

Web Server Programming

A comprehensive guide to programming with network sockets, implementing Internet protocols, designing IoT devices, and much more with C **Key Features** Leverage your C or C++ programming skills to build powerful network applications **Get to grips with a variety of network protocols that allow you to load web pages, send emails, and do much more** **Write portable network code for operating systems such as Windows, Linux, and macOS** **Book Description** Network programming, a challenging topic in C, is made easy to understand with a careful exposition of socket programming APIs. This book gets you started with modern network programming in C and the right use of relevant operating system APIs. This book covers core concepts, such as hostname resolution with DNS, that are crucial to the functioning of the modern web. You'll delve into the fundamental network protocols, TCP and UDP. Essential techniques for networking paradigms such as client-server and peer-to-peer models are explained with the help of practical examples. You'll also study HTTP and HTTPS (the protocols responsible for web pages) from both the client and server perspective. To keep up with current trends, you'll apply the concepts covered in this book to gain insights into web programming for IoT. You'll even get to grips with network monitoring and implementing security best practices. By the end of this book, you'll have experience of working with client-server applications, and be able to implement new network programs in C. The code in this book is compatible with the older C99 version as well as the latest C18 and C++17 standards. Special consideration is given to writing robust, reliable, and secure code that is portable across operating systems, including Winsock sockets for Windows and POSIX sockets for Linux and macOS. **What you will learn** **Uncover cross-platform socket programming APIs** **Implement techniques for supporting IPv4 and IPv6** **Understand how TCP and UDP connections work over IP** **Discover how hostname resolution and DNS work** **Interface with web APIs using HTTP and HTTPS** **Acquire hands-on experience with Simple Mail Transfer Protocol (SMTP)** **Apply network programming to the Internet of Things (IoT)** **Who this book is for** If you're a developer or a system administrator who wants to enter the world of network programming, this book is for you. Basic knowledge of C programming is assumed.

Create real-time applications using Node.js 10, Docker, MySQL, MongoDB, and Socket.IO with this practical guide and go beyond the developer's laptop to cover live deployment, including HTTPS and hardened security. **Key Features** **Learn server-side JavaScript coding through the most up-to-date book on Node.js** **Explore the latest JavaScript features, and EcmaScript modules** **Walk through different stages of developing robust applications using Node.js 10** **Book Description** Node.js is a server-side JavaScript platform using an event-driven, non-blocking I/O model allowing users to build fast and scalable data-intensive applications running in real time. This book gives you an excellent starting point, bringing you straight to the heart of developing web applications with Node.js. You will progress from a rudimentary knowledge of JavaScript and server-side development to being able to create, maintain, deploy and test your own Node.js application. You will understand the importance of transitioning to functions that return Promise objects, and the difference between fs, fs/promises and fs-extra. With this book you'll learn how to use the HTTP Server and Client objects, data storage with both SQL and MongoDB databases, real-time applications with Socket.IO, mobile-first theming with Bootstrap, microservice deployment with Docker, authenticating against third-party services using OAuth, and use some well known tools to beef up security of Express 4.16 applications. **What you will learn** **Install and use Node.js 10 for both development and deployment** **Use the Express 4.16 application framework** **Work with REST service development using the Restify framework** **Use data storage engines such as MySQL, SQLITE3, and MongoDB** **Use User authentication methods with OAuth2** **Perform Real-time communication with the front-end using Socket.IO** **Implement Docker microservices in development, testing and deployment** **Perform unit testing with Mocha 5.x, and functional testing with Puppeteer 1.1.x** **Work with HTTPS using Let's Encrypt, and application security with Helmet** **Who this book is for** This book is for anybody looking for an alternative to the "P" languages (Perl, PHP, and Python), or anyone looking for a new paradigm of server-side application development. You should have at least a rudimentary understanding of JavaScript and web application development.

Learn how to build dynamic web applications with Express, a key component of the Node/JavaScript development stack. In this hands-on guide, author Ethan Brown teaches you the fundamentals through the development of a fictional application that exposes a public website and a RESTful API. You'll also learn web architecture best practices to help you build single-page, multi-page, and hybrid web apps with Express. Express strikes a balance between a robust framework and no framework at all, allowing you a free hand in your architecture choices. With this book, frontend and backend engineers familiar with JavaScript will discover new ways of looking at web development.

Create webpage templating system for rendering dynamic data Dive into request and response objects, middleware, and URL routing Simulate a production environment for testing and development Focus on persistence with document databases, particularly MongoDB Make your resources available to other programs with RESTful APIs Build secure apps with authentication, authorization, and HTTPS Integrate with social media, geolocation, and other third-party services Implement a plan for launching and maintaining your app Learn critical debugging skills This book covers Express 4.0.

