simply copy, paste and instantly execute every programming example in the book to see how it works and learn the programming concepts.

If there is an error, the **Syntax Checker** finds it, highlights it and explains it, so that you can fix it immediately.



"Learning Programming through JavaScript"

Third, the methodology - JavaScript and JavaScript editor on their own do not do much without an effective course to take you through the programming concepts step-by-step.

Here I must admit that in the early trials, the built-in JavaScript tutorial proved to work very well with adults, but it was less effective with children. We needed something to put the theory and the practical examples into one all-encompassing, meaningful and well-organized course, and this is where Ron Green, the teacher and the programmer of vast experience, helped us out. Ron is the author of the "***Learning Programming through JavaScript***" course, which he designed specifically for use with JavaScript Editor, and with the exercises and solutions at the end of every chapter.


The end result is the [Computer Programming for Kids](#) program, available on DVD or as a download, which is the fastest, easiest, and the quite simply most direct way to master programming available today.

When Computer Programming for Kids was retested with the class of 12 year old children, they needed 2 weeks flat to fully master all the programming concepts.

It has everything you need in one package, including the JavaScript Editor software and the "***Learning Programming through JavaScript***" course.

Computer Programming for Kids

Dr Alex Davidovic
Ron Green

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- From beginner to an expert in 14 days
 - Step-by-step hands-on JavaScript course
 - Includes Antechinus JavaScript Editor

Envisage. Devise. Inspire.

Who is the Computer Programming for Kids course for?

It is designed for and gives excellent results with:

- Classroom situations with children who are 12 or older
- One-on-one learning with a parent or an instructor and a child even younger than 12, and
- All adults who are looking for a simple and quick way to learn programming.

To recap:

- a) With JavaScript, you don't need a compiler or a linker
- b) It is interpreted instantly
- c) It is widely used in web pages, stand-alone apps and programs, and even to create libraries used by other languages
- d) It doesn't need a web server to run
- e) It is universally supported by all operating systems and web browsers
- f) With JavaScript Editor you run the JavaScript code with a single click
- g) You find the errors (in there are any) instantly with the Syntax Checker
- h) The Computer Programming for Kids course takes you step-by-step through the concepts, examples and the solutions
- i) The end result: **you master programming in just 2 weeks.**

Computer Programming for Kids is available on DVD, or as an instant download.

Get it from:

PurposeAndDirection.com/computer-programming-for-kids/