

Realtime Web Apps With Html5 Websocket Php And Jquery Html5 Websocket Pusher And The Webs Next Big Thing Author Jason Lengstorf May 2013

WebRTC, Web Real-Time Communications, is revolutionizing the way web users communicate, both in the consumer and enterprise worlds. WebRTC adds standard APIs (Application Programming Interfaces) and built-in real-time audio and video capabilities and codecs to browsers without a plug-in. With just a few lines of JavaScript, web developers can add high quality peer-to-peer voice, video, and data channel communications to their collaboration, conferencing, telephony, or even gaming site or application. New for the Third Edition The third edition has an enhanced demo application which now shows the use of the data channel for real-time text sent directly between browsers. Also, a full description of the browser media negotiation process including actual SDP session descriptions from Firefox and Chrome. Hints on how to use Wireshark to monitor WebRTC protocols, and example captures are also included. TURN server support for NAT and firewall traversal is also new. This edition also features a step-by-step introduction to WebRTC, with concepts such as local media, signaling, and the Peer Connection introduced through separate runnable demos. Written by experts involved in the standardization effort, this book contains the most up to date discussion of WebRTC standards in W3C and IETF. Packed with figures, example code, and summary tables, this book is the ultimate WebRTC reference.

Table of Contents

- 1 Introduction to Web Real-Time Communications
 - 1.1 WebRTC Introduction
 - 1.2 Multiple Media Streams in WebRTC
 - 1.3 Multi-Party Sessions in WebRTC
 - 1.4 WebRTC Standards
 - 1.5 What is New in WebRTC
 - 1.6 Important Terminology
 - 1.7 Notes
 - 1.7 References
- 2 How to Use WebRTC
 - 2.1 Setting Up a WebRTC Session
 - 2.2 WebRTC Networking and Interworking Examples
 - 2.3 WebRTC Pseudo-Code Example
 - 2.4 References
- 3 Local Media
 - 3.1 Media in WebRTC
 - 3.2 Capturing Local Media
 - 3.3 Media Selection and Control
 - 3.4 Media Streams Example
 - 3.5 Local Media Runnable Code Example
- 4 Signaling
 - 4.1 The Role of Signaling
 - 4.2 Signaling Transport
 - 4.3 Signaling Protocols
 - 4.4 Summary of Signaling Choices
 - 4.5 Signaling Channel Runnable Code Example
 - 4.6 References
- 5 Peer-to-Peer Media
 - 5.1 WebRTC Media Flows
 - 5.2 WebRTC and Network Address Translation (NAT)
 - 5.3 STUN Servers
 - 5.4 TURN Servers
 - 5.5 Candidates
- 6 Peer Connection and Offer/Answer Negotiation
 - 6.1 Peer Connections
 - 6.2 Offer/Answer Negotiation
 - 6.3 JavaScript Offer/Answer Control
 - 6.4 Runnable Code Example: Peer Connection and Offer/Answer Negotiation
- 7 Data Channel
 - 7.1 Introduction to the Data Channel
 - 7.2 Using Data Channels
 - 7.3 Data Channel Runnable Code Example
 - 7.3.1 Client WebRTC Application
- 8 W3C Documents
 - 8.1 WebRTC API Reference
 - 8.2 WEBRTC Recommendations
 - 8.3 WEBRTC Drafts
 - 8.4 Related Work
 - 8.5 References
- 9 NAT and Firewall Traversal
 - 9.1 Introduction to Hole Punching
 - 9.3 WebRTC and Firewalls
 - 9.3.1 WebRTC Firewall Traversal
 - 9.4 References
- 10 Protocols
 - 10.1 Protocols
 - 10.2 WebRTC Protocol Overview
 - 10.3 References
- 11 IETF Documents
 - 11.1 Request For Comments
 - 11.2 Internet-Drafts
 - 11.3 RTCWEB Working Group Internet-Drafts
 - 11.4 Individual Internet-Drafts
 - 11.5 RTCWEB Documents in Other Working Groups
 - 11.6 References
- 12 IETF Related RFC Documents
 - 12.1 Real-time Transport Protocol
 - 12.2 Session Description Protocol
 - 12.3 NAT Traversal RFCs
 - 12.4 Codecs
 - 12.5 Signaling
 - 12.6 References
- 13 Security and Privacy
 - 13.1 Browser Security Model
 - 13.2 New WebRTC Browser Attacks
 - 13.3 Communication Security
 - 13.4 Identity in WebRTC
 - 13.5 Enterprise Issues
- 14 Implementations and Uses

INDEX ABOUT THE AUTHORS

HTML5 continues to evolve, browsers are implementating at break-neck speed and HTML5 web sites spring up like flowers after rain. More than ever, you need to get acquainted with the powerful new possibilities in web and application design. That's why we've crafted a second edition of this book to help you stay on top of current developments. This book shows you how to start adapting the language now to realize its benefits on today's browsers. It concentrates on the practical—the problems HTML5 can solve for you right away. By following the book's hands-on HTML5 code examples you'll learn about:

- new semantics and structures to help your site become richer and more accessible
- applying the most important JavaScript APIs that are already implemented
- using and controlling native multimedia
- how to build more intelligent web forms
- implementing new storage options and web databases, including both WebSQL and IndexedDB
- how geolocation works with HTML5 in both web and mobile applications

And this new edition adds:

- even more detail on canvas, geolocation and offline storage options
- a peek around the corner for audio and video's new element, subtitling formats, in-browser web conference
- browser history controls to make applications more usable and bookmarkable
- ways to use HTML5 now in older browsers

Technology is continuously advancing and changing the way aspects of business are performed. The implementation of mobile business transactions to acquire various types of goods has changed the landscape of consumerism. Apps Management and E-Commerce Transactions in Real-Time is a timely research publication that features the latest scholarly trends, issues, and implications of the use of a new technological forum in electronic buying and selling. Including extensive coverage on a number of topics and perspectives such as social networks, customer satisfaction, and cloud computing, this book is ideally designed for researchers, academicians, and students seeking current research on mobile solutions in business deals.

