JavaScript is a scripting language that was created by Brendan Eich for the primary purpose of executing on the client-side of the client-server interaction (Eich, 2010). It has been asserted in this week’s discussion question instructions that JavaScript was a “classic case” of how an innovation is eventually adopted as an industry standard (University of Liverpool/Laureate Online Education, 2014). How this was achieved and its implications will be evaluated below.

To start off and give some historical context, during the 1990s, Netscape Corporation, which had Netscape Navigator, was engaged in a browser war with Microsoft, which had Internet Explorer (Eich, 2008). During this time period, few web standards existed, though they were badly needed. Microsoft, Netscape, Sun Microsystems all contributed to JavaScript, and were all in agreement that an industry standard was needed (Eich, 2008). However, at the time, Internet Explorer did not enjoy the majority status it does today, and was rightfully cautious of implementing agreed upon standard first, fearing that Netscape may later renege, well after Internet Explorer had implemented the standards (Eich, 2008). Were this to happen, Internet Explorer may not be able to view many web pages, and thus be at a disadvantage.

Netscape, not wanting to wait on Microsoft, decided to submit JavaScript to the European Computer Manufacturers Association (ECMA), which is an association whose primary purpose is in promoting communication standardization (Ecma International, n.d.). This has proved overall to be beneficial for the web; even to this day, it is estimated that approximately 88% of all websites are using JavaScript despite its age (W3Techs, 2014).

During the early days of the Internet, there was a legitimate fear that the Web, due to competing browsers, would fragment into different worlds, just like operating systems (Zelnick, 1998). This would have indeed been a tragedy because Web developers would be much more difficult, requiring the knowledge of multiple standards.

In closing, the accepted standardization of JavaScript has had a stabilizing effect on the Web. Without web standards, web development would be much more complicated, and the indexing of web pages by search engines such as Google and Bing, which provide users with easy access to information, would probably be a much more difficult task.

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