Market_Desc: · Proficient Programmers in Java and C/C++ who know the basics of database, web and networking technologies · Computing Undergraduates Special Features: · First survey of web server tools to include .NET technologies· Focuses on technical not design aspects of web programming· Identifies common principles of server side programming About The Book: This book looks at the technical and computational components of running a commercial and successful Web site. It provides students with hands-on and in-depth guidance on setting up and running an Apache server; using Perl for web CGI programming and support administrative tasks; PHP Scripting, and many more topics.

Client-Server Web Apps with JavaScript and Java

Get Programming with Node.js

Hands-On Network Programming with C

PHP & MySQL: Novice to Ninja

Learn socket programming in C and write secure and optimized network code

Best of the Perl Journal

When the web transitioned from a publishing to an interactive e-commerce medium, standardised web-browsers entered widespread use and developers were able to rely on a relatively stable client component. Since then, server-side developments have blossomed and resulted in considerable ease of programming, efficiency and increasing sophistication of the server-side environment. Focusing on various technologies that support the server-side processing of data from web-based forms, principally CGI style programs, scripting and Java solutions, this is a book tailored to the technical and computational components of running a commercial and successful website. To benefit most from this approach, you will have a working knowledge of HTML, some programming experience in Java or C++, and limited experience with databases. Its concentration on server-side to the exclusion of web-page design and client-side concerns will be welcomed by practitioners and students who want hands-on and in-depth guidance on: * Setting up and running an Apache server * Use of Perl for web CGI programming and support administrative tasks * PHP Scripting - ideal for prototyping small web services * Servlet technologies * JSP - separating the issues of business programming and presentation * XML - a few of its applications * Advanced services with EJBs * NET's new world order - a better model for client/server interaction The unified presentation allows for evaluation and comparison and cuts down on tedious duplication of content. Use it as a map to navigate the strengths and niches of each of the tools to help judge which best suits your environment and requirements. Realistic examples help to ground this broad coverage of server technologies and will prove invaluable for web masters, systems administrators and students looking for careers requiring web programming skills. Please visit booksite: www.uow.edu.au/~nabg/WebServer Buku ini adalah buku pertama yang diterbitkan penulis, mengupas skrip pemrograman web mulai tingkat dasar hingga web database. Buku ini cocok bagi pembaca yang ingin mendalami pemrograman web sehingga penulis berharap dengan buku ini pembaca bisa terbantu memahami skrip secara konsep maupun praktek.

Written for developers who want build applications using Twisted, this book presents a task-oriented look at this open source, Python- based technology.

Provides information on building Web applications using Google App Engine.

Web Programming (Client Side and Server Side)

Core Java Web Server

Server-side development with Node 10 made easy, 4th Edition

Step-by-Step Guide to Creating Database-Driven Web Sites

C++ Reactive Programming

Web Programming

Summary Go Web Programming teaches you how to build scalable, high-performance web applications in Go using modern design principles. Purchase of the print book includes a free eBook in PDF and ePub formats from Manning Publications. About the Technology The Go language handles the demands of scalable, high-performance web applications by providing clean and fast compiled code, a simple concurrency model, and a fantastic standard library. It's perfect for writing microservices or building scalable, maintainable systems. About the Book Go Web Programming teaches you how to build web applications in Go using modern design principles. You'll learn how to implement the dependency injection design pattern for writing test doubles, use concurrency in web applications, and create JSON and XML in web services. Along the way, you'll discover how to minimize your dependence on external frameworks, and you'll pick up valuable productivity techniques for testing and deploying applications. What's Inside Basics Testing and benchmarking Using concurrency Deploying to standalone servers, PaaS, and Docker Dozens of tips, tricks, and techniques About the Reader This book

familiar with Go language basics and the general concepts of web development. About the Author Sau Sheong Chang is Managing Director of Digital Technology at Singapore Power and an active Ruby and Go communities. Table of Contents PART 1 GO AND WEB APPLICATIONS Go and web applications Go Chat PART 2 BASIC WEB APPLICATIONS Handling requests Processing requests Displaying content Storing data PART 3 BEING REAL Go web services Testing your application Leveraging Go concurrency Deploying Go

