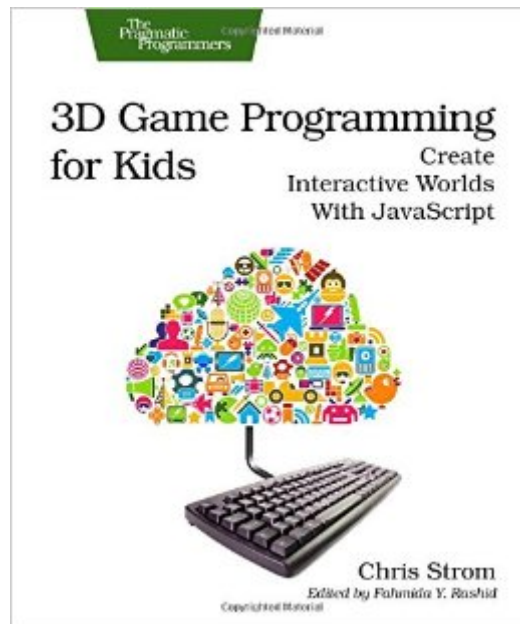# 3D Game Programming For Kids: Create Interactive Worlds With JavaScript (Pragmatic Programmers)

Synopsis

Printed in full color.You know what's even better than playing games? Creating your own. Even if you're an absolute beginner, this book will teach you how to make your own online games with interactive examples. You'll learn programming using nothing more than a browser, and see cool, 3D results as you type. You'll learn real-world programming skills in a real programming language: JavaScript, the language of the web. You'll be amazed at what you can do as you build interactive worlds and fun games.You'll jump right in and write games and simulations while learning programming fundamentals. You'll use the ICE Code Editor, which was created especially for this book to make it easy for you to get started with JavaScript programming. With the ICE Editor, you'll see the results of your work right away. Want a red donut? You can make hundreds of them, spinning around like crazy right next to the code you just typed.You'll do hands-on coding in every chapter. You'll start by building simple animated shapes, then make your own player--who can do cartwheels! You'll learn how to build your own games from start to finish, including a monster eating fruit, a cave puzzle, and rafting on a river. You'll animate simple shapes to create a model of the solar system, and make your own website so that you can show off your games with your friends. If you just want to make games, jump to the lessons focusing on projects. To understand some of the theory better or if you need some help with functions, turn to the chapters that explain the programming concepts. We'll walk you carefully through all the math needed to bring games to life.Best of all, you get to create awesome games and say, "I made this!"

Book Information

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Guides > Game Programming

Age Range: 10 - 14 years

Grade Level: 5 - 9

Customer Reviews

I am an eleven year old and I loved this book. I have had a lot of experience in other programs like scratch, but nothing like Javascript. I was able to read this book on my own, and I found it very interesting. One tip. when you learn how to make something look round, do not go over 100 or it will frieze that website and you will not be able to do anything about it.

Chris has excellent pacing throughout that makes the material fun and approacable to a solo teenager or a younger child with the assist of a parent. Personally, I took the coaching route with my 7yo daughter. She loved this book and spent weeks drawing all of the sprite images she wanted to use in her own games.There are some great early wins and lots of incremental "a ha" moments. The choice to code in ICE was great intend of going Chrome console, etc. just for the sake that the reader gets an instantaneous win and encouragement.It's great that you can skip over the theory sections to just have more fun with the projects, then go back. I foresee a lot of kids rewriting the same projects for repetition and then going into the theory sections weeks or months later.This is the first book I felt really understands how kids enjoy learning code: not for code sake but to have fun and solve interesting puzzles. I know I learned to code by treating the code itself as a game.I can't wait to see how my daughter progresses through this full book. I also intend to recommend it to the computer class at her school.

I taught myself computer programming as a kid in the mid 80's. Back then, computers had a built in programming language that were very simple and very forgiving let me fall in love with programming with minimal frustration. I've been looking for something similar for my kids, and this book comes extremely close!I picked up this book as an end-of-school-year gift for my 10 year old son. He's shown some moderate interest in programming, but every time we've tried to pick it up, things were just too frustrating either with the programming environment, the pickiness of the programming language, or the lack of _interesting_ beginner material to teach him.Having a simple environment on a web page was excellent; he was able to dive right in and start coding! Reminded me a lot of when I was a kid and you could just start typing your program with minimal fuss.My the end of the first chapter, he had a bunch of spinning objects on the screen, and he started tweaking size,

position, rotation. He was so excited that he was able to change the code, and see the results immediately on the screen. Within a few chapters he had built his avatar; it was responding to keystrokes and flipping and moving around the screen.The environment (the ICE Code Editor) is perfect for kids. It gives enough feedback with errors and warnings, without having lots of widgets that an IDE would have that would get in a kids way. He was able to type something, wait a few seconds, and see it immediately show up behind his code was amazing. His big errors at first were spelling and capitalization, but he's learning to catch those on his own now.I highly recommend this book for anyone who wants to encourage their kid(s) to learn to program, or as a first step if your kid wants to learn. It's simple, and it's a lot of fun.

