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Nota di contenuto	Intro -- Scratch 1.4 Beginner's Guide -- Table of Contents -- Scratch 1.4 Beginner's Guide -- Credits -- About the Author -- About the Reviewer -- Preface -- What this book covers -- What you need for this book -- Who this book is for -- Conventions -- Reader feedback -- Customer support -- Downloading the example code for the book -- Errata -- Piracy -- Questions -- 1. Welcome to Scratch! -- What is Scratch? -- 21st century learning skills -- How to use Scratch? -- Programming concepts -- Programming limitations -- Scratch anatomy -- Building blocks -- Write the script -- Watch the story -- Built-in image editor -- Interface promotes tinkering -- Learning Scratch -- Welcome to Scratch! -- Installation -- Start Scratching -- Graphics and Slideshows -- Storytelling -- Arcade Games -- Games of Fortune -- Math and Finance -- Share! -- Real-world stimuli -- Summary -- 2. Installation -- Install Scratch -- Windows -- Run Scratch from flash

drive -- Integrate Scratch with the PortableApps.com suite -- Installation on Macintosh -- Run Scratch on USB flash drive -- Installation on Linux -- Troubleshooting -- Limitations -- Wine and Scratch -- Confirm Java install -- Customize your Scratch installation -- Redistribute Scratch freely -- Source code license -- Share alike -- Summary -- 3. Start Scratching -- The interface at a glance -- Time for action - first step -- What just happened? -- Basics of a Scratch project -- We're all actors on Scratch's stage -- Pop quiz -- Time for action - save your work -- Set the cat in motion -- Time for action - a big step -- What just happened? -- Coordinating a sprite's location -- Double-click control -- Pop quiz -- Time for action - in motion forever -- What just happened? -- Loops play it again -- Time for action - get out of the corner -- What just happened? -- Have a go hero -- Undo an action -- Pop quiz.

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Working with images -- Resize images -- How to measure images -- Time for action - flip through the photos -- What just happened? -- Have a go hero -- Building audience participation -- Time for action - present your show -- Pop quiz -- Next steps -- Summary -- 5.

Storytelling -- Barnyard humor -- Table of contents -- Time for action - create TOC -- What just happened? -- Have a go hero -- Add pages to our book -- Time for action - add new pages -- What just happened? -- Hide that sprite -- Time for action - hide the sprites -- Introducing the horse -- Time for action - import the horse -- Costumes versus sprites -- The horse speaks -- Time for action - the horse talks -- What just happened? -- Synchronize the action -- Time for action - revise the horse talks exercise -- What just happened? -- Sound -- Time for action - a horse whinnies -- What just happened? -- Sound formats -- The dog enters -- Time for action - bring out the dog -- X and Y coordinates mark the spot -- Time for action - stay dog

-- What just happened? -- Position on the grid -- Pop quiz -- Pointed in the right direction -- Time for action - turn to the left -- What just happened? -- Degrees of direction -- Sound effects -- Time for action - hit the cymbals -- What just happened? -- Select an instrument -- Time for action - applause, please -- What just happened? -- Play a note -- Have a go hero -- Pop quiz -- Piece the dog scene together -- Time for action - joke, please -- What just happened? -- Have a go hero -- Control the story -- Time for action - hide TOC -- What just happened? -- Have a go hero -- Time for action - enter dog -- What just happened? -- Time for action - exit dog -- What just happened? -- Have a go hero -- Time for action - show TOC -- What just happened? -- Have a go hero -- Build sequence -- Have a go hero -- Next steps -- Summary -- 6. Arcade Games.
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sprite with the go to block -- Draw with the pen tool -- Time for action - draw the x and y axis of the grid -- What just happened? -- Have a go hero -- Label the newAmount value -- Time for action - label newAmount -- What just happened? -- Pop quiz -- Find the interest earned on a lump sum -- Time for action - calculate interest on lump sum -- What just happened? -- Have a go hero -- Round to nearest whole number -- Have a go hero -- Next steps -- Summary -- 9. Share! -- Share with the Scratch community -- Reduce file size -- Time for action - compress media files -- What just happened? -- Share! -- Time for action - share! -- What just happened? -- Tag it -- Update a project -- Trouble?. Firefox display problems.

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Learn to program while creating interactive stories, games, and multimedia projects using ScratchKey FeaturesCreate interactive stories, games, and multimedia projects that you can reuse in your own classroomLearn computer programming basics ñ no computer science degree requiredConnect with the Scratch community for inspiration, advice, and collaborationProvides hands-on projects that help you learn by experiment and playBook DescriptionIf you have the imaginative power to design complex multimedia projects but can't adapt to programming languages, then Scratch 1.4: Beginner's Guide is the book for you. Imagine how good you'll feel when you drag-and-drop your way to interactive games, stories, graphic artwork, computer animations, and much more using Scratch even if you have never programmed before. This book provides teachers, parents, and new programmers with a guided tour of Scratch's features by creating projects that can be shared, remixed, and improved upon in your own lesson plans. Soon you will be creating games, stories, and animations by snapping blocks of "code" together. When you program you solve problems. In order to solve problems, you think, take action, and reflect upon your efforts. Scratch teaches you to program using a fun, accessible environment that's as easy as dragging and dropping blocks from one part of the screen to another. In this book you will program games, stories, and animations using hands-on examples that get you thinking and tinkering. For each project, you start with a series of steps to build something. Then you pause to put our actions into context so that you can relate our code to the actions on Scratch's stage. Throughout each chapter, you'll encounter challenges that encourage you to experiment and learn. One of the things you're really going to love is that, as you begin working through the examples in the book, you won't be able to stop your imagination and the ideas will stream as fast as you can think of them. Write them down. You'll quickly realize there are a lot of young minds in your home, classroom, or community group that could benefit from Scratch's friendly face. Teach them, please.What you will learnDesign user interfaces, including sequence, characters, and controls.Think critically and make decisions ñ based on need, program limitations and knowledge level.Get to know the concepts of scratch programming such as loops, conditional statements, variables, arrays, Boolean logic, dynamic interaction, coordination, synchronization, threads, and event handling, and apply it later to other programming languages.Develop a barnyard humor that let s you shine as a storyteller.Debug problems in your design and code.Revise your projects to fix problems and add functionality. Collaborate with the Scratch community by remixing and sharing projects so that you can learn from each other.Communicate with peers and students about the details of your projects.Capture sound, light, touch, and resistance via an external PicoBoard and use it as input for your Scratch projects.Who this book is forScratch is a teaching

language, so it's ideal for people who want to learn how to program or teach others how to program. Educators and parents will learn how to program using Scratch, so they can use Scratch to teach the latest learning skills to their students and children. No previous computer programming knowledge is required. You only need to know how to perform basic tasks on a computer and this book will teach the rest. You can then use it as a platform to learn more advanced programming languages. Parents, stuck with a child who wants to
