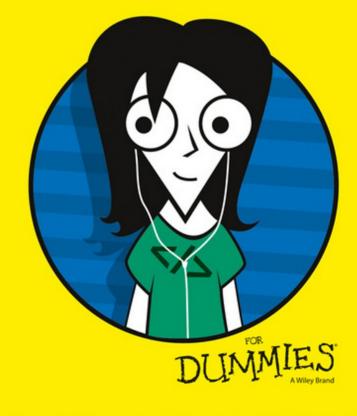
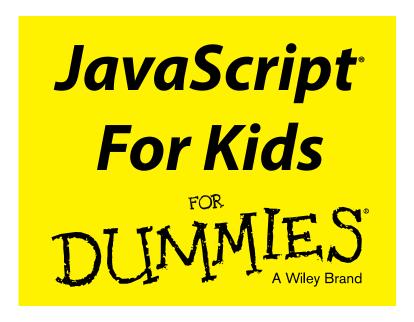
# 15 Fun Coding Projects!

# JavaScript<sup>®</sup> KIDS

- Build an Animated Robot App
- Create Cool Games
- Make a Web Page
- Learn Real Coding Skills

Chris Minnick
Eva Holland
Cofounders of WatzThis?





by Chris Minnick and Eva Holland



#### JavaScript® For Kids For Dummies®

Published by: John Wiley & Sons, Inc., 111 River Street, Hoboken, NJ 07030-5774, www.wiley.com

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Published simultaneously in Canada

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Library of Congress Control Number: 2015945282

ISBN 978-1-119-11986-9 (pbk); ISBN 978-1-119-11989-0 (ebk); ISBN 978-1-119-11988-3

Manufactured in the United States of America

10 9 8 7 6 5 4 3 2 1

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#### Introduction

JavaScript For Kids For Dummies is an introduction to the basics of JavaScript coding. In each chapter, we walk you step-by-step through creating JavaScript programs for the web. Designed for kids of all ages, with no coding experience, we strive to introduce this technical topic in a fun, engaging, and interactive way.

JavaScript is the most widely used programming language in the world today. That's why we think you've made a great decision by beginning your journey into the world of coding by picking up this book.

JavaScript is fun and easy to learn! With some determination and imagination, you'll be on your way to creating your very own JavaScript programs in no time!

Just as the only way to Carnegie Hall is to practice, practice, the only way to become a better programmer is to code, code, code!

#### **About This Book**

We seek to "de-code" the language of JavaScript for you and give you an understanding of the concepts. With the ability to move at your own pace, *JavaScript For Kids For Dummies* will get you up to speed. In this book, you learn how to create fun games and programs. We even show you how to customize and build your own versions of the games that you can post to the web and share with your friends!

Whether you know a little JavaScript or you've never seen it before, this book shows you how to write JavaScript the right way.

Topics covered in this book include the following:

- ✓ The basic structures of JavaScript programs
- JavaScript expressions and operators
- Structuring your programs with functions
- Writing loops
- ✓ Working with JavaScript, HTML5, and CSS3
- Making choices with if...else statements

Learning JavaScript isn't only about learning how to write the language. It's also about accessing the tools and the community that has been built around the language. JavaScript programmers have refined the tools and techniques used to write JavaScript over the language's long and exciting history. Throughout this book, we mention important techniques and tools for testing, documenting, and writing better code!

To make this book easier to read, you'll want to keep in mind a few tips. First, all JavaScript code and all HTML and CSS markup appears in monospaced type like this:

```
document.write("Hi!");
```

The margins on a book page don't have the same room as your monitor likely does, so long lines of HTML, CSS, and JavaScript may break across multiple lines. Remember that your computer sees such lines as single lines of HTML, CSS, or JavaScript. We indicate that everything should be on one line by breaking it at a punctuation character or space and then indenting any overage, like so:

HTML and CSS don't care very much about whether you use uppercase or lowercase letters or a combination of the two. But, JavaScript cares a lot! In order to make sure that you get the correct results from the code examples in the book, always stick to the same capitalizations that we use.

#### **Foolish Assumptions**

You don't need to be a "programming ninja" or a "hacker" to understand programming. You don't need to understand how the guts of your computer work. You don't even need to know how to count in binary.

However, we do need to make a couple of assumptions about you. We assume that you can turn your computer on, that you know how to use a mouse *and* a keyboard, and that you have a working Internet connection and web browser. If you already know something about how to make web pages (it doesn't take much!), you'll have a jumpstart on the material.

The other things you need to know to write and run JavaScript code are details we cover in this book, and the one thing you'll find to be true is that programming requires attention to details.

#### Icons Used In This Book

Here's a list of the icons we use in this book to flag text and information that's especially noteworthy.



This icon highlights technical details that you may or may not find interesting. Feel free to skip this information, but if you're the techie type, you might enjoy reading it.



This icon highlights helpful tips that show you easy ways or shortcuts that will save you time or effort.



Whenever you see this icon, pay close attention. You won't want to forget the information you're about to read — or, in some cases, we'll remind you about something that you've already learned that you may have forgotten.



Be careful. This icon warns you of pitfalls to avoid.

#### **Beyond the Book**

We've put together a lot of extra content that you won't find in this book. Go online to find the following:

- www.dummies.com/cheatsheet/javascriptforkids.
  Here, you find information on converting CSS property names to JavaScript; a list of common web browser events that JavaScript can respond to; and a list of words that can't be used as JavaScript variables, functions, methods, loop labels, or object names.
- Web Extras: Online articles covering additional topics are available at www.dummies.com/extras/javascript forkids. In these articles, we cover things like HTML5 form input tricks, how to name JavaScript variables, JavaScript troubleshooting tips, and more.

#### Where to Go from Here

Coding with JavaScript is fun, and when you get a little knowledge under your belt, the world of interactive web applications is your oyster! So buckle up! We hope you enjoy the book and our occasional pearls of wisdom.

If you want to show us changes and improvements you make to our games, or programs you come up with on your own, you can do so on Facebook (www.facebook.com/watzthisco), Twitter (www.twitter.com/watzthisco), or via email at info@watzthis.com. We're excited to see what you come up with!

### Part I

# What Is JavaScript? Alert! JavaScript Is Awesome!

