***Linus Torvalds* : a brief biography**

Linus Torvalds is a Finnish-American software engineer (Born December 28th,1969) who is known for being the creator and lead developer of Linux and as the creator of the git system. Torvalds has received many awards and recognitions during his career including recently in 2014 where he received the ‘IEEE Computer Pioneer Award’.

Torvalds was one of the first prolific software engineers I had looked at for this biography, but I knew straight away he was the one I was going to write about mainly due to his relevance to the CS3012 course as he created Git, which is a core part of this module. I also find him and his personality very interesting as he is quite unique and found it very cool that Linux started while he was a student at university when he was 21. He doesn’t care much about making millions and I love his practical mindset which is evident in his main creations Linux and Git as they were made for a practical purpose for himself rather than something to become rich off. He sees himself as an engineer rather than a visionary and says at his TED talk “I'm perfectly happy with all the people who are walking around and just staring at the clouds ... but I'm looking at the ground, and I want to fix the pothole that's right in front of me before I fall in.", emphasising his practical nature.

Torvalds was born and grew up in Helsinki, Finland. His parents were journalists and he has two siblings, a brother and a sister. He began programming at the age of 11 on a Commodore VIC-20. He attended the university of Helsinki between 1988 and 1996 and by that time he was already an accomplished programmer so naturally graduated with a master’s degree in computer science.

***Linux:***

In 1991, Torvald bought an IBM compatible computer far more powerful than what he had previously been using but he became disappointed with it’s operating system as it wasn’t advanced enough to take advantage of his new powerful computer and much preferred the more powerful UNIX operating system he had become used to using in university, however, Torvald was unable to obtain a system of UNIX as it cost thousands of dollars at the time. Torvald also considered MINIX, which was a clone of UNIX to help teach university students about UNIX but it had some serious restrictions. Due to these issues, in early 1991 Torvald decided to create his own operating system based on MINIX and UNIX which he named Linux (Linus + MINIX/UNIX = Linux). The first official version was released in October of the same year. Torvald’s best decision was to release linux as open source under a GNU public license. This free software license allowed anyone to modify and improve linux as long as they made the source code freely available. As a consequence, many programmers from around the world helped Torvald develop Linux and it began improving very fast. Now, Linux can be found everywhere. It runs most of the internet and the world’s stock exchange and can be found in things like smartphones, cars and home appliances.

***Git:***

Git is a prime example of what kind of practical person Torvald was as he created it to aid him and his Linux community develop Linux. It was developed for the purpose of managing the source code of Linux. Torvald and the Linux community had been using BitKeeper as their revision control system but could now no longer use it and no other source control management system was suitable for them. Torvald, over a weekend, took the problem into his own hands and decided to make his own SCMs and the following week emerged with Git, something he was hesitant to do as he found source control management one of the most boring things in computing.

While still developing Linux, Torvald moved to silicon valley in 1997 to work in Transmeta until 2003 where he began to work at the Open Source Development labs. In 1999, Torvald received his only big payout for Linux when Red Hat, a leading developer of Linux, gave Torvald what turned out to be $1million in stock. Today, Torvald works for the non-profit Linux Foundation to manage the open source software. He also is invited to give talks all around the world and in his free time he loves to go diving and has even developed open-source diving software. Torvald is married and has three children and currently lives in Portland, Oregon.

The impact Torvald’s work has had on the world is huge and is hard to accurately calculate. The fact that approximately 70-80% of internet servers run Linux gives us a glimpse of how important his work has been. The use of Git has become extremely popular worldwide in the software engineering community as I have learned this year and continues to grow. I have found learning about Linus Torvald actually very interesting (surprisingly) and I hope anyone reading this and learning about his life and work will find it enjoyable to learn.

**INFORMAL BIBLIOGRAPHY:**

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