A Biography of an influential Software engineer

'Hello World'

Dennis Ritchie, the creator of the C programming language, born in September 9 1941 in Bronxville, New York. We could say his passion for computers came from Alistair Ritchie, his dad worked for Bell Labs as a scientist and co-wrote a book on switching circuit theory, *The Design of Switching Circuits*. Dennis went on to graduated from Harvard with degrees in Physics and applied mathematics. Dennis Ritchie, like his dad, got hired by Bell Labs.

At Bell Labs, He met Ken Thompson ,where they both worked on the Multics operating system. In 1969,Bell Labs decided to stop the Multics project. However, this inspired both of them and others to work an old PDP-7 machine where they would create their own application and operating system from scratch called 'Unix'.

Unix was meant to be a convenient platform for programmers developing software to be run on it and on other systems, rather than for non-programmer users. UNIX was designed to be portable, multi-tasking and multi-user in a time-sharing configuration. Unix systems are characterized by the following concepts concepts: the use of plain text for storing data; a hierarchical file system and the use of a large number of software tools, small programs that can be strung together through a command-line interpreter. Unix should not be confused with Linux, a Unix clone, divided into open source distributions such as Ubuntu or Mint. The Unix system had significant impact on how software engineering would pan out for the next 50 years. It achieved its reputation by being ergonomic, by providing the software at a small cost for educational use, by being optimized running on inexpensive hardware, and by being easy to adapt and move to different machines. Unix was originally written in assembly language but was soon rewritten in C, a high-level programming language.

To supplement assembly language with a system-level programming language, Thompson came up with B.B was soon replaced by C, created by Ritchie. The C programming language, is an imperative programming language. C provides constructs that map efficiently to typical machine instructions, and therefore it has found lasting use in applications that had formerly been coded in assembly language, including operating systems, as well as various application software for computers ranging from supercomputers to embedded systems. It was designed to be compiled using a relatively straightforward compiler, to provide low-level access to memory, Despite its low-level capabilities, the language was designed to encourage cross-platform programming. the C language is widely used today in application, operating system, and embedded system development, and its influence is seen in most modern programming languages. A book, was written by Ken Thompson and Dennis Ritchie on this specific programming language ,C, dictating how the language works. In one of the sections of the book, it introduces a program called 'Hello World' has sort of became a convention, for introducing programming languages.

Ritchie was also involved with the development of the Plan 9 and Inferno operating systems, and the programming language Limbo. He was awarded ,in 1983 the prestigious Turing award for the implementation of the new operating system ,Unix. He was awarded countless awards for his works(C and Unix).Unfortunately, He died on October 12, 2011, at the age of 70 at his home in Berkeley Heights, New Jersey. He died of prostate cancer and a bad heart.

Computing as we know it now would not have existed without Dennis Ritchie, creator of the C programming language and co-creator of the UNIX operating system. The foundations of modern computing that Dennis Ritchie has laid, is everywhere nowadays. Ritchie and Steve Jobs who died around the same time, debates where made on whom influenced the world the most. Two legends who shaped the modern world. However ,I truly believe without Dennis Ritchie, there would be no Steve Jobs, Ritchie invented and co-invented two key software technologies which make up the DNA of effectively every single computer software product we use directly or even indirectly. Ritchie and Thompson are the

founding brothers of modern software engineering and computing as a whole. Althought, the thing that stands out the most from this man is a humbleness, Ritchie never expected C to be so significant.

As a software engineer, I am inspired by Dennis Ritchie true pursuit of his passion, I believe money and fame weren't in his scope. He truly doesn't get the recognition he deserves. However, Legends never die and his lasting legacy while have the greatest of impacts in modern computing for the next decades

*Sources:*https://en.wikipedia.org/wiki/Dennis_Ritchie;https://en.wikipedia.org/wiki/Unix;https://en.wikipedia.org/wiki/C_(programming_language)