In just 24 sessions of one hour or less, learn how to build rich, robust mobile apps that run on smartphones, tablets, and other devices and interact with users in powerful new ways. Using this book's straightforward, step-by-step approach, you'll master leading-edge practical skills you can use whether you're developing for the iPad/iPhone or Android. Discover how to quickly build new mobile apps and upgrade older apps, provide cutting-edge media content, leverage advanced features ranging from geolocation to the semantic web, and even simplify complex back-end development. Each lesson builds on what you've already learned, giving you a rock-solid foundation for real-world success! Step-by-step instructions carefully walk you through the most common HTML5 mobile development tasks. Quizzes and Exercises at the end of each chapter help you test your knowledge. By the Way notes present interesting information related to the discussion. Did you Know? tips offer advice or show you easier ways to perform tasks. Watch Out! cautions alert you to possible problems and give you advice on how to avoid them. Learn how to... Work with the new HTML5 tags most valuable for mobile development Get started fast with HTML5 features already supported by today's browsers Detect mobile devices and HTML5 support and upgrade sites to support them Style and build more efficient, usable mobile pages Use jQuery Mobile to quickly create mobile apps Leverage HTML5's breakthrough drawing and typography features Efficiently integrate media content into your apps Add meaning with HTML5 sectioning and semantic elements Implement drag-and-drop more easily than ever Build offline applications and other apps that use local storage Detect and work with location data via the GeoLocation API Use microformats and microdata to make web pages friendlier to computers Add powerful back-end functionality with WebSockets, Web Workers, and File APIs Improve user navigation with the History API

HTML has been on a wild ride. Sure, HTML started as a mere markup language, but more recently HTML's put on some major muscle. Now we've got a language tuned for building web applications with Web storage, 2D drawing, offline support, sockets and threads, and more. And to speak this language you've got to go beyond HTML5 markup and into the world of the DOM, events, and JavaScript APIs. Now you probably already know all about HTML markup (otherwise known as structure) and you know all about CSS style (presentation), but what you've been missing is JavaScript (behavior). If all you know about are structure and presentation, you can create some great looking pages, but they're still just pages. When you add behavior with JavaScript, you can create an interactive experience; even better, you can create full blown web applications. Head First HTML5 Programming is your ultimate tour guide to creating web applications with HTML5 and JavaScript, and we give you everything you need to know to build them, including: how to add interactivity to your pages, how to communicate with the world of Web services, and how to use the great new APIs being developed for HTML5. Here are just some of the things you'll learn in Head First HTML5 Progaming: Learn how to make your pages truly interactive by using the power of the DOM. Finally understand how JavaScript

works and take yourself from novice to well-informed in just a few chapters. Learn how JavaScript APIs fit into the HTML5 ecosystem, and how to use any API in your web pages. Use the Geolocation API to know where your users are. Bring out your inner artist with Canvas, HTML5's new 2D drawing surface. Go beyond just plugging a video into your pages, and create custom video experiences. Learn the secret to grabbing five megabytes of storage in every user's browser. Improve your page's responsiveness and performance with Web workers. And much more.

Summary HTML5 for .NET Developers teaches professional software engineers how to integrate the latest HTML5 APIs and semantic markup into rich web applications using JavaScript, ASP.NET MVC, and WCF. Written from the .NET perspective, this book is full of practical applications and ways to connect the new web standards with your existing development practices About the Technology A shift is underway for Microsoft developers—to build web applications you'll need to integrate HTML5 features like Canvas-based graphics and the new JavaScript-driven APIs with familiar technologies like ASP.NET MVC and WCF. This book is designed for you. About this Book HTML5 for .NET Developers teaches you how to blend HTML5 with your current .NET tools and practices. You'll start with a quick overview of the new HTML5 features and the semantic markup model. Then, you'll systematically work through the JavaScript APIs as you learn to build single page web apps that look and work like desktop apps. Along the way, you'll get tips and learn techniques that will prepare you to build "metro-style" applications for Windows 8 and WP 8. This book assumes you're familiar with HTML, and concentrates on the intersection between new HTML5 features and Microsoft-specific technologies. Purchase of the print book comes with an offer of a free PDF, ePub, and Kindle eBook from Manning. Also available is all code from the book. What's Inside HTML5 from a .NET perspective Local storage, threading, and WebSockets Using JSON-enabled web services WCF services for HTML5 How to build single page web apps "This book speaks directly to the interests and concerns of the .NET developer."—From the Forward by Scott Hanselman, Microsoft Table of Contents HTML5 and .NET A markup primer: classic HTML, semantic HTML, and CSS Audio and video controls Canvas The History API: Changing the game for MVC sites Geolocation and web mapping Web workers and drag and drop Websockets Local storage and state management Offline web applications

