Chapter 1

Learning HTML and CSS

What’s more fun than playing video games? Making them! And this book will show you how. You don’t need to know anything about programming or any other complicated technical computer-y things. You don’t even need to know much math. This book will show you everything you need to make great games that you can play on the Web, on desktop computers, or as apps on mobile phones and tablets.

There are lots and lots of ways to make video games. But you don’t need to know all of them—you only need to know the best way. By “best,” I mean the easiest and most fun way, and that’s the way that you’re going to learn from this book. It’s also the way that will give your games the widest audience, give you the most solid set of game-design skills, and give you the best chance of making a bit of money from it too.

To make games, you have to learn a computer-programming language, which you can use to communicate with the computer to tell it what to do. A computer-programming language can look a lot like English, and such languages are easy to learn. People might argue with you that technically HTML and CSS are markup languages, not programming languages, but I’m going to call them all programming languages here and be done with it.

This book is about making games using a technology suite called HTML5. HTML5 is based on three separate computer-programming languages that work together:

- **HTML** (HyperText Markup Language): A programming language that describes how games and applications are structured. Games and most websites are built using HTML.
- **CSS** (Cascading Style Sheets): A programming language that describes how HTML code should be visually presented.
- **JavaScript**: A programming language that lets you control how your games behave.
You’re going to learn all three languages in this book. In this chapter you’ll learn about HTML and CSS. They’re extremely easy to use, and what we cover in this chapter will be enough to get you started making games. You can also use the skills you learn in this chapter to use HTML and CSS to start building websites if that is something you’d like to do. To make games, you’ll need to learn JavaScript, and that’s what much of the rest of the book is all about.

These programming languages let you access and control many specialized technologies that are all part of the HTML5 standard. The most important of these for games is canvas. Canvas is a display technology that’s great for animation and action games. You’ll learn all about how to use canvas to make games starting with Chapster 6.

Note: If you already know HTML and CSS, you can jump ahead to Chapter 2 to learn JavaScript. If you already know JavaScript and just want to start making games, jump ahead to Chapter 3. If you already know JavaScript and how to program in general, but you just want to start making games with canvas, Chapters 6, 7, and 8 are all yours!

What you need

Surprisingly, video-game design can be a relatively low-tech affair. Here’s the basic equipment you’ll need to make use of this book.

A computer

You need a reasonably up-to-date computer, either running Windows or the latest version of Mac OS X, or even Linux. You should have basic computer literacy skills, which includes understanding how to make new files and how to organize them in folders.

Programming software

Luckily, this costs nothing and you probably already have all the programming software you need already installed on your computer. Here’s what you’ll need:

- **A text editor**: If you’re using Windows, Notepad works well. If you’re using Mac OS X, you may use TextEdit.

- **Safari, Chrome, Firefox, or Opera**: These web browsers include some great features for building and testing HTML5 games. This book will explain how to use them to help you make games. Safari, Chrome, Firefox, and Opera are available for Windows and Mac. Chrome is available for Linux. If you’re using a Mac, Safari is already installed on your computer. If you’re using Windows, you can download Chrome or Safari here: [www.google.com/chrome](http://www.google.com/chrome) and [www.apple.com/safari/download](http://www.apple.com/safari/download)

This book describes how to use these software programs and tools to program games—you won’t need anything else.

However, there is some more specialized, but optional, software that you might want to try if you’re doing a lot of programming and want to make things a little easier for yourself.