In its first five years of existence, The Perl Journal (TPJ) became the voice of the Perl community. Every serious Perl programmer subscribed to it, and every notable Perl guru jumped at the opportunity. TPJ explained critical Perl topics and demonstrated Perl's utility for fields as diverse as astronomy, biology, economics, AI, and games. Back issues were hoarded, or swapped like trading cards. In that format, The Perl Journal remains a proud and timeless achievement of Perl during one of its most exciting periods of development. Web, Graphics & Perl/Tk is the second volume of The Best of Perl, compiled and re-edited by the original editor and publisher of The Perl Journal, Jon Orwant. In this series, we've taken the very best (and still relevant) articles published in TPJ over its five years and immortalized them into three volumes. The forty articles included in this volume are simply some of the best Perl articles ever written on the subjects of graphics, the Web, and Perl/Tk, by some of the best authors and coders. Much of Perl's success is due to its capabilities for developing web sites; the Web section covers popular topics such as CGI programs, mod_perl, spidering, HTML parsing, session management. The Graphics section is a grab bag of techniques, ranging from simple graph generation to ray tracing and real-time video digitizing. The Perl/Tk section shows you how to use the Perl/Tk toolkit for developing graphical applications that work on both Unix/Linux and Windows without a single change. Written by twenty-three of the most prominent and prolific members of the Perl community, including Lincoln Stein, Mark-Jason Dominus, Alligator Descartes, and Dan Brian, this anthology does what no other book can, giving unique insight into the real-life applications and programming techniques made possible by Perl.

Web Programming with HTML5, CSS, and JavaScript is written for the undergraduate, client-side web programming course. It covers the three client-side technologies (HTML5, CSS, and JavaScript) with no dependence on server-side technologies.

PHP and MySQL are quickly becoming the de facto standard for rapid development of dynamic, database-driven web sites. This book is perfect for newcomers to programming as well as hobbyists intimidated by harder-to-follow books. With concepts explained in plain English, the new edition starts with the basics of the PHP language, and explains how to work with MySQL, the popular open-source database. You then learn how to put the two together to generate dynamic content. If you come from a web design or graphics design background and know your way around HTML, Learning PHP & MySQL is the book you've been looking for. The content includes: PHP basics such as strings and arrays, and pattern matching A detailed discussion of the variances in different PHP versions MySQL data fundamentals: tables and statements Information on SQL data access for language A new chapter on XHTML Error handling, security, HTTP authentication, and more Learning PHP & MySQL explains everything from the fundamental concepts to the nuts and bolts of performing specific tasks. As part of O'Reilly's bestselling Learning series, the book is an easy-to-use resource designed specifically for beginners. It is intended for future learning, providing you with a solid foundation for more advanced development.

Go Web Programming

Learning PHP & MySQL

Rust Programming Cookbook

Get Up to Speed With PHP the Easy Way

A hands-on guide to developing fast and secure web apps with the Rust programming language

Missing Link

As a Java programmer, how can you tackle the disruptive client-server approach to web development? With this comprehensive guide, you'll learn how today's client-side technologies and web APIs work with various Java tools. Author Casimir Saternos provides the big picture of client-server development, and then takes you through many practical client-server architectures. You'll work with hands-on projects in several chapters to get a feel for the topics discussed. User habits, technologies, and development methods have drastically altered web app design in recent years. But the Web itself hasn't changed. This book shows you how to build apps that conform to the web's underlying architecture. Learn the advantages of using separate client and server tiers, including code organization and speedy prototyping Explore the major tools, frameworks, and starter projects used in JavaScript development Dive into web API design and REST style of software architecture Understand Java's alternatives to traditional packaging methods and application server deployment Build projects with lightweight servers, using jQuery with Jython, and Sinatra with Angular Create client-server web apps with traditional Java web application servers and libraries

Discusses how to use ASP in the .NET framework, events, controls, control details, Web forms, tracing and debugging, validation, data binding, ADO, Web services, and security.

This book is aimed at the practicing programmer seeking to use Python and Linux to rapidly develop web and enterprise services. Will be especially important to those involved in e-commerce programming.

If you can build websites with CSS and JavaScript, this book takes you to the next level—creating dynamic, database-driven websites with PHP and MySQL. Learn how to build a database, manage your content, and interact with users. With step-by-step tutorials, this completely revised edition gets you started with expanded coverage of the basics and takes you deeper into the world of server-side programming. The important stuff you need to know: Get up to speed quickly. Learn how to install PHP and MySQL, and get them running on both your computer and a remote server. Gain new techniques. Take advantage of the all-new chapter on integrating PHP with HTML web pages. Manage your content. Use the file system to access user data, including images and other binary files. Make it dynamic. Create pages that change with each new viewing. Build a good database. Use MySQL to store user information and other data. Keep your site working. Master the tools for fixing things that go wrong. Control operations. Create an administrative interface to oversee your site.