Realtime Web Apps: With HTML5 WebSocket, PHP, and jQuery is a guide for intermediate- to advanced-level web developers looking to take the next leap forward in website and app development: realtime. With Realtime Web Apps , you'll be able to quickly get up to speed on what HTML5 WebSocket does, how it is going to affect the future of the web as we know it, and—thanks to Pusher's simple API—start developing your first realtime app today. Using a practical approach, Realtime Web Apps will guide you through building your first app using HTML5, CSS3, jQuery, and Pusher. After your initial introduction to the technologies used in the book, you'll immediately jump into the process of creating a realtime Q&A app that will work on desktop browsers as well as mobile phones (including iOS and Android). In addition to learning realtime development strategies, you'll also learn progressive development strategies including responsive CSS3 layouts, AJAX development with jQuery, and more. The future of the web is realtime. Grab your hoverboard. Introduces you to the revolutionary capabilities of the HTML5 WebSocket API Gets you started with WebSocket immediately using the super-simple Pusher API Walks you through the development of a real-life realtime web app Gets you working with responsive layouts, jQuery, and AJAX development What you'll learn Familiarize yourself with what "realtime" means and how it changes the web as we know it. Learn how to utilize responsive web design and jQuery to create a single web app instead of multiple platform-specific applications. Get up and running with the Pusher API to start developing realtime apps today. Build a web app back-end with PHP and MySQL. Integrate AJAX and realtime interactivity into your web app. Use OAuth 2.0 to allow users to log in to your app (including Facebook and Twitter OAuth). Who this book is for Realtime Web Apps: With HTML5 WebSocket, PHP, and jQuery is for the beginning- to intermediate-level web developer who is ready to usher in the next era of web apps. It's for those whose time is precious, but have a need to implement realtime functionality into their projects. Realtime Web Apps is written for—and by—geeks who love to expand their skillset but don't have weeks to dedicate to learning how to implement new technology. It's the perfect tool for busy web professionals who need to get up to speed with the latest the web has to offer quickly and in such a way that it's immediately applicable to...

The two volume set LNCS 9474 and LNCS 9475 constitutes the refereed proceedings of the 11th International Symposium on Visual Computing, ISVC 2015, held in Las Vegas, NV, USA in December 2015. The 115 revised full papers and 35 poster papers presented in this book were carefully reviewed and selected from 260 submissions. The papers are organized in topical sections: Part I (LNCS 9474) comprises computational bioimaging; computer graphics; motion and tracking; segmentation; recognition; visualization; mapping; modeling and surface reconstruction; advancing autonomy for aerial robotics; medical imaging; virtual reality; observing humans; spectral imaging and processing; intelligent transportation systems; visual perception and robotic systems. Part II (LNCS 9475): applications; 3D computer vision; computer graphics; segmentation; biometrics; pattern recognition; recognition; and virtual reality.

If you want to build your organization's next web application with HTML5, this practical book will help you sort through the various frameworks, libraries, and development options that populate this stack. You'll learn several of these approaches hands-on by writing multiple versions of a sample web app throughout the book, so you can determine the right strategy for your enterprise. What's the best way to reach both mobile and desktop users? How about modularization, security, and test-driven development? With lots of working code samples, this book will help web application developers and software architects navigate the growing number of HTML5 and JavaScript choices available. The book's sample apps are available at <http://savesickchild.org>. Mock up the book's working app with HTML, JavaScript, and CSS Rebuild the sample app, first with jQuery and then Ext JS Work with different build tools, code generators, and package managers Build a modularized version of the app with RequireJS Apply test-driven development with the Jasmine framework Use WebSocket to build an online auction for the app Adapt the app for both PCs and mobile with responsive web design Create mobile versions with jQuery Mobile, Sencha Touch, and PhoneGap

Learn how to build a wide range of scalable real-world web applications using a professional development toolkit. If you already know the basics of Node.js, now is the time to discover how to bring it to production level by leveraging its vast ecosystem of packages. With this book, you'll work with a varied collection of standards and frameworks and see how all those pieces fit together. Practical Node.js takes you from installing all the necessary modules to writing full-stack web applications. You'll harness the power of the Express.js and Hapi frameworks, the MongoDB database with Mongoskin and Mongoose. You'll also work with Pug and Handlebars template engines, Stylus and LESS CSS languages, OAuth and Everyauth libraries, and the Socket.IO and Derby libraries, and everything in between. This exciting second edition is fully updated for ES6/ES2015 and also covers how to deploy to Heroku and AWS, daemonize apps, and write REST APIs. You'll build full-stack real-world Node.js apps from scratch, and also discover how to write your own Node.js modules and publish them on NPM. Fully supported by a continuously updated source code repository on GitHub and with full-color code examples, learn what you can do with Node.js and how far you can take it! What You'll Learn Manipulate data from the mongo console Use the Mongoskin and Mongoose MongoDB libraries Build REST API servers with Express and Hapi Deploy apps to Heroku and AWS Test services with Mocha, Expect and TravisCI Implement a third-party OAuth strategy with Everyauth Web developers who have some familiarity with the basics of Node.js and want to learn how to use it to build apps in a professional environment.

