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Nota di contenuto	<p>""JavaScript Creativity""; ""Contents at a Glance""; ""Contents""; ""About the Author""; ""About the Technical Reviewer""; ""Acknowledgments""; ""Foreword""; ""Chapter 1: Introduction""; ""What You Need to Know""; ""CSS""; ""Debugging""; ""Browser Compatibility""; ""JavaScript Console""; ""Access to variables""; ""Prompt""; ""Sources""; ""Live editing""; ""Breakpoints""; ""Timeline""; ""Canvas Profiles""; ""Summary""; ""Chapter 2: Canvas and Animation Basics""; ""What Is Canvas?""; ""RequestAnimationFrame""; ""Linear Interpolation""; ""Follow the Mouse""; ""Bouncing Box""</p> <p>""a€œClevera€? Animation""""Introducing Drag-and-Drop""; ""Making the Paintbrush""; ""Summary""; ""Chapter 3: Audio and Video Basics""; ""Containers and Codecs""; ""Containers""; ""WebM""; ""MP4""; ""QuickTime File Format""; ""AVI""; ""ASF""; ""Ogg""; ""Matroska""; ""WAV""; ""Codecs""; ""MP3""; ""Vorbis""; ""AAC""; ""AC-3""; ""H.264""; ""VP8""; ""Theora""; ""Encoding Videos""; ""Browser Compatibility""; ""Using the and elements""; """"; """"; ""Attributes and Properties""; ""Controls""; ""Autoplay""; ""Preload""; ""Loop""; ""Played""; ""Buffered""; ""Duration""</p>

""Volume""""Playback Rate""; ""Network State""; ""Web Audio API""; ""Analyzing Audio""; ""Frequency Visualization""; ""Spectrogram""; ""Web Audio API Nodes""; ""Manipulating Video""; ""Summary""; ""Chapter 4: Beginning 3D""; ""Basics of 3D""; ""Three.js""; ""Make a Scene""; ""Adding Meshes""; ""Extrusion""; ""Text""; ""Lighting""; ""Materials""; ""Data Visualizations""; ""3D Node Graph""; ""Adding Data""; ""Summary""; ""Chapter 5: Creating Music in the Browser""; ""Music Theory""; ""Creating a Keyboard""; ""Recording the Music""; ""Timeline""; ""Summary""; ""Chapter 6: The Music Player"" ""Media Player""""Specification""; ""Where to Start""; ""Playlists""; ""Models""; ""Views""; ""Player Object""; ""Main App View""; ""Drag and Drop""; ""Integrating the Music Creation""; ""Music Visualization""; ""Summary""; ""Chapter 7: Real-time Collaboration with Node.js""; ""Making a Chatroom""; ""Installing Node.js""; ""Socket.IO and Express""; ""Summary""; ""Chapter 8: Video-to-Video Using WebRTC""; ""Introduction to WebRTC""; ""getUserMedia()""; ""Specifications""; ""Servers""; ""Where to Start?""; ""Technologies Behind WebRTC""; ""ICE""; ""NAT Traversal""; ""STUN/TURN""; ""SDP"" ""Client-side Code""""Summary""; ""Chapter 9: Motion Detection""; ""A n Introduction to Motion Detection""; ""Boilerplate for Video Manipulation""; ""Basic Video Manipulation""; ""Motion Detection""; ""Motion Tracking""; ""Haar-like Features""; ""Viola-Jones""; ""Using js-objectDetect""; ""Summary""; ""Chapter 10: Interacting with the Browser Using Gestures""; ""Taking the Keyboard Server-Side""; ""Controlling the Music with a Webcam""; ""Summary""; ""CHAPTER 11: Appendix""; ""The Future""; ""Further Reading""; ""Algorithms""; ""Links""; ""Chapter 1""; ""Chapter 3""; ""Chapter 4"" ""Chapter 5""

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## Sommario/riassunto

JavaScript Creativity teaches you how to use every feature of this versatile and powerful language in exciting and creative ways. JavaScript can be used for so much more than simple interactivity. Master your use of canvas, animation, audio and video, 3D visualizations, motion detection and real-time collaboration. In every chapter of this book you will learn how to use and evolve JavaScript's creative capabilities in your own projects, as well as having project examples to follow throughout. Specifically, you will learn how to: Expertly use canvas and animation Push audio and video to their full capabilities Code and manipulate advanced 3D visualizations Create your own music directly from the browser Implement real-time collaboration with Node.js Explore real-time audio and video with WebRTC Play with motion detection and gesture control Combine all features into one social music creation experiment, similar to Google's 'Jam with Chrome' JavaScript Creativity is for the developer who has a working knowledge of JavaScript and wants to take their code to the next level. Every feature explored can be manipulated and implemented in your everyday projects to really impress your clients or just increase your code skill. This book is an exciting, action-packed introduction to all the advanced and truly creative aspects of this language - start creative coding today!

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