Web Coding & Development All-in-One For Dummies

Python Web Programming

Server-side web development made easy with Node 14 using practical examples

Rust Web Programming

Web Servers Succinctly

Lighttpd

Learn how to implement the reactive programming paradigm with C++ and build asynchronous and concurrent applications **Key Features** **Efficiently exploit concurrency and parallelism in your programs** **Use the Functional Reactive programming model to structure programs** **Understand reactive GUI programming to make your own applications using Qt** **Book Description** **Reactive programming is an effective way to build highly responsive applications with an easy-to-maintain code base. This book covers the essential functional reactive concepts that will help you build highly concurrent, event-driven, and asynchronous applications in a simpler and less error-prone way. C++ Reactive Programming begins with a discussion on how event processing was undertaken by different programming systems earlier. After a brisk introduction to modern C++ (C++17), you'll be taken through language-level concurrency and the lock-free programming model to set the stage for our foray into the Functional Programming model. Following this, you'll be introduced to RxCpp and its programming model. You'll be able to gain deep insights into the RxCpp library, which facilitates reactive programming. You'll learn how to deal with reactive programming using Qt/C++ (for the desktop) and C++ microservices for the Web. By the end of the book, you will be well versed with advanced reactive programming concepts in modern C++ (C++17). What you will learn** **Understand language-level concurrency in C++** **Explore advanced C++ programming for the FRP** **Uncover the RxCpp library and its programming model** **Mix the FP and OOP constructs in C++ 17 to write well-structured programs** **Master reactive microservices in C++** **Create custom operators for RxCpp** **Learn advanced stream processing and error handling** **Who this book is for** **If you're a C++ developer interested in using reactive programming to build asynchronous and concurrent applications, you'll find this book extremely useful. This book doesn't assume any previous knowledge of reactive programming.**

This book shows you how to build your own Linux Web server with Ubuntu Linux and host your own website at home for free without having to pay a web hosting company like GoDaddy or Web.com. Whether you are ten years old or 80, even if you have never worked with Linux before and you are not that good with computers, you can setup a Linux Web Server by following the simple, easy-to-follow steps in this book. Setup an Ubuntu Linux Server from scratch. Create your own domain name. Make a simple web page. Get your server to be seen by the Internet. Use FTP to edit your web pages. Process HTML form submissions. Program a MySQL database to store a guest book. Use PHP to integrate your web page with MySQL. Add a visitor counter to your web page. Setup Free Dynamic DNS Forwarding Backup your MySQL Databases Use Linux, MySQL and PHP security features. Accept payment with PayPal buttons.

The concept of a "web server" has become fuzzy because the server is now entwined with the dynamic requirements of web applications. Handling a request is no longer the simple process of "send back the content of this file," but instead involves routing the request to the web application, which, among other things, determines where the content comes from. In Web Servers Succinctly, author Marc Clifton provides great insights on the benefits of building your own web server, and covers different options available for threading, work processes, session management, routing, and security.

This text provides an explanation of CGI and related techniques for people who want to provide their own information servers on the Web. It explains the value of CGI and how it works, and looks at the subtle details of programming. The accompanying CD-ROM

Web Development with Node and Express

Using Google App Engine

Programming Web Services with SOAP

Building Distributed Applications

Design concurrent and asynchronous applications using the RxCpp library and Modern C++17

Setting Up a Web Server

The Internet and Web Programming book helps you to understand concepts of Internet, World-Wide-Web and Programming Fundamentals to create websites by using HTML, JavaScript, JavaServlets, ASP, and JSP. The book covers:

- Introduction to Web
- Markup Language (HTML)
- Cascading StyleSheet (CSS)
- JavaScript and DHTML
- Server Side Programming I
- Server Side Programming II (Session Tracking)
- Server Side Programming III (Database Connectivity)
- Introduction to Web Extension

Speak the languages that power the web **With more high-paying web development jobs opening every day, people with coding and web/app building skills are having no problems finding employment. If you're a would-be developer looking to gain the know-how to**

build the interfaces, databases, and other features that run modern websites, web apps, and mobile apps, look no further. Web Coding & Development All-in-One For Dummies is your go-to interpreter for speaking the languages that handle those tasks. Get started with a refresher on the rules of coding before diving into the languages that build interfaces, add interactivity to the web, or store and deliver data to sites. When you're ready, jump into guidance on how to put it all together to build a site or create an app. Get the lowdown on coding basics Review HTML and CSS Make sense of JavaScript, jQuery, PHP, and MySQL Create code for web and mobile apps There's a whole world of opportunity out there for developers—and this fast-track boot camp is here to help you acquire the skills you need to take your career to new heights!

Combines language tutorials with application design advice to cover the PHP server-side scripting language and the MySQL database engine.