What people are saying about Building iPhone Apps w/ HTML, CSS, and JavaScript "The future of mobile development is clearly web technologies like CSS, HTML and JavaScript. Jonathan Stark shows you how to leverage your existing web development skills to build native iPhone applications using these technologies." --John Allsopp, author and founder of Web Directions "Jonathan's book is the most comprehensive documentation available for developing web applications for mobile Safari. Not just great tech coverage, this book is an easy read of purely fascinating mobile tidbits in a fun colloquial style. Must have for all PhoneGap developers." -- Brian LeRoux, Nitobi Software It's a fact: if you know HTML, CSS, and JavaScript, you already have the tools you need to develop your own iPhone apps. With this book, you'll learn how to use these open source web technologies to design and build apps for the iPhone and iPod Touch on the platform of your choice-without using Objective-C or Cocoa. Device-agnostic mobile apps are the wave of the future, and this book shows you how to create one product for several platforms. You'll find guidelines for converting your product into a native iPhone app using the free PhoneGap framework. And you'll learn why releasing your product as a web app first helps you find, fix, and test bugs much faster than if you went straight to the App Store with a product built with Apple's tools. Build iPhone apps with tools you already know how to use Learn how to make an existing website look and behave like an iPhone app Add native-looking animations to your web app using jQTouch Take advantage of client-side data storage with apps that run even when the iPhone is offline Hook into advanced iPhone features -- including the accelerometer, geolocation, and vibration -- with JavaScript Submit your applications to the App Store with Xcode This book received valuable community input through O'Reilly's Open Feedback Publishing System (OFPS).

Realtime Web Apps With HTML5 WebSocket, PHP, and JQuery

This book reports on the latest advances in the modeling, analysis and efficient management of information in Internet of Things (IoT) applications in the context of 5G access technologies. It presents cutting-edge applications made possible by the implementation of femtocell networks and millimeter wave communications solutions, examining them from the perspective of the universally and constantly connected IoT. Moreover, it describes novel architectural approaches to the IoT and presents the new framework possibilities offered by 5G mobile networks, including middleware requirements, node-centrality and the location of extensive functionalities at the edge. By providing researchers and professionals with a timely snapshot of emerging mobile communication systems, and highlighting the main pitfalls and potential solutions, the book fills an important gap in the literature and will foster the further developments of 5G hosting IoT devices.

WordPress is much more than a blogging platform. As this practical guide clearly demonstrates, you can use WordPress to build web apps of any type—not mere content sites, but full-blown apps for specific tasks. If you have PHP experience with a smattering of HTML, CSS, and JavaScript, you'll learn how to use WordPress plugins and themes to develop fast, scalable, and secure web apps, native mobile apps, web services, and even a network of multiple WordPress sites. The authors use examples from their recently released SchoolPress app to explain concepts and techniques throughout the book. All code examples are available on GitHub. Compare WordPress with traditional app development frameworks Use themes for views, and plugins for backend functionality Get suggestions for choosing WordPress plugins—or build your own Manage user accounts and roles, and access user data Build asynchronous behaviors in your app with jQuery Develop native apps for iOS and Android, using wrappers Incorporate PHP libraries, external APIs, and web service plugins Collect payments through ecommerce and membership plugins Use techniques to speed up and scale your WordPress app

HTML5 is here, and with it, web applications have acquired power, ease, scalability, and responsiveness like never before. With this book, developers will learn how to use the latest cutting-edge HTML5 web technology—available in the most recent versions of modern browsers—to build web applications with unparalleled functionality, speed, and responsiveness. This new edition includes major revisions for WebSockets functionality, reflecting the new W3C specification. It also features new chapters covering the drag-and-drop API as well as SVG. Explains how to create real-time HTML5 applications that tap the full potential of modern browsers Provides practical, real-world examples of HTML5 features in action Covers all the new HTML5 APIs to get you up-to-speed quickly with HTML5 Fully updated to include the latest revisions of the WebSocket API, and much more.

Summary HTML5 in Action provides a complete introduction to web development using HTML5. You'll explore every aspect of the HTML5 specification through real-world examples and code samples. It's much more than just a specification reference, though. It lives up to the name HTML5 in Action by giving you the practical, hands-on guidance you'll need to use key features. About the Technology HTML5 is not a few new tags and features added to an old standard—it's the foundation of the modern web, enabling its interactive services, single-page UI, interactive games, and complex business applications. With support for standards-driven mobile app development, powerful features like local storage and WebSockets, superb audio and video APIs, and new layout options using CSS3, SVG, and Canvas, HTML5 has entered its prime time. About the Book HTML5 in Action provides a complete introduction to web development using HTML5. It explores the HTML5 specification through real-world examples and code samples. It earns the name "in Action" by giving you the practical, hands-on guidance you'll need to confidently build the sites and applications you—and your clients—have been wanting for years. This book concentrates on new HTML5 features and assumes you are familiar with standard HTML. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. What's Inside New semantic elements and form input types Single-page application design Creating interactive graphics Mobile web apps About the Authors Rob Crowther is a web developer and blogger and the author of Manning's Hello! HTML5 & CSS3. Joe Lennon is an enterprise mobile application developer. Ash Blue builds award-winning interactive projects. Greg Wanish is an independent web and eCommerce developer. Table of Contents PART 1 INTRODUCTION HTML5: from documents to applications PART 2 BROWSER-BASED APPS Form creation: input widgets, data binding, and data validation File editing and management: rich formatting, file storage, drag and drop Messaging: communicating to and from scripts in HTML5 Mobile applications: client storage and offline execution PART 3 INTERACTIVE GRAPHICS, MEDIA, AND GAMING 2D Canvas: low-level, 2D graphics rendering SVG: responsive in-browser graphics Video and audio: playing media in the browser WebGL: 3D application development Plus 10 Appendixes

