

them. Finally, two chapters are devoted to Node.js, another environment to program JavaScript in.

Throughout the book, there are five *project chapters*, which describe larger example programs to give you a taste of real programming. In order of appearance, we will work through building an [artificial life simulation](#), a [programming language](#), a [platform game](#), a [paint program](#), and a [dynamic website](#).

The language part of the book starts with four chapters to introduce the basic structure of the JavaScript language. They introduce [control structures](#) (such as the `while` word you saw in this introduction), [functions](#) (writing your own operations), and [data structures](#). After these, you will be able to write simple programs. Next, Chapters [5](#) and [6](#) introduce techniques to use functions and objects to write more *abstract* code and thus keep complexity under control.

After a [first project chapter](#), the first part of the book continues with chapters on [error handling and fixing](#), on [regular expressions](#) (an important tool for working with text data), and on [modularity](#)—another weapon against complexity. The [second project chapter](#) concludes the first part of the book.

The second part, Chapters [12](#) to [19](#), describes the tools that browser JavaScript has access to. You'll learn to display things on the screen (Chapters [13](#) and [16](#)), respond to user input (Chapters [14](#) and [18](#)), and communicate over the network ([Chapter 17](#)). There are again two project chapters in this part.

After that, [Chapter 20](#) describes Node.js, and [Chapter 21](#) builds a simple web system using that tool.

Typographic conventions