Tim Berners-Lee

Introduction and early life

Tim Berners-Lee, credited with inventing the World Wide Web, was born into a tech savvy family in 1955. His parents were involved in producing the world's first commercially built computer, a testament to where his avid interest in computer science sources from. These interests were clear from an early age, as he displayed enthusiasm for electronics. This stemmed from experimentation with a model train he owned. At a young age, Tim Berners-Lee took what many saw to be a novelty toy, and became interested in how the mechanics of it worked. Demonstrating a desire for learning at an early age surely shows he was on track to do great things.

Career and impact

Early development…

Having earned his Bachelor of Arts degree in Physics from The Queen's College in Oxford, Berners-Lee worked as a contractor for CERN in Switzerland. It was at this point when he started exploring the possibility of sharing information in a more efficient manner, with colleagues and other workers from around the globe. The basis for this idea was hypertext. He even built a prototype called ENQUIRE to demonstrate his thought process.

Despite this early progress, into wasn't until 1989 that his initial idea really started to gain traction. He published a paper called "Information Management: A Proposal", which detailed a connection between the pre-existing internet and hypertext – to create a basis on how to communicate and share information on a global scale. 9 years after identifying the issue, Berners-Lee presented a proposed solution; and in doing so, revolutionised not only the software engineering field, but also how people use the internet. What did he call it? The World Wide Web.

The World Wide Web…

The London native is incredibly modest about his invention, however. He claims he simply took ideas which had been created and designed already, and "just had to put them together". Despite this, it must be noted that the World Wide Web is so much more than just joining ideas. Tim Berners-Lee made it possible for people to access web pages from the internet, using URLs (specific address unique to a webpage), HTML (the way in which web pages are published and HTTP (the ability to access web pages on demand. These methods are still used today.

Of course, Berners-Lee created the first ever website, which contained information on what the World Wide Web actually is, and the idea behind it. I find this interesting, as he demonstrates that he is not only an inventor and innovator, but also an educator – which will become evident as this biography progresses.

Ideology and vision for the future…

Later, in 1994, Berners-Lee founded the W3C (World Wide Web Consortium) at the Massachusetts Institute of Technology, with the goal of standardising and improving the invention of the web. Berners-Lee had the opportunity to make a substantial amount of money from his invention, but by deciding not to apply for a patent or accepting any royalties, he made his invention globally accessible. He infamously stated he wished to eradicate the insinuation that the internet was only meant for smart people – he wanted to make it easy to use.

As the idea of the World Wide Web extended its influence around the globe, it became a very topical subject. Berners-Lee of course had his idea on how the web should be used, and is very outspoken about it. He argues the case for freedom of information and has expressed his concerns about censorship and government involvement in inhibiting the circulation of information. In an article written in the Guardian, the software engineer also discusses the dangers of personal information on the web, as well as political information and mass spread of misinformation.

Further accomplishments and education…

Berners-Lee has not just spoken up about his vision for the future of the web, he has acted on it. In 2009, Tim collaborated with the UK Government in a bid to make data more accessible online. He called for transparency and accountability at a democratic level, which empowers people to make informed decisions about matters relating to them.

In 2008, Tim Berners-Lee founded the World Wide Web Foundation, a non-profit which is dedicated to achieving a world in which everyone can communicate and share ideas. The WWWF also explores how the web can benefit the human race. In a similar act of pushing for a better world, Tim was named on the Board of Trustees of the Ford Foundation, which strives to improve human welfare.

He has also been knighted by Queen Elizabeth II, awarded the UK Queen Elizabeth Prize for engineering and as recently as April 2017, received the Turing Award accolade for "inventing the World Wide Web, the first web browser, and the fundamental protocols and algorithms allowing the Web to scale". He currently is working at the University of Oxford as a professor in the computer science field, still dedicating himself to education.

Conclusion

Despite being relatively new to the software engineering career path when he first pondered the idea of global communication via hypertext, Tim Berners-Lee demonstrated all the hallmarks early on of what makes a good software engineer. He was confident in his idea. He thought big and he thought global. He showed innovation and creativity, venturing down a path and connecting ideas where none had been connected before.

Not only was he brave, but selfless too. In choosing to go down the so called 'non-profit path' by refusing royalties and rejecting the idea of a patent, he allowed the web to be eventually accessible to most people around the world. He lives a modest lifestyle, while watching many of his former colleagues to go on to become millionaires. He seems content in the satisfaction that his invention has changed the world, and described it as "an incredibly good feeling… a lesson for all dreamers". We should be thankful for this attitude. If it were not for Tim Berners-Lee, the software engineering world would be so unimaginably different.