HTML5 is more than a markup language—it's a collection of several independent web standards. Fortunately, this expanded guide covers everything you need in one convenient place. With step-by-step tutorials and real-world examples, HTML5: The Missing Manual shows you how to build web apps that include video tools, dynamic graphics, geolocation, offline features, and responsive layouts for mobile devices. The important stuff you need to know: Structure web pages more effectively. Learn how HTML5 helps web design tools and search engines work smarter. Add audio and

video without plugins. Build playback pages that work in every browser. Create stunning visuals with Canvas. Draw shapes, pictures, and text; play animations; and run interactive games. Jazz up your pages with CSS3. Add fancy fonts and eye-catching effects with transitions and animation. Design better web forms. Collect information from visitors more efficiently with HTML5 form elements. Build it once, run it everywhere. Use responsive design to make your site look good on desktops, tablets, and smartphones. Include rich desktop features. Build self-sufficient web apps that work offline and store the data users need.

Take advantage of JavaScript's power to build robust web-scale or enterprise applications that are easy to extend and maintain. By applying the design patterns outlined in this practical book, experienced JavaScript developers will learn how to write flexible and resilient code that's easier—yes, easier—to work with as your code base grows. JavaScript may be the most essential web programming language, but in the real world, JavaScript applications often break when you make changes. With this book, author Eric Elliott shows you how to add client- and server-side features to a large JavaScript application without negatively affecting the rest of your code. Examine the anatomy of a large-scale JavaScript application Build modern web apps with the capabilities of desktop applications Learn best practices for code organization, modularity, and reuse Separate your application into different layers of responsibility Build efficient, self-describing hypermedia APIs with Node.js Test, integrate, and deploy software updates in rapid cycles Control resource access with user authentication and authorization Expand your application's reach through internationalization

The six-volume set LNCS 8579-8584 constitutes the refereed proceedings of the 14th International Conference on Computational Science and Its Applications, ICCSA 2014, held in Guimarães, Portugal, in June/July 2014. The 347 revised papers presented in 30 workshops and a special track were carefully reviewed and selected from 1167 initial submissions. The 289 papers presented in the workshops cover various areas in computational science ranging from computational science technologies to specific areas of computational science such as computational geometry and security.

MQTT is a messaging protocol designed for the Internet of Things (IoT). It is lightweight enough to be supported by the smallest devices, yet robust enough to ensure that important messages get to their destinations every time. With MQTT devices, such as energy meters, cars, trains, mobile phones and tablets, and personal health care devices, devices can communicate with each other and with other systems or applications. IBM® MessageSight is a messaging appliance designed to handle the scale and security of a robust IoT solution. MessageSight allows you to easily secure connections, configure policies for messaging, and scale to up to a million concurrently connected devices. This IBM Redbooks® publication introduces MQTT and MessageSight through a simple key fob remote MQTT application. It then dives into the architecture and development of a robust, cross-platform Ride Share and Taxi solution (PickMeUp) with real-time voice, GPS location sharing, and chat among a variety of mobile platforms. The publication also includes an addendum describing use cases in a variety of other domains, with sample messaging topology and suggestions for design.

Dive into game development and create great multiplayer online games with Pro Android Web Game Apps. This hands-on guide covers both the theory and practice of browser game development for the Android platform. You'll use cutting-edge technologies to make game engines in your browser, establish real-time server communication, and create amazing gaming experiences with artificial intelligence and rich media. Bring your knowledge of HTML and JavaScript to the next level with Pro Android Web Game Apps. You are guided through exciting projects that give you firsthand experience with core game app development concepts. You'll start with a blank HTML page, and by the end of the book, have the skills needed to create a multiplayer online game with rich graphics, sound, animation, and more—even if you have no previous games development or server-side experience.

Offers information on using HTML5 to create web apps and solutions that deliver state-of-the-art media content and interactivity with new audio, video, and canvas elements.

Provides information on using HTML5, JavaScript, and W3C specifications to create mobile and desktop Web applications for all browsers and devices.

