Introduction

JavaScript is an object-based scripting language whose interpreter is embedded inside web browser software, such as Microsoft Internet Explorer, Mozilla Firefox, Opera and Safari. This allows scripts contained in a web page to be interpreted when the page is loaded in the browser to provide functionality and dynamic effects. For security reasons JavaScript cannot read or write files, with the exception of "cookie" files that store minimal data.

Created by Brendan Eich at Netscape, JavaScript was first introduced in December 1995, and was initially named "LiveScript". It was soon renamed, however, to perhaps capitalize on the popularity of Sun Microsystem's Java programming language – although it bears little resemblance.

Before the introduction of JavaScript, web page functionality required the browser to call upon "server-side" scripts, resident on the web server, where slow response could impede performance. Calling upon "client-side" scripts, resident on the user's system, overcame the latency problem and provided a superior experience.

JavaScript quickly became very popular but a disagreement arose between Netscape and Microsoft over its licensing – so Microsoft introduced their own version named "JScript". Although similar to JavaScript, the new JScript version had extended features and some differences that remain today. Recognizing the danger of fragmentation the JavaScript language was standardized by the European Computer Manufacturer's Association (ECMA) in June 1997 as "ECMAScript". This helped to stabilize core features but the name, sounding like some kind of skin disease, is not widely used and most people will always call the language "JavaScript".

The JavaScript examples in this book describe three key ingredients:

- **Language basics** – illustrating the mechanics of the language syntax, keywords, operators, structure, and built-in objects

- **Web page functionality** – illustrating how to use the browser's Document Object Model (DOM) to provide user interaction and to create Dynamic HTML (DHTML) effects

- **Rich internet applications** – illustrating the latest AJAX techniques to create responsive web-based applications

Brendan Eich, creator of the JavaScript language.

Hot tip

The Document Object Model (DOM) is a hierarchical arrangement of objects representing the currently loaded HTML document.