

A World Built on Python

Why Python Has Become The World's Top Coding Language?

Introduction

For the unaware and the curious, coding is what makes websites, software, apps, and virtually everything else related to computers or the Internet, go from a possibility to a reality.

Some computer scientists compare the skill of knowing how to code in the near future to knowing how to read when the world began turning from the economy of farmers and fishermen to one of store owners and industrialists a few centuries ago. Just as the ability to communicate and work on computers has become standard in today's workplace, so too will coding become an essential skill when our children one day take over the reins of the world's workforce. As more and more professionals, amateur enthusiasts, and students take to become adept at coding, which is essentially writing the commands that cause things to happen in a digital setting, one programming language has moved to the head of the pack in terms of ease-of-use and effectiveness. And much like the serpent whose name it shares, Python has spent the last quarter century coiling itself slowly but methodically around the coding world to become the industry leader as the top programming language on earth.

Python's History

Remarkably, Python began its lifespan in an era where almost no one had even heard of the Internet. It was released internally in 1990 and its first numbered version, 0.9.0, launched in 1991. The language's inventor, Guido van Rossum, is a native of The Netherlands. Incredibly, he started the project as nothing more than something to keep him busy as his office was closed the week of Christmas. The name of the language comes not from the snake, but from Monty Python's Flying Circus, the popular troupe of British comedians. Rather like Monty Python's spin of satire, van Rossum was feeling in an irreverent mood when he decided to construct an upgrade for the existing programming languages that were available at the time. More than anything, he wanted a language that could be compatible with other coding entities, that could make sense to people who didn't spend 18 hours a day in front of a computer screen, and that would preach simplicity and the beauty of designing something special.

Van Rossum went so far as to verbalize these axioms when he release a second version of the language in the 2000s. In a document called "The Zen of Python", van Rossum wrote¹:

- Beautiful is better than ugly
- Explicit is better than implicit
- Simple is better than complex
- Complex is better than complicated

¹ <https://www.python.org/dev/peps/pep-0020/>

- Readability counts

That sort of commitment to the beauty of creation beyond the hardcore technical realm that most “hackers” were living in at the time was a revolutionary thing, and has been a catalyst in transforming coding from something done strictly by computer wizards to something approachable by people of all walks of life. The language is also meant to be fun to learn and fun to use, a spirit that has since been emulated by the likes of Google. The result of that ambition is that Python has introduced whole new sectors of the population to coding specifically and computer programming in general. Earlier languages were logical and functional, but also difficult to understand without a mind already introduced to the subject.

Python made its programming language easy to learn and easy to write. Its tutorials are light-hearted and emphasize a crucial point, that you can do anything, build anything, achieve anything by learning how to code.

Python vs. The Competition

Computer languages are nothing new, and anyone who went to high school from the mid-1980s on likely took at least one class in computer science at some point. But most languages have significant drawbacks for the general public. Learning the likes of Kobol, C++, or Java truly means immersing yourself in a new language, with new syntax, and seemingly as many exceptions as rules.

But Python uses intuitive commands such as ‘if’, ‘for’, ‘while’, ‘try’, ‘with’ and ‘print’ that are easily recognizable by anyone as young as early grade school children and follow the syntax of basic

English composition. The fact that Python runs on virtually all major computing systems, including both Windows and Macintosh, allows it to reach virtually every computer user in the world. Its resume outstrips just about every other competitor on the market, as past and current clients include heavyweights like Google, NASA, YouTube, and Industrial Light and Magic - the special effects company owned by Star Wars’ creator George Lucas. It also outstrips the competition because it contains what coders like to refer to as “Batteries Included”.

Kids & Python

Thirty years ago, the number of kids taking apart personal computers, which cost hundreds or thousands of dollars, was tiny. Today, a majority of teenagers have either a smartphone, a laptop, a tablet, or a combination of these devices. Coding opens an incredible doorway where kids can learn a highly valuable career skill while doing fun things such as building their own websites and designing their own apps for smartphones. Despite the ‘wow’ factor that coding can deliver, the number of college graduates with that particular skill set are currently fewer than the demand in the economy, even at websites that virtually everyone on earth knows about.

“There just aren’t enough people who are trained and have these skills today,” says Mark Zuckerberg, founder and CEO of Facebook. “Our policy at Facebook is literally to hire as many talented engineers as we can find.”²

The shortage is particularly noticeable among female students. In 2014, just 18 percent of computer science majors were women.³ Girls might not have the ambition to write code for a living for the rest of their lives, but much like

² <https://code.org/quotes>

³ <http://www.usnews.com/news/data-mine/articles/2016-10-20/study-computer-science-gender-gap-widenspite-increase-in-jobs>

learning a second language, it can a door-opening skill that leads to careers in a host of different avenues from the entertainment realm to international careers to quite literally anything under the sun.

Because of Python's simplicity of language and syntax, it is a fantastic first program for children to learn coding in.

Conclusion

Python is a powerful easy-to-learn coding language that is perfect for teaching the kids the extremely useful tool known as coding. With close to 600,000 website currently using Python as their language of choice, it's easy to see how popular the language is.