Create high-performance, visually stunning 3D applications for the Web, using HTML5 and related technologies such as CSS3 and WebGL—the emerging web graphics standard. With this book, you'll learn how to use the tools, frameworks, and libraries for building 3D models and animations, mind-blowing visual effects, and advanced user interaction in both desktop and mobile browsers. In two parts—Foundations and Application Development Techniques—author Tony Parisi provides a thorough grounding in theory and practice for designing everything from a simple 3D product viewer to immersive games and interactive training systems. Ideal for developers with Javascript and HTML experience. Explore HTML5 APIs and related technologies for creating 3D web graphics, including WebGL, Canvas, and CSS Work with the popular JavaScript 3D rendering and animation libraries Three.js and Tween.js Delve into the 3D content creation pipeline, and the modeling and animation tools for creating killer 3D content Look into several game engines and frameworks for building 3D applications, including the author's Vizi framework Create 3D environments with multiple objects and complex interaction, using examples and supporting code Examine the issues involved in building WebGL-based 3D applications for mobile browsers

Realtime Web Apps: With HTML5 WebSocket, PHP, and jQuery is a guide for beginner- to intermediate-level web developers looking to take the next leap forward in website and app development: realtime. With Realtime Web Apps, you'll be able to quickly get up to speed on what HTML5 WebSocket does, how it is going to affect the future of the web as we know it, and—thanks to Pusher's simple API—start developing your first realtime app today. Using a practical approach rather than focusing on dry theory, Realtime Web Apps will guide you through building your first app using HTML5, CSS3, jQuery, and Pusher. After your initial introduction to the technologies used in the book, you'll immediately jump into the process of creating a realtime Q&A app that will work on desktop browsers as well as mobile phones (including iOS and Android). In addition to learning realtime development strategies, you'll also learn progressive development strategies including

responsive CSS3 layouts, AJAX development with jQuery, and more. The future of the web is realtime. Grab your hoverboard. Introduces you to the revolutionary capabilities of the HTML5 WebSocket API Gets you started with WebSocket immediately using the super-simple Pusher API Walks you through the development of a real-life realtime web app Gets you working with responsive layouts, jQuery, and AJAX development

Anyone familiar with Zynga's Farmville understands how fun and addictive real-time social games can be. This hands-on guide shows you how to design and build one of these games from start to finish, with nothing but open source tools. You'll learn how to render graphics, animate with sprites, add sound, validate scores to prevent cheating, and more, using detailed examples and code samples. By the end of the book, you'll complete a project called Tourist Resort that combines all of the techniques you've learned. You'll also learn how to integrate your game with Facebook. If you're familiar with JavaScript, HTML5, and CSS3, you're ready to get started. Use HTML5's canvas element to build smooth animations with sprites Create an isometric grid pattern for high-performance graphics Design a GUI that works equally well on mobile devices and PCs Add sound to your game with HTML5's audio element Implement the game's path-finding function with WebWorkers Build a client data model on the server with PHP and MySQL Make your game come alive with dynamic CSS3 objects Building rich JavaScript applications that bring a desktop experience to the Web requires moving state from the server to the client side—not a simple task. This hands-on book takes proficient JavaScript developers through all the steps necessary to create state-of-the-art applications, including structure, templating, frameworks, communicating with the server, and many other issues. Throughout the book, you'll work with real-world example applications to help you grasp the concepts involved. Learn how to create JavaScript applications that offer a more responsive and improved experience. Use the Model-View-Controller (MVC) pattern, and learn how to manage dependencies inside your application Get an introduction to templating and data binding Learn about loading remote data, Ajax, and cross-domain requests Create realtime applications with WebSockets and Node.js Accept dropped files and upload data with progress indicators Use major frameworks and libraries, including jQuery, Spine, and Backbone Write tests and use the console to debug your applications Get deployment best practices, such as caching and minification

This book constitutes the refereed proceedings of the 15th International Conference on Information Security Practice and Experience, ISPEC 2019, held in Kuala Lumpur, Malaysia, in November 2019. The 21 full and 7 short papers presented in this volume were carefully reviewed and selected from 68 submissions. They were organized into the following topical sections: Cryptography I, System and Network Security, Security Protocol and Tool, Access Control and Authentication, Cryptography II, Data and User Privacy, Short Paper I, and Short Paper II. Deliver rich audio and video real-time communication and peer-to-peer data exchange right in the browser, without the need for proprietary plug-ins. This concise hands-on guide shows you how to use the emerging Web Real-Time Communication (WebRTC) technology to build a browser-to-browser application, piece by piece. The authors' learn-by-example approach is perfect for web programmers looking to understand real-time communication, and telecommunications architects unfamiliar with HTML5 and JavaScript-based client-server web programming. You'll use a ten-step recipe to create a complete WebRTC system, with exercises that you can apply to your own projects. Tour the WebRTC development cycle and trapezoid architectural model Understand how and why VoIP is shifting from standalone functionality to a browser component Use mechanisms that let client-side web apps interact with browsers through the WebRTC API Transfer streaming data between browser peers with the RTCPeerConnection API Create a signaling channel between peers for setting up a WebRTC session Put everything together to create a basic WebRTC system from scratch Learn about conferencing, authorization, and other advanced WebRTC features

Socket.io Real-time Web Application Development.