Summary Get Programming with Node.js teaches you to build web servers using JavaScript and Node. In this engaging tutorial, you'll work through eight complete projects, from writing the code for your first web server to adding live chat to a web app. Your hands will stay on the keyboard as you explore the most important aspects of the Node development process, including security, database management, authenticating user accounts, and deploying to production. You'll especially appreciate the easy-to-follow discussions, illuminating diagrams, and carefully explained code! Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology Node.js delivers the speed and reliability you need for ecommerce, social media, and gaming applications. It comes with thousands of prebuilt packages to help you get started immediately. If you want to use JavaScript on the server, Node.js is your choice. What's inside New features from ES2015 and later Writing asynchronous code Creating data models Debugging JavaScript modules About the Reader Written for front-end web developers with intermediate JavaScript skills. Table of Contents GETTING SET UP Lesson 0 - Setting up Node.js and the JavaScript engine Lesson 1 - Configuring your environment Lesson 2 - Running a Node.js application UNIT 1 - GETTING STARTED WITH NODE.JS Lesson 3 - Creating a Node.js module Lesson 4 - Building a simple web server in Node.js Lesson 5 - Handling incoming data Lesson 6 - Writing better routes and serving external files Lesson 7 - Capstone: Creating your first web application UNIT 2 - EASIER WEB DEVELOPMENT WITH EXPRESS.JS Lesson 8 - Setting up an app with Express.js Lesson 9 - Routing in Express.js Lesson 10 - Connecting views with templates Lesson 11 - Configurations and error handling Lesson 12 - Capstone: Enhancing the Confetti Cuisine site with Express.js UNIT 3 - CONNECTING TO A DATABASE Lesson 13 - Setting up a MongoDB database Lesson 14 - Building models with Mongoose Lesson 15 - Connecting controllers and models Using promises with Mongoose Lesson 16 - Capstone: Saving user subscriptions UNIT 4 - BUILDING A USER MODEL Lesson 17 - Improving your data models Lesson 18 - Building the user model Lesson 19 - Creating and reading your models Lesson 20 - Updating and deleting your models Lesson 21 - Capstone: Adding CRUD models to Confetti Cuisine Creating controllers UNIT 5 - AUTHENTICATING USER ACCOUNTS Lesson 22 - Adding sessions and flash messages Lesson 23 - Building a user login and hashing passwords Lesson 24 - Adding user authentication Lesson 25 - Capstone: Adding user authentication to Confetti Cuisine UNIT 6 - BUILDING AN API Lesson 26 - Adding an API to your application Lesson 27 - Accessing your API from your application Lesson 28 - Adding API security Lesson 29 - Capstone: Implementing an API UNIT 7 - ADDING CHAT FUNCTIONALITY Lesson 30 - Working with Socket.io Lesson 31 - Saving chat messages Lesson 32 - Adding a chat notification indicator UNIT 8 - DEPLOYING AND MANAGING CODE IN PRODUCTION Lesson 33 - Capstone: Adding a chat feature to Confetti Cuisine Lesson 34 - Deploying your application Lesson 35 - Managing in production Lesson 36 - Testing your application Lesson 37 - Capstone: Deploying Confetti Cuisine

Programming ASP.NET

Java Server Side Programming

Node.js Web Development

Web Server Programming

Techniques for Integrating Python, Linux, Apache, and MySQL

Getting Started for Internet of Things with Launch Pad and ESP8266

This book presents computational biology methods by focusing on their applications, including primary sequence analysis, protein structure elucidation, transcriptomics and proteomics data analysis, and exploration of protein interaction networks.

Web programmers are rushing to embrace ISAPI and NSAPI, technologies that provide a more efficient, easy-to-use alternative to CGI. This book shows how to implement dynamic extension of server processes, multithreading, and ISAPI/NSAPI framework applications. The CD-ROM has all examples, project files, and source code used in the book, plus utilities and working programs.

Create real-time server-side applications with this practical, step-by-step guide About This Book Learn about server-side JavaScript with Node.js and Node modules through the most up-to-date book on Node.js web development Understand website development both with and without the Connect/Express web application framework Develop both HTTP server and client applications Who This Book Is For This book is for anybody looking for an alternative to the "P" languages (Perl, PHP, and Python), or anyone looking for a new paradigm of server-side application development. You should have at least a rudimentary understanding of JavaScript and web application development. What You Will Learn Install and use Node.js for both development and deployment Use the Express application framework Configure Bootstrap for mobile-first theming Use data storage engines such as MySQL, SQLITE3, and MongoDB Understand user authentication methods, including OAuth, with third-party services Deploy Node.js to live servers, including microservice development with Docker Perform unit testing with Mocha Perform functional testing of the web application with CasperJS In Detail Node.js is a server-side JavaScript platform using an event driven, non-blocking I/O model allowing users to build fast and scalable data-intensive applications running in real time. Node.js Web Development shows JavaScript is not just for browser-side applications. It can be used for server-side web application development, real-time applications, microservices, and much more. This book gives you an excellent starting point, bringing you straight to the heart of developing web applications with Node.js. You will progress from a rudimentary knowledge of JavaScript and server-side development to being able to create and maintain your own Node.js application. With this book you'll learn how to use the HTTP Server and Client objects, data storage with both SQL and MongoDB databases, real-time applications with Socket.IO, mobile-first theming with Bootstrap, microservice deployment with Docker, authenticating against third-party services using OAuth, and much more. Style and Approach This book is a practical guide for anyone looking to develop striking and robust web applications using Node.js.

