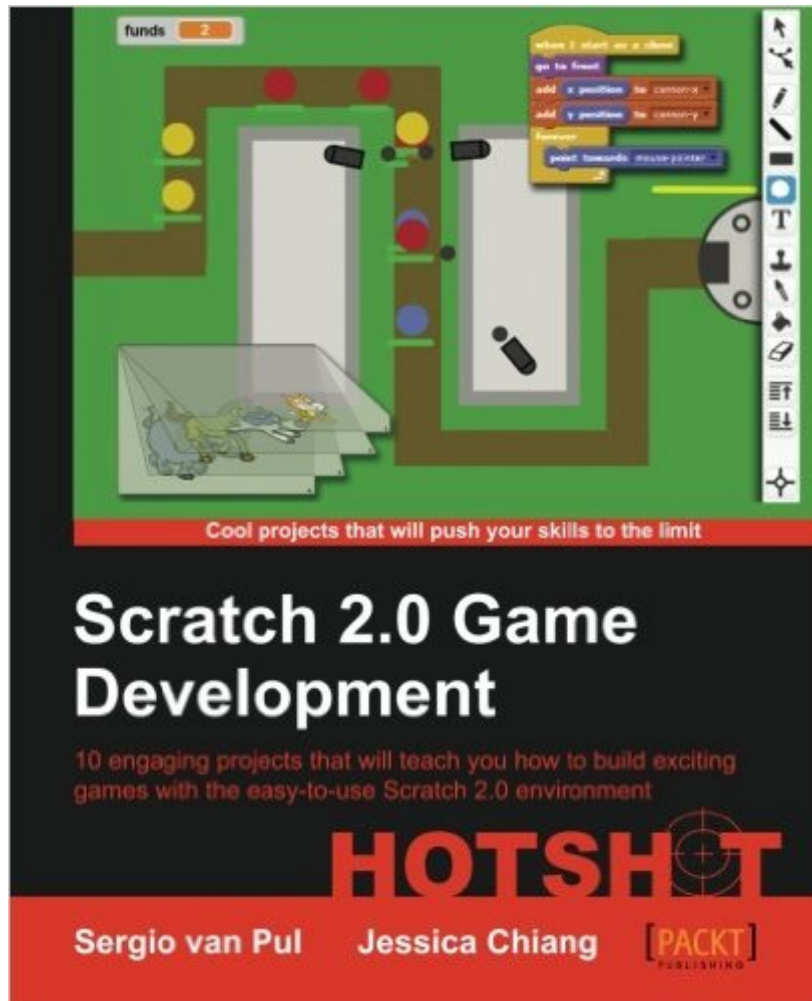# Scratch 2.0 Game Development HOTSHOT

Synopsis

10 engaging projects that will teach you how to build exciting games with the easytouse Scratch 2.0 environmentAbout This Book Discover how to make the most of the new Scratch 2.0 interface Understand how video games work under the hood Make your projects come to life, using practical programming principles Learn how to plan and build your own interactive projects Who This Book Is ForIf you are a new, or current Scratch user and would like to improve your understanding of the new Scratch 2.0 interface, and learn how to make video games, this book is ideal for you. Each project is explained in-depth from start to finish, so everyone can follow along, even if you don't have much previous experience with the software. If you want to become a video game designer, this book is an easy- to- use and friendly guide about the world of interactive media. It will teach, challenge, and inspire you to create great interactive projects.What You Will Learn Draw and edit game graphics Construct scripts from logic blocks Utilize operators and conditions to steer game actions Use variables and lists to save and reuse dynamic numbers Create both mouse and keyboard controls for various purposes Implement natural physics effects such as collisions and gravity Invent and build power-ups Learn how to use some advanced math, for better looking movement patterns Make interesting level designs Balance the game for an enjoyable experience Reuse elements to speed up the building process In DetailPlaying video games is fun, however, it's even more fun to make your own! Scratch 2.0 makes that challenge a lot easier. Instead of diving into abstract and confusing code, you can build games using easy to understand logic blocks. Within minutes you can have your first game up and running. Readers can look forward to an easily accessible and fun introduction to programming and interactive media design. Within minutes of starting the program, you will be able to see the first results of your hard work. Visual feedback comes early and often, making high-level, abstract concepts a lot easier to understand. This book offers readers access to completely interactive projects based on well-known video game genres. You will then learn how to use standard programming principles such as operators, variables, and functions. From a broader perspective, you will also learn how to plan and develop a game from a general idea to the finished product, creating a fun and user-friendly game. Scratch 2.0 includes many new and exciting features, which makes it possible to create more advanced games. The final results will be close to production level games. This book will not only introduce you to the Scratch 2.0 software, but also teach you about interactive media design.