I really like how quickly this book gets kids doing something interesting. In the first chapter, kids learn to draw shapes, and it's easy for them to experiment with the shapes and see what the parameters do (bigger, smaller, move, smoother/more chunky, etc.). My son is 14, and is enjoying it.The programming environment is really nice. The editor runs in Chrome, and the drawing appears "underneath" the editor with the code automatically being reloaded and run after each change. The result is that there is no save button, no upload, no hitting refresh, etc. It's also a forgiving environment. Knowing that kids will forget to add semicolons at the ends of statements, it handles it gracefully and runs the code anyway. To aid in learning, it doesn't fix it for the student but instead adds an "i" in the left gutter that will point out the missing semicolon when someone clicks on it.The other thing I really like about this is that the code is actual Javascript, so everything he's learning will help him write real apps later.We are just getting going, having gone through chapters 1 and 2. The lessons have moved at a good pace.So far it's been great. Highly recommended.

I have been looking for good materials to teach a beginning JavaScript class to middle and high school kids, and I was so thrilled to come across this book. The book did not disappoint, and the accompany discussion forum and involvement of the author makes it even better. As the other reviewers note, going with a free, browser-based editing environment is a big win, making it really easy and accessible for students of all backgrounds.The author writes in a conversational, approachable and engaging way, introducing the programming concepts, geometry, and math that readers apply in building the various projects. The chapters are short but meaningful, encouraging all the kids to get at least all the basics down, then challenging them to take off from there.I'm planning to get the book for all the kids so they can have a reference to work through at their own pace to accompany the projects we do in class. While I had found some interactive lessons for

practicing with JavaScript (like http://www.crunchzilla.com/), I hadn't seen a curriculum like this that can be a great foundation -- I know the kids are going to love it!

3D Game Programming for Kids: Create Interactive Worlds with JavaScript (Pragmatic Programmers) Java: The Simple Guide to Learn Java Programming In No Time (Programming,Database, Java for dummies, coding books, java programming) (HTML,Javascript,Programming,Developers,Coding,CSS,PHP) (Volume 2) Programming Clojure (Pragmatic Programmers) Programming Ruby 1.9 & 2.0: The Pragmatic Programmers' Guide (The Facets of Ruby) Programming Groovy: Dynamic Productivity for the Java Developer (Pragmatic Programmers) Programming Groovy 2: Dynamic Productivity for the Java Developer (Pragmatic Programmers) Practical Programming: An Introduction to Computer Science Using Python 3 (Pragmatic Programmers) Pragmatic Guide to Git (Pragmatic Guides) Javascript Artificial Intelligence: Made Easy, w/ Essential Programming; Create your * Problem Solving * Algorithms! TODAY! w/ Machine Learning & Data ... engineering, r programming, iOS development) PowerShell: For Beginners! Master The PowerShell Command Line In 24 Hours (Python Programming, Javascript, Computer Programming, C++, SQL, Computer Hacking, Programming) Web Design for Developers: A Programmer's Guide to Design Tools and Techniques (Pragmatic Programmers) Seven Concurrency Models in Seven Weeks: When Threads Unravel (The Pragmatic Programmers) The Agile Samurai: How Agile Masters Deliver Great Software (Pragmatic Programmers) The Cucumber Book: Behaviour-Driven Development for Testers and Developers (Pragmatic Programmers) Effective JavaScript: 68 Specific Ways to Harness the Power of JavaScript (Effective Software Development Series) Learning JavaScript: JavaScript Essentials for Modern Application Development The Handbook for Beginning Programmers with Examples in JavaScript Javascript Artificial Intelligence: Made Easy, w/ Essential Programming; Create your * Problem Solving * Algorithms! TODAY! w/ Machine Learning & Data Structures (Artificial Intelligence Series) An Illustrated Guide for z/Architecture Assembler Programmers: A compact reference for application programmers Delphi Nuts & Bolts for Experienced Programmers: For Experienced Programmers