

James Gosling

James Arthur Gosling is a famous Canadian software engineer, he is often referred to as “Dr. Java”, since he is known as the father of the Java programming language. He designed the Java language and he also implemented Java’s original compiler and virtual machines (Wikipedia, 2021). Other than Java, he also made huge contributions to other software systems such as NeWS and Gosling Emacs. As a result of his achievements, he was elected as a member of the National Academy of Engineering (Wikipedia, 2021).

Early Life

James Gosling was born in Calgary, Alberta Canada on 19-May-1955. James Gosling attended University and received a Bachelor of Science from the University of Calgary in Computer Science in 1977. He also received an M.A and Ph.D. from Carnegie Mellon University in Computer Science in 1983 (Wikipedia, 2021). At his time in university, he implemented Gosling Emacs(Gosmacs) in C, which was the first Emacs to run under Unix (Gosling, 1981). He also built a multi-processor version of Unix as well as several compilers and mail systems (Wikipedia, 2021).



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Contribution

Java Programming language:

Gosling invented Java in Sun Microsystems(now acquired by Oracle) at 1994. Java was originally designed for interactive televisions, and it was named oaks. (Wikipedia, 2021)He invented the language because the two major languages: C/C++ created a lot of bugs from pointers. Therefore, Java was designed with a C/C++ syntax however removing pointers and some other low level features to reduce the memory leakage and pointer bugs. (Fridman, 2020) This was achieved by his development of GC(Garbage Collection) in JVM(java virtual machine) (Wikipedia, 2021), and later on he published most of his JVMs as open-source software. (Github, 2021) The language changed its name to Java and made its logo as coffee as well because they are saving you more time to relax and have coffee!

Java is famous as it's write once, run anywhere(WORA) functionality, where it allows you to run code on any operating system with no cost on run-times. It is also secure: it allowed network and file-access restrictions (Wikipedia, 2021).

The language is also much easier to learn in comparison to C++. Nowadays, most universities teaches Java instead of C++, I think it makes people feel like coding isn't too hard and influences more people to become a software engineer. Therefore, I believe Gosling helped make programming more accessible and easier to start with (Guru99, 2021).



Impact:

Java existed for 26 years and it had still be considered as one of the most demanded, used and loved programming language. Todays, there are still over 90% of the Fortune 500 companies still highly relying on Java for their development process providing more than 60000 opportunities. (DZone, 2021) There are over 8 million Java developers as well. Java is used in a huge amount of areas, for example, Android apps, embedded Systems and cloud-based applications (DZone, 2021).

How James Goslings inspired me:

I'm inspired by James Goslings of his openness and his passion about learning new technologies.

"Openness is unbelievably helpful to security" is what he said (AZQuotes, n.d.), despite how much sun software tried to release Java under proprietary licenses, he still wants Java to be free and reachable to everyone. Personally, I support open-source and Goslings ideas resonates with me. If everyone can work together on a problem, they are more likely to find issues with the software and thus make it more secure.

After he left Oracle due to a dispute, he continued to search for a job and work in different areas. For example, he worked at Google at 2011 to develop more on Java, he also worked on robotics in a company called liquid robotics for 6 years, and today as a man aged 66 he is still working in AWS at Amazon (Gosling, 2021). I'm inspired by his passion and persistence in computer science.

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