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statically typed languages and strongly typed languages

My first language was python so it was a little bit of both and since python is my first language I may be biased when I say I prefer it. I feel like it is easy to write in python and allows for beginners to grasp concepts in programming a lot better. When it comes to static typed languages the type checking happens when the compilers is compiling which depending on the amount of code you write does more processing at compile time but it the run time performance would be better and with strong typing once you set a type for a variable you can't change it unless you use a method to convert it to another type of piece of data. Software developers have very different opinions on what is best when comparing dynamically and statically typed languages. The major differences with the python and swift programs was the fact I didn't have to state the type of data stored in the variable since it automatically stored the data unlike the swift where I had to declare the type of data stored. I faced some challenges with swift when trying to set values for the input the user would make. I understood that I would have to make an optional value and it was also a little confusing when trying to later on in the program to use mathematical operators on the strings even after converting to Double using the Double method. Once I figured it out it was easier from that point. Strong typing can help prevent errors like trying to add an integer or float with a string and concatenate instead of performing a mathematical operation. Static typing forces code

to state what type of data will be stored and strongly typed will not allow the data to be intermingled with easily allowing for more complicated but healthier code.

Resources

<https://hackernoon.com/actually-understand-statically-dynamically-strongly-weakly-typed-languages-axbpi3za2>

<https://hackernoon.com/i-finally-understand-static-vs-dynamic-typing-and-you-will-too-a-d0c2bd0acc7>

<https://hackernoon.com/statically-typed-vs-dynamically-typed-languages-e4778e1ca55>