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| 1. Introduction and Setup  1.1. What is JavaScript?  *Copyrighted Material - subject to fair use exception*  JavaScript is an interpreted language that was initially created to 'add life' to static web pages.  You can think of a web page as consisting of three separate layers:    The HTML layer lets you specify the content of a web page.  The CSS layer lets you specify the presentation of a web page, the way a web page looks.   **The JavaScript layer lets you specify the behavior of a web page,**the way it interacts with the user.  Today, it is really hard to find a web page that does not use JavaScript. All web browsers, on computers, tablets and phones include JavaScript interpreters.  As we’ll see later in this course, JavaScript has also become common in server-side programming.  1.2. Origins of JavaScript  *Copyrighted Material - subject to fair use exception*  In 1995, Netscape’s Navigator was the dominant web browser.  The company decided to add interactivity to HTML pages, with a lightweight programming language.  Brendan Eich developed a first version in 10 days.  Its initial name was **Mocha** but it was quickly changed to **LiveScript**. In December 1995, Netscape and Sun had a licensing agreement that led to the programming language’s final name, **JavaScript**.  At that point, it was included in Netscape Navigator releases.  The name JavaScript came from the intended role for the language:  Java was supposed to provide the large-scale building blocks for web applications, while JavaScript was to be the glue, connecting the blocks. Today JavaScript dominates the browser, Java is mostly non-existent there.  1.3. Standards, Names and Version Numbers  *Copyrighted Material - subject to fair use exception*  After JavaScript came out, Microsoft implemented the same language, under the different name JScript, in Internet Explorer 3.0.  Netscape submitted the language for standardization to ECMA (European Computer Manufacturer’s Association).   Because Sun had a trademark on the word Java, the language to be standardized couldn’t be called JavaScript. **ECMAScript** was chosen as the name of the standard language.  Its**implementations are officially called JavaScript and JScript**. When talking unofficially about either the standard or its implementations, we use the term JavaScript.  The current version of ECMAScript is 5.1, released in June 2011.  This is also known as ECMA-262, edition 5.1.  Sometimes you’ll also see a JavaScript version number such as JavaScript 1.5 or JavaScript 1.8.5.  These are Mozilla’s version numbers:  JavaScript 1.5 implements ECMAScript 3 and JavaScript 1.8.5 implements ECMAScript 5 with some added features. Google JavaScript Engine is V8 and the current version of the V8 engine implements ECMAScript 5.  1.4. Setting Up Our Environment: Firefox and Firebug  *Copyrighted Material - subject to fair use exception*  To get started with JavaScript, we need an interpreter.  All current web browsers include a JavaScript interpreter.  In this course, we’ll use Mozilla’s Firefox.  Once you have installed Firefox, you’ll need to install the**Firebug extension**.  It is a powerful web development tool that facilitates the debugging, editing, and monitoring of any website's CSS, HTML, DOM, and JavaScript.  **Using Firefox as your browser**, go to :  <https://getfirebug.com/> |  |