PHP & MySQL: Novice to Ninja, 6th Edition is a hands-on guide to learning all the tools, principles, and techniques needed to build a fully functional application using PHP & MySQL. Comprehensively updated to cover PHP 7 and modern best practice, this practical and fun book covers everything from installing PHP and MySQL through to creating a complete online content management system. You'll learn how to: Install PHP & MySQL on Windows, Mac OS X, or Linux Gain a thorough understanding of PHP syntax Use object oriented programming techniques Master database design principles and SQL Develop robust websites that can handle high levels of traffic Build a working content management system (CMS) And much more!

High Performance ISAPI/NSAPI Web Programming

Dynamic Web Programming and HTML5

CGI Programming on the World Wide Web

A Complete Guide To Internet And Web Programming

Leveraging the JavaScript Stack

There is no substitute for the in-depth learning you acquire when you actually write something yourself. It may appear too much to actually write a server to learn all the details of Java Server Side Programming. Yet this book is able to teach just that. It leads the reader through building their own small Java server with subset versions of servlet and JSP technologies. The subsets are powerful enough to include features like cookies, sessions, session expiration, automatic rebuild and reload of server pages. Yet all this can be done in under 1,000 lines of code with the guidance of this book. This is followed by a review of the full JSP and servlet technologies, as well as other technologies, all of which is much easier for the reader to understand, with the foundation learning already in place. The book is accompanied by a downloadable file. This downloadable file includes support code, so readers can stay focused on the server technologies without getting side-tracked far into string manipulation etc.

Setting Up a Web Server was written to help new and prospective web masters choose, configure, use, and understand how web servers work. It details each step required to choose, install, and configure the hardware and software elements, then promote and publish on the web site. It covers Internet and intranet security, communications, and links to other servers in an organization. The book also explains about the main web server software applications, how they differ and which works best in different environments. Setting Up a Web Server ensures that your server is well-connected. It covers communications and hardware, explaining: How to choose the best communications links between the server and the internet How to link your server to your LAN How TCP/IP works to bind the Internet together How to configure your server for a particular hardware setup The publishing techniques covered will help you to create a great web site. You'll also find coverage of advanced HTML page design, database publishing, and programming with Perl, Java, Javascript, and Visual Basic. Setting Up a Web Server is the complete reference book for anyone who is setting up a web server-it covers all major platforms, software, links and web techniques! · Discusses main web server software applications · Covers communications and hardware · Details servers for e-mail, FTP, Telnet, gopher, finger and the latest push information servers

Build scalable web applications using Node.js, Express.js, and the latest ECMAScript techniques, along with deploying applications with AWS and Docker with this updated fifth edition Key Features • Learn backend web programming with the JavaScript stack • Explore best practices, right from configuring

and building web servers to deploying them on a production cloud hosting system: AWS using Docker and Terraform • Work through the different stages of developing robust and scalable apps using Node.js 14 Book Description Node.js is the leading choice of server-side web development platform, enabling developers to use the same tools and paradigms for both server-side and client-side software. This updated fifth edition of Node.js Web Development focuses on the new features of Node.js 14, Express 4.x, and ECMAScript, taking you through modern concepts, techniques, and best practices for using Node.js. The book starts by helping you get to grips with the concepts of building server-side web apps with Node.js. You'll learn how to develop a complete Node.js web app, with a backend database tier to help you explore several databases. You'll deploy the app to real web servers, including a cloud hosting platform built on AWS EC2 using Terraform and Docker Swarm, while integrating other tools such as Redis and NGINX. As you advance, you'll learn about unit and functional testing, along with deploying test infrastructure using Docker. Finally, you'll discover how to harden Node.js app security, use Let's Encrypt to provision the HTTPS service, and implement several forms of app security with the help of expert practices. With each chapter, the book will help you put your knowledge into practice throughout the entire life cycle of developing a web app. By the end of this Node.js book, you'll have gained practical Node.js web development knowledge and be able to build and deploy your own apps on a public web hosting solution. What you will learn

- Install and use Node.js 14 and Express 4.17 for both web development and deployment
- Implement RESTful web services using the Restify framework
- Develop, test, and deploy microservices using Docker, Docker Swarm, and Node.js, on AWS EC2 using Terraform
- Get up to speed with using data storage engines such as MySQL, SQLite3, and MongoDB
- Test your web applications using unit testing with Mocha, and headless browser testing with Puppeteer
- Implement HTTPS using Let's Encrypt and enhance application security with Helmet

Who this book is for If you're looking for an alternative to the 'P' languages (Perl, PHP, and Python), or if you want to get started with server-side web development with JavaScript programming, or if you want a deep dive into deploying services to cloud hosting, this Node.js book is for you. A rudimentary understanding of JavaScript and web application development is a must before you get started with this book.

