Programming Languages I Might Like To Learn

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Abstract:

An assignment to research 6 different programming languages about the origin, certain things about them, and why they are good languages to learn. It will allow for further ventures into languages that I may or may not have any prior knowledge on and allow me to expand my overall understanding of differing programming languages.

Language 1: HTML:

HTML was created by Sir Tim Berners-Lee in late 1991 but was not officially released. It was published in 1995 as HTML 2.0. HTML 4.01 was published in late 1999 and was a major version of HTML. HTML is a very evolving markup language and has evolved with various versions updating. Long before its revised standards and specifications are carried in, each version has allowed its user to create web pages in a much easier and prettier way and make sites very efficient.

HTML would be worth learning for any number of reasons including:

1. HTML is the skeleton of any website, and is integral for making any website from scratch

2. HTML is very easy to understand. It uses tags in easy to understand names that allow for quick understanding and effortless learning.

3. All computer scientists should know HTML. It is standardized in a professional setting to the point that if you ever have a career in computer science the chances that you won't come across HTML are slim to none.

Language 2: Python:

Python was initially designed by Guido van Rossum in 1991 and developed by Python Software Foundation. It was mainly developed for emphasis on code readability, and its syntax allows

programmers to express concepts in fewer lines of code. It was started firstly as a hobby project because Guido was looking for an interesting project to keep him occupied during Christmas. The programming language in which Python is said to have succeeded is ABC Programming Language, which had interfacing with the Amoeba Operating System and had the feature of exception handling.

Python would be worth learning for any number of reasons including:

1. Python is highly versatile. You can use it for both small and complex tasks, and it is used across many different industries from its more common applications in data science and software engineering to environments like mobile app development, artificial intelligence, and machine learning. Another important aspect of Python's versatility is its ability to run with other programming languages. A few common examples of Python implementation with other languages are Jython and CPython. Lastly, Python offers cross-platform functionality.

2. Python has Data Extraction/Web Scraping. A process to retrieve and organize data from different sources on the web and turn them into valuable ones. Python has many web scraping tools and frameworks that can efficiently retrieve online data or webpage content, not to mention its very robust standard library that can provide highly functional tools suited to do varied tasks aside from data extraction.

3. Python is living up to its name when it comes to cybersecurity fierceness. With powerful third-party libraries (e.g., Nmap, Yara, Requests, etc.) to choose from, it can respond to security threats faster than other languages.

Language 3: RUBY

Ruby was created by Yukihiro Matsumoto, or "Matz", in Japan in 1993. It was designed for programmer productivity with the idea that programming should be fun for programmers. It emphasizes the necessity for software to be understood by humans first and computers second. Ruby continues to gain popularity for its use in web application development. The Ruby on Rails framework, built with the Ruby language by David Heinemeier Hansson, introduced many people to the joys of programming in Ruby. Ruby has a vibrant community that is supportive for beginners and enthusiastic about producing high-quality code.

RUBY would be worth learning for any number of reasons including:

1.Ruby is a popular language for web development because of a powerful web development framework called Ruby on Rails. Ruby on Rails was released in 2005 and was one of the most advanced web frameworks at the time. Since then, other frameworks have come out that emulate

some of its features.

2. Ruby is a handy scripting language that developers use to automate manual processes. Because it is concise and easy to write, simple scripts can be written quickly to save time and make work more efficient.

3. The Ruby language is also well suited to data processing, cleaning, and filtering. There are several useful functions built into Ruby, including map, reduce, and select. These functions can effectively solve many problems related to data processing.

Language 4: Javascript:

Javascript is a language that was developed in May 1995 by Brendan Ike based off of the Scheme programming language but intended to have syntax like Java, created in 10 days, originally named Mocha. The name was then changed to Livescript and then finally Javascript. They chose Javascript to piggyback off of the success of Java.

Javascript would be worth learning for any number of reasons including:

1. Javascript is the default language of the internet, almost all internet browsers were made with it. Since browsers are a necessary part of any user's online experience, it's easy to see why JavaScript is so significant.

2. Javascript is incredibly versatile, it's often said that everything that can be written in Javascript will be written in Javascript. Its good for front-end and back-end as well as desktop, mobile and web apps.

3. Javascript is easy to learn. JavaScript turns intricate details into abstracts, making things easier for the newcomer. Unlike the higher-level languages, JavaScript has more of a natural language feel to it.

Language 5: C#

C# was designed by Anders Hejlsberg from Microsoft in 2000 and was later approved as an international standard by Ecma in 2002. During the development of the .NET Framework, the class libraries were originally written using a managed code compiler system called "Simple Managed C" In January 1999, Anders Hejlsberg formed a team to build a new language at the time called Cool, which stood for "C-like Object Oriented Language". Microsoft had considered keeping the name "Cool" as the final name of the language, but chose not to do so for trademark

reasons. By the time the .NET project was publicly announced at the July 2000 Professional Developers Conference, the language had been renamed C#, and the class libraries and ASP.NET runtime had been ported to C#.

C# would be worth learning for any number of reasons including:

1. C# is a modern language that supports the latest features for developing scalable, reliable, and robust industry standard software applications. C# is a modern language. C# language supports everything modern programmers need in a language.

2. C# is easy to learn, the language syntaxes are like C++, Java, and Pascal. The object model is like any popular programming language.

3. C# is one of the fastest evolving programming languages in the world. Unlike other programming languages, C# development is fully supported by a committed staff of Microsoft employees.

.Language 6: GDscript

GDscript was developed specifically for the Godot game engine in 2014, by Juan Linietsky and Ariel Manzur. The engine originally used Lua but after the developers found that Lua was slow and took a significant amount of code. After trying to integrate python instead it also proved to difficult and clunky. Thus they decided to create their own, birthing GDscript.

GDscript would be worth learning for any number of reasons including:

1. GDscript is very specialized to work well with game development. Using nodes as a way to visualize and see the direct result of your scripting in an easy digestible way

2. GDscript is incredibly new but very easy to learn, due to the easy implementation of the documentation built into the godot engine with a simple shift-click on any operation or method, giving full clear and detailed explanations.

3. GDscript syntax is a mix between python and C# making it easy to learn if you are familiar with either language in any capacity.