Developing applications for Android and other mobile devices using web technologies is now well within reach. When the capabilities of HTML5 are combined with CSS3 and JavaScript, web application developers have an opportunity to develop compelling mobile applications using familiar tools. Not only is it possible to build mobile web apps that feel as good as native apps, but to also write an application once and have it run a variety of different devices. While the HTML5 specification is still evolving, there is a lot that can be used right now to build mobile web apps. Mobile web apps are now starting to provide many of the features that were once only available to native-language-based apps in Java, Objective-C, etc. Pro Android Web Apps teaches developers already familiar with web application development, how to code and structure a web app for use on the Android mobile platform. Understand both the why and how of mobile web app development, focusing on the Android platform. Learn how to structure mobile web apps through a number of practical, real-world application examples. Discover what cloud platforms such as Google AppEngine have to offer Android web apps, for both hosting web apps and providing device to cloud data synchronization solutions. Get a real picture of the status of HTML5 on Android and other mobile devices, including some things to watch out for when building your own applications. Understand the capabilities of the web application stack, and how to complement those with native bridging frameworks such as PhoneGap to access native features of the device. Gain an understanding of the different UI frameworks that are available for building mobile web apps. Learn how to include mapping and leverage location-based services in mobile web apps to create engaging mobile experiences. Enable social integration with your Android web app and gain access to millions of potential users. After reading this book, you will not only have a greater understanding of the world of web apps on Android, but also how to leverage additional tools and frameworks to increase the reach of your mobile web apps. Additionally, through the practical samples in the book you will have been given solid exposure of where both the opportunities and challenges lie when building mobile apps the web way. The book will follow a step-by-step tutorial approach to construct an application that allows video conferencing and calls between two browsers and a system for sharing files among a group. This book is ideal for developers new to the WebRTC standards who are interested in adding sensor-driven, real-time, peer-to-peer communication to their web applications. You will only need basic experience with HTML and JavaScript.

Learn powerful JavaScript tools for exploiting HTML5 elements, and discover new methods for working with data, such as offline storage and multithreaded processing. Complete with code samples, this book is ideal for experienced JavaScript and mobile developers alike.

Learn to use AWS IoT services to build your connected applications with the help of this comprehensive guide. Key Features Gets you started with AWS IoT and its functionalities Learn different modules of AWS IoT with practical use cases. Learn to secure your IoT communication Book Description The Internet of Things market increased a lot in the past few years and IoT development and its adoption have showed an upward trend. Analysis and predictions say that Enterprise IoT platforms are the future of IoT. AWS IoT is currently leading the market with its wide range of device support SDKs and versatile management console. This book initially introduces you to the IoT platforms, and how it makes our IoT development easy. It then covers the complete AWS IoT Suite and how it can be used to develop secure communication between internet-connected things such as sensors, actuators, embedded devices, smart applications, and so on. The book also covers the various modules of AWS: AWS Greengrass, AWS device SDKs, AWS IoT Platform, AWS Button, AWS Management consoles, AWS-related CLI, and API references, all with practical use cases. Near the end, the book supplies security-related best practices to make bi-directional communication more secure. When you've finished this book, you'll be up-and-running with the AWS IoT Suite, and building IoT projects. What you will learn Implement AWS IoT on IoT projects Learn the technical capabilities of AWS IoT and IoT devices Create IoT-based AWS IoT

projects Choose IoT devices and AWS IoT platforms to use based on the kind of project you need to build Deploy AWS Greengrass and AWS Lambda Develop program for AWS IoT Button Visualize IoT AWS data Build predictive analytics using AWS IoT and AWS Machine Learning Who this book is for This book is for anyone who wants to get started with the AWS IoT Suite and implement it with practical use cases. This book acts as an extensive guide, on completion of which you will be in a position to start building IoT projects using AWS IoT platform and using cloud services for your projects.

This book is for web developers who want to learn and implement WebSocket to create interesting apps for modern browsers, leveraging the capabilities of HTML5 with WebSockets.

This book includes game design and implementation chapters using either Phaser JavaScript Gaming Frameworks v2.6.2, CE, v3.16+, AND any other JS Gaming Frameworks for the front- and back-end development. It is a Book of 5 Rings Game Design - "HTML5, CSS, JavaScript, PHP, and SQL". It further analyzes several freely available back-end servers and supporting middleware (such as PHP, Python, and several CMS). This game design workbook takes you step-by-step into the creation of Massively Multiplayer Online Game as a profitable business adventure - none of this theoretical, local workstation proof of concept! It uses any popular JavaScript Gaming Framework -- not just limited to Phaser.JS!! -- on the client-side browser interfacing into a unique, server-side, application using WebSockets. It is the only book of its kind since January 2017 for the Phaser MMO Gaming Framework! * Part I leads you through the world of networks, business consideration, MMoG analysis and setting up your studio workshop. I have 40 years of networking career experience in highly sensitive (i.e., Government Embassies) data communications. I am a certified Cisco Academy Instructor and have taught networking, networking security, game design/development, and software engineering for the past 14 years at the college level. * Part II Guides you into Multi-player Online Game architecture contrasted to normal single-player games. This lays the foundation for Multi-Player Game Prototypes and reviews a missing aspect in current MMoG development not seen in many online tutorials and example code. * Part III contains 3 chapters focused on production and development for the client-side code, client-proxy, server-side code, and MMoG app. This content sets the foundation for what many Phaser tutorials and Phaser Starter-Kits on the market today overlook and never tell you! Upon completion of Part III, you will have your bespoke MMoG with integrated micro-service, and if you choose, web workers and block-chain. * Part IV (Bonus Content) This section includes proprietary Game Rule Books and EULA source code included as a part of your book purchase. It features four (4) Game Recipes -- step-by-step instructions -- listed by complexity "1" = easiest (elementary skills) to "4" = most complex (requiring advanced skills across several IT technology disciplines). Each external "Walk-Through Tutorial" guides you in different aspects of MMoG development. * How to migrate single-player games into a 2-player online delivery mode (not using "hot-seat")! * How to use dynamic client-side proxy servers and migrate this game from its current single-player mode (with AI Bot) into an online 2-player mode (not using "hot-seat")! * How to include "Asynchronous Availability" during gameplay and migrate this gameplay mode (with AI Bot) into an online "Asynchronous Availability" 3-player mode using postal mail or email game turns! The FREE game rule book will help "deconstruct" this game mechanics.