Table of Contents

- About Node.js
- Setting Up Node.js
- Exploring Node.js Modules
- HTTP Servers and Clients
- Your First Express Application
- Implementing the Mobile-First Paradigm
- Data Storage and Retrieval
- Authenticating Users with a Microservice
- Dynamic Client/Server Interaction with Socket.IO
- Deploying Node.js Applications to Linux Servers
- Deploying Node.js microservices with Docker
- Deploying a Docker Swarm to AWS EC2 with Terraform
- Unit Testing and Functional Testing
- Security in Node.js Applications

Installing, compiling, configuring, optimizing, and securing this lightning-fast web server

The Conceptual Foundation

How to Setup a Linux Web Server

Web Database Applications with PHP and MySQL

PHP & MySQL: The Missing Manual

Twisted Network Programming Essentials

Web Programming with HTML5, CSS, and JavaScript

A Python community leader teaches professionals how to integrate web applications with Python.

The web services architecture provides a new way to think about and implement application-to-application integration and interoperability that makes the development platform irrelevant. Two applications, regardless of operating system, programming language, or any other technical implementation detail, communicate using XML messages over open Internet protocols such as HTTP or SMTP. The Simple Open Access Protocol (SOAP) is a specification that details how to encode that information and has become the messaging protocol of choice for Web services. Programming Web Services with SOAP is a detailed guide to using SOAP and other leading web services standards--WSDL (Web Service Description Language), and UDDI (Universal Description, Discovery, and Integration protocol). You'll learn the concepts of the web services architecture and get practical advice on building and deploying web services in the enterprise. This authoritative book decodes the standards, explaining the concepts and implementation in a clear, concise style. You'll also learn about the major toolkits for building and deploying web services. Examples in Java, Perl, C#, and Visual Basic illustrate the principles. Significant applications developed using Java and Perl on the Apache Tomcat web platform address real issues such as security, debugging, and interoperability. Covered topic areas include: The Web Services Architecture SOAP envelopes, headers, and encodings WSDL and UDDI Writing web services with Apache SOAP and Java Writing web services with Perl's SOAP::Lite Peer-to-peer (P2P) web services Enterprise issues such as authentication, security, and identity Up-and-coming standards projects for web services Programming Web Services with SOAP provides you with all the information on the

standards, protocols, and toolkits you'll need to integrate information services with SOAP. You'll find a solid core of information that will help you develop individual Web services or discover new ways to integrate core business processes across an enterprise.

Adopt the Rust programming language by learning how to build fully functional web applications and services and address challenges relating to safety and performance

Key Features

- Build scalable web applications in Rust using popular frameworks such as Actix, Rocket, and Warp
- Create front-end components that can be injected into multiple views
- Develop data models in Rust to interact with the database

Book Description Are safety and high performance a big concern for you while developing web applications? While most programming languages have a safety or speed trade-off, Rust provides memory safety without using a garbage collector. This means that with its low memory footprint, you can build high-performance and secure web apps with relative ease. This book will take you through each stage of the web development process, showing you how to combine Rust and modern web development principles to build supercharged web apps. You'll start with an introduction to Rust and understand how to avoid common pitfalls when migrating from traditional dynamic programming languages. The book will show you how to structure Rust code for a project that spans multiple pages and modules. Next, you'll explore the Actix Web framework and get a basic web server up and running. As you advance, you'll learn how to process JSON requests and display data from the web app via HTML, CSS, and JavaScript. You'll also be able to persist data and create RESTful services in Rust. Later, you'll build an automated deployment process for the app on an AWS EC2 instance and Docker Hub. Finally, you'll play around with some popular web frameworks in Rust and compare them. By the end of this Rust book, you'll be able to confidently create scalable and fast web applications with Rust. What you will learn

Structure

- scalable web apps in Rust in Rocket, Actix Web, and Warp
- Apply data persistence for your web apps using PostgreSQL
- Build login, JWT, and config modules for your web apps
- Serve HTML, CSS, and JavaScript from the Actix Web server
- Build unit tests and functional API tests in Postman and Newman
- Deploy the Rust app with NGINX and Docker onto an AWS EC2 instance

Who this book is for This book on web programming with Rust is for web developers who have programmed in traditional languages such as Python, Ruby, JavaScript, and Java and are looking to develop high-performance web applications with Rust. Although no prior experience with Rust is necessary, a solid understanding of web development principles and basic knowledge of HTML, CSS, and JavaScript are required if you want to get the most out of this book.