Book Information

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Customer Reviews

As someone who uses both Scratch 2.0 and game design in elementary and middle-school classrooms, I'm always curious to see how other people approach the topic.Scratch 2.0 is a great platform for teaching advanced programming concepts without spending a lot of time worrying about placement of semicolons and curly braces.My hope is that I'm teaching good programming practices long before kids are focused on actual programming.So how does Scratch 2.0 Game Development Hotshot hold up?Sadly, it doesn't.The book is project based, which I love. It covers a variety of gameplay genres, which I love. It introduces a lot of the powerful features of Scratch, which is terrific. But along the way it flat out lies about features and introduces some terrible programming practices along the way.For example: In the very first project - replicating the gameplay of Angry Birds - the authors state that there is no way in Scratch 2.0 to determine the value of a built-in variable (which is false). They go on to solve that (non) problem by creating a custom variable called direction for a sprite and storing the value of the build-in direction variable. Of course, because they want to use the value of the custom direction variable in another sprite, they make the variable available to all sprites.Besides being confusing, what's the problem with this? Making a custom variable available to all sprites is the equivalent of declaring a global variable. That means it ought to be reserved for game-wide values such as playerScore or playerHealth or enemyCount, not the direction of a single object in your game.

Scratch is a visual programming language created by MIT to introduce programming to kids. I've been using it to teach some elementary kids. Its a great tool to get them started. The open gallery of projects([...]) provide a platform for sharing and learning from others. There aren't too many books

written on this. Those that exist teach you the basics of how to use the tool and less of how to design and develop applications.Recently, I had a chance to review Scratch 2.0 Game Development Hotshot ([...]) Published by PACKT publishing. I'd like the thank the authors Jessica Chiang and Sergio van Pul for compiling this book for young Game developers. This book is a game changer. I was surprised to see advanced games written in scratch and more importantly I commend the authors for walking us thru the design elements of the games. Starting from scratch, the authors have explained the steps for developing games with varying levels of complexity.I worked out some projects from the book, with my kids in 3rd grade, who have had some experience developing games and applications last year or so. The results were mixed. The game in the first chapter was easy for them to follow thru, but it got harder and harder for them to manage various game elements. This was expected and in no way a down side of the book. It just means that this book will continue to teach them as they grow.We reviewed the games and ranked them for the best entertainment value/interest level and also the game complexity. The kids liked Dungeon Crawl the most although the difficulty level was one of the highest. They found Chapter 5 "Shoot 'Em Up" boring. They loved the sound effects in "Space Age".As an advanced user of Scratch, I found the games very interesting.

Scratch is a great way to introduce children to computer programming, and the Scratch 2.0 Game Development Hotshot is a great starting point for doing so. It is a nice and lengthy text with exhaustive examples of everything that a learner would need to figure out how to do almost anything they need to do when working with Scratch.This book is written well in a process that goes from simple to complex; anyone using it still needs a basic amount of familiarity with computers and at times the book suggests using external programs in addition to Scratch. Fortunately, the book lists free, easy-to-use programs in addition to the commercial software it suggests, so it remains accessible to educators and parents on a tight budget who don't already have access to programs like Photoshop.There is a small conflict in this guidebook between the complexity of programming and the need to be clearly communicative, and I feel that it did a very good job of being clear. I am not particularly proficient with Scratch, though I have worked with other alternatives extensively, but it seemed to use a very wide range of tools within the Scratch platform to accomplish its objectives, which should help learners utilize emergent strategies on their own.The inclusion of many well-chosen code excerpts and diagrams within the book is done perfectly, and there is little left to be desired by the helpful images. For more advanced users, some of these will be redundant, but given Scratch's nature as an incredibly accessible tool this could help computer novices or young

children and they do not become particularly burdensome for a reader.The projects contained in the book represent a variety of game genres, and are presented in an order of increasing complexity.

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