CS3012 Software Engineering

Tim Berners-Lee

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Tim Berners-Lee is an English engineer born in 1955. Born and raised in London, Berners-Lee would eventually become the inventor and engineer behind the largest library of information there is, the World Wide Web.

After this early part of his career, he became an independent contractor and started work with CERN in 1980. It was here at CERN where Berners-Lee proposed hypertext as a way of sharing information and easy ways to access it. He created a system, ENQUIRE, as a prototype to his idea. ENQUIRE would be a system similar to Wikipedia where files would contain their own information with additional links to other files, thus being hypertext.

Berners-Lee left CERN soon after only to return to the particle physics laboratory in 1984. He had returned to develop the designs of the computer network in CERN. The object of his work was to allow computers to communicate with each other to control remote machines. In 1989, Berners-Lee published a paper called ‘Information Management: A Proposal’ which proposed the idea of a global hypertext system, where information can be shared globally. This method would overshadow the current method of emailing information as this system would be available to everyone at any time. This would later become the Web. The system was set up for CERN scientists by 1990, and by 1991 it was available to everyone being hosted through the Internet. The first website published was info.cern.ch, which was both website and web server at the time. The website had information on how people can use the hypertext and how to build their own web pages. By the following year, the number of servers had increased to 50, two years later over two million people were using the system developed by Berners-Lee.

At this time Berners-Lee had set up the World Wide Web Consortium (W3C) to create web standards. It was set up in the Massachusetts Institute of Technology and made up of companies all wanting to create standards for which the web should be used. They agreed the technology would be free of royalties and patents. This act of no royalties allowed the Web to be used by anyone, anywhere, for free….as long as they had an internet connection. Berners-Lee has served as director of the World Wide Web Consortium since its beginnings. In 1995, Microsoft produced the first ever commercial browser, Internet Explorer, which since its initial release has been a major internet browser up until the early 10’s. Browsers such as this allowed websites to be accessed a lot easier by each and every internet user.

In his later career, Berners-Lee remained working in the area of his creation. In 2009, then Prime Minister of the United Kingdom, Gordon Brown, had announced that Berners-Lee would be working with the government in making data more accessible to the public through the website data.gov.uk.

Berners-Lee has collected many awards and achievements in his time because of the creation and continuing work towards the information powerhouse that is the World Wide Web. The early 2000’s showed for his achievements within Britain as he became a member of the Royal Society in 2001, then went on to receive a knighthood from the Royal family in 2004. In 2007, he had been appointed to the Order of Merit. Another achievement he acquired in 2007 was the Charles Stark Draper Prize, an award given to someone for an engineering achievement that positively affects the modern-day society, given by the U.S. National Academy of Engineering. He also was awarded the first Millennium Technology Prize of €1 million by the Finnish Technology Award Foundation. His most recent, and most significant, award came in 2016, when he was awarded the Turing Award for his invention of the World Wide Web.

Tim Berners-Lee is one of the most influential software engineers of all time with his creation of the World Wide Web due to its importance in daily, everyday life. Not only did he create this wonderful service for the entire globe, but he did it without asking a penny for it, allowing everyone an opportunity to learn new information very quickly without severe costs to go along side it. Without Berners-Lee and his creation life would be very different.

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