Practical solutions to overcome challenges in creating console and web applications and working with systems-level and embedded code, network programming, deep neural networks, and much more.

Key Features

- Work through recipes featuring advanced concepts such as concurrency, unsafe code, and macros to migrate your codebase to the Rust programming language
- Learn how to run machine learning models with Rust
- Explore error handling, macros, and modularization to write maintainable code

Book Description Rust 2018, Rust's first major milestone since version 1.0, brings more advancement in the Rust language. The Rust Programming Cookbook is a practical guide to help you overcome challenges when writing Rust code. This Rust book covers recipes for configuring Rust for different environments and architectural designs, and provides solutions to practical problems. It will also take you through Rust's core concepts, enabling you to create efficient, high-performance applications that use features such as zero-cost abstractions and improved memory management. As you progress, you'll delve into more advanced topics, including channels and actors, for building scalable, production-grade applications, and even get to grips with error handling, macros, and modularization to write maintainable code. You will then learn how to overcome common roadblocks when using Rust for systems programming, IoT, web development, and network programming. Finally, you'll discover what Rust 2018 has to offer for embedded programmers. By the end of the book, you'll have learned how to build fast and safe applications and services using Rust. What you will learn

Understand how Rust provides unique solutions to solve system programming language problems

- Grasp the core concepts of Rust to develop fast and safe applications
- Explore the possibility of integrating Rust units into existing applications for improved efficiency
- Discover how to achieve better parallelism and security with Rust
- Write Python extensions in Rust
- Compile external assembly files and use the Foreign Function Interface (FFI)
- Build web applications and services using Rust for high performance

Who this book is for The Rust cookbook is for software developers looking to enhance their knowledge of Rust and leverage its features using modern programming practices. Familiarity with Rust language is expected to get the most out of this

book.

Web Programming with the SAP Web Application Server

Explore the latest features of Rust 2018 for building fast and secure apps

Web server programming

Web, Graphics & Perl/Tk Programming

With organizations and individuals increasingly dependent on the Web, the need for competent, well-trained Web developers and maintainers is growing. Helping readers master Web development, Dynamic Web Programming and HTML5 covers specific Web programming languages, APIs, and coding techniques and provides an in-depth understanding of the underlying concepts, theory, and principles. The author leads readers through page structuring, page layout/styling, user input processing, dynamic user interfaces, database-driven websites, and mobile website development. After an overview of the Web and Internet, the book focuses on the new HTML5 and its associated open Web platform standards. It covers the HTML5 markup language and DOM, new elements for structuring Web documents and forms, CSS3, and important JavaScript APIs associated with HTML5. Moving on to dynamic page generation and server-side programming with PHP, the text discusses page templates, form processing, session control, user login, database access, and server-side HTTP requests. It also explores more advanced topics such as XML and PHP/MySQL. Suitable for a one- or two-semester course at the advanced undergraduate or beginning graduate level, this comprehensive and up-to-date guide helps readers learn modern Web technologies and their practical applications. Numerous examples illustrate how the programming techniques and other elements work together to achieve practical goals. Online Resource Encouraging hands-on practice, the book's companion website at <http://dwp.sofpower.com> helps readers gain experience with the technologies and techniques involved in building good sites. Maintained by the author, the site offers: Live examples organized by chapter and cross-referenced in the text Programs from the text bundled in a downloadable code package Searchable index and appendices Ample resource listings and information updates

Getting Started for Internet of Things with Launch Pad and ESP8266 provides a platform to get started with the Ti launch pad and IoT modules for Internet of Things applications. The book provides the basic knowledge of Ti launch Pad and ESP8266 based customized modules with their interfacing, along with the programming. The book discusses the application of Internet of Things in different areas. Several examples for rapid prototyping are included, this to make the readers understand the concept of IoT. The book comprises of twenty-seven chapters, which are divided into four sections and which focus on the design of various independent prototypes. Section-A gives a brief introduction to Ti launch pad (MSP430) and Internet of Things platforms like GPRS, NodeMCU and NuttyFi (ESP8266 customized board), and it shows steps to program these boards. Examples on how to interface these boards with display units, analog sensors, digital sensors and actuators are also included, this to make reader comfortable with the platforms. Section-B discusses the communication modes to relay the data like serial out, PWM and I2C. Section-C explores the IoT data loggers and shows certain steps to design and interact with the servers. Section-D includes few IoT based case studies in various fields. This book is based on the practical experience of the authors while undergoing projects with students and partners from various industries.