With 90 detailed hacks, expert web developers Jesse Cravens and Jeff Burtoft demonstrate intriguing uses of HTML5-related technologies. Each recipe provides a clear explanation, screenshots, and complete code examples for specifications that include Canvas, SVG, CSS3, multimedia, data storage, web workers, WebSockets, and geolocation. You'll also find hacks for HTML5 markup elements and attributes that will give you a solid foundation for creative recipes that follow. The last chapter walks you through everything you need to know to get your HTML5 app off the ground, from Node.js to deploying your server to the cloud. Here are just a few of the hacks you'll find in this book: Make iOS-style card flips with CSS transforms and transitions Replace the background of your video with the Canvas tag Use Canvas to create high-res Retina Display-ready media Make elements on your page user-customizable with editable content Cache media resources locally with the filesystem API Reverse-geocode the location of your web app user Process image data with pixel manipulation in a dedicated web worker Push notifications to the browser with Server-Sent Events

Take advantage of the improved performance and reduced memory requirements of PHP version 7, and learn to utilize the new built-in PHP functions and features such as typed variable enforcement with declare(strict_types=1) and the new available data types, scalar type declarations for function arguments and return statements, constant arrays using define(), argument unpacking with the ... operator, integer division with intdiv(), the null coalesce operator, the spaceship operator, new exception types, and improvements to existing features. Pro PHP and jQuery, Second Edition is for intermediate level programmers interested in building web applications using jQuery and PHP. Updated for PHP version 7 and the latest version of jQuery, this book teaches some advanced PHP techniques and it shows you how to take your dynamic applications to the next level by adding a JavaScript layer using the jQuery framework and APIs. After reading and using this book, you'll come away having built a fully functional PHP and jQuery web application that you can reapply as a template for your own particular web application. Pro PHP and jQuery, Second Edition is for intermediate level programmers interested in building web applications using jQuery and PHP. Updated for PHP version 7 and the latest version of jQuery, this book teaches some advanced PHP techniques and it shows you how to take your dynamic applications to the next level by adding a JavaScript layer using the jQuery framework and APIs, considered the most popular JavaScript libraries. After reading and using this book, you'll come away understanding a fully functional PHP using jQuery web application case study that you can reapply as a template for your own particular web application. Moreover, from PHP 7, you'll get uniform variable syntax, the AST-based compilation process, the added Closure::call(), bitwise shift consistency across platforms, the (null coalesce) operator, Unicode codepoint escape syntax, return type declarations, and new and easier extensions development with support for redis, MongoDB and much more.

The Definitive Guide to HTML5 WebSocket is the ultimate insider's WebSocket resource. This revolutionary new web technology enables you to harness the power of true real-time connectivity and build responsive, modern web applications. This book contains everything web developers and architects need to know about WebSocket. It discusses how WebSocket-based architectures provide a dramatic reduction in unnecessary network overhead and latency compared to older HTTP (Ajax) architectures, how to layer widely used protocols such as XMPP and STOMP on top of WebSocket, and how to secure WebSocket connections and deploy WebSocket-based applications to the enterprise. Build real-time web applications with HTML5. This book: Introduces you to the WebSocket API and protocol Describes and provides real-world examples of protocol communication over WebSocket Explains WebSocket security and enterprise deployment

Summary In Single Page Web Applications you'll learn to build modern browser-based apps that take advantage of stronger client

platforms and more predictable bandwidth. You'll learn the SPA design approach, and then start exploring new techniques like structured JavaScript and responsive design. And you'll learn how to capitalize on trends like server-side JavaScript and NoSQL data stores, as well as new frameworks that make JavaScript more manageable and testable as a first-class language. About this Book If your website is a jumpy collection of linked pages, you are behind. Single page web applications are your next step: pushing UI rendering and business logic to the browser and communicating with the server only to synchronize data, they provide a smooth user experience, much like a native application. But, SPAs can be hard to develop, manage, and test. Single Page Web Applications shows how your team can easily design, test, maintain, and extend sophisticated SPAs using JavaScript end-to-end, without getting locked into a framework. Along the way, you'll develop advanced HTML5, CSS3, and JavaScript skills, and use JavaScript as the language of the web server and the database. This book assumes basic knowledge of web development. No experience with SPAs is required. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. What's Inside Design, build, and test a full-stack SPA Best-in-class tools like jQuery, TaffyDB, Node.js, and MongoDB Real-time web with web sockets and Socket.IO Touch controls for tablets and smartphones Common SPA design mistakes About the Authors The authors are architects and engineering managers. Michael Mikowski has worked on many commercial SPAs and a platform that processes over 100 billion requests per year. Josh Powell has built some of the most heavily trafficked sites on the web. Table of Contents PART 1: INTRODUCING SPAS Our first single page application Reintroducing JavaScript PART 2: SPA CLIENT Develop the Shell Add feature modules Build the Model Finish the Model and Data modules PART 3: THE SPA SERVER The web server The server database Readyng our SPA for production

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