World Wide Web Consortium*  

Mirina Grosz

I. Introduction

The World Wide Web Consortium (W3C) was founded as an industry consortium in 1994, five years after the establishment of the World Wide Web (WWW). Its mission is “to lead the World Wide Web to its full potential” (W3C Process Document: Abstract). The enhancement of interoperability between different technical means is particularly crucial for the functioning of the Web’s information flows. On this note, W3C is engaged in the development of common technical Web standards, referred to as the W3C Recommendations. Following the Internet’s basic principle of openness, the consortium promotes the harmonization of the Web’s technologies based on the consensus of its membership, its staff, invited experts, as well as the public (W3C Process Document: 1).

W3C is not incorporated but is based on contractual relationships with its hosts and its members. Its activities are administered by the MIT Computer Science and Artificial Intelligence Laboratory (CSAIL) in the United States, the European Research Consortium for Informatics and Mathematics (ERCIM) with headquarters in France, and the Keio University in Japan. Furthermore, W3C maintains World Offices around the globe that facilitate the consortium’s collaboration with regional Web communities and promote W3C’s technologies, thereby encouraging international participation (Jacobs, About the W3C 2007: 1).

II. Origins and Development

First attempts to connect devices in order to make knowledge more accessible were already undertaken before computers existed. In 1945 Vannevar Bush tried to link documents by a photo-electrical-mechanical device called Memex (Bush 1945; Berners-Lee 1999: 5). In the 1960s, Ted Nelson wrote about

* This entry reflects developments and sources up to April 2009.
“literary machines” that referred to a new, nonlinear, “nonsequential” text format of computer writing, which he called “hypertext”. At about the same time, Doug Engelbart – also known as the inventor of the computer mouse – created a “collaborative workspace” that he called NLS (oN Line System). It was a system very similar to the WWW, except that it ran on a single computer and did not cross borders yet. Notably the Internet was still in its infancy then (Berners-Lee 1999: 5–6 1999). In 1989 Tim Berners-Lee, at that time working at CERN (the European Organization for Nuclear Research), managed to devise a global hypertext system that he named the “World Wide Web” one year later, when writing the first corresponding client programme (a browser and editor). The WWW was based upon the vision that anything could potentially be connected with anything, making all bits of information available to everyone, in a type of global information space (Berners-Lee 1989/1990; Berners-Lee 1999: 1–6, 28–51, 60–62; Jacobs, About W3C, History).

By the 1990s, the Web was open to commercialization and increasingly used by the public, thereby spreading around the world. New browsers and servers appeared which threatened to challenge the consistency of a coherent and integrative Web. It was in light of these developments that the idea of establishing an organization emerged. This entity was envisaged as a body of oversight, making sure that the Web stayed what it originally was intended to be, namely “a universal medium for sharing information” (Berners-Lee 1999: 84; for further information see Berners-Lee 1999: 75–102).

After the first International WWW Conference in May 1994, the formal establishment of the World Wide Web Consortium followed on 1 October 1994, founded by Berners-Lee in collaboration with CERN at the MIT Laboratory for Computer Science (MIT/LCS). It was further supported by the US Department of Defence’s Advanced Research Project Agency (DARPA) and the European Commission (Berners-Lee 1999: 85–89). Eventually, CERN transferred its position to INRIA (Institut national de Recherche en Informatique et Automatique), which became the first European W3C host; it was later replaced by the European Research Consortium in Informatics and Mathematics (ERCIM) in 2003. In 1996, Keio University became W3C’s Asian host in Japan (Jacobs, About W3C, History).

III. Membership

Membership of the W3C is open to any entity capable of signing the Membership Agreement and agreeing to the terms of its Appendix 1 (Appendix 1: 1). All types of organization (commercial, educational, as well as governmental entities, irrespective of their structure as for-profit or non-profit entities)