Web Programming In Python With Django

Learn web scraping and crawling techniques to access unlimited data from any web source in any format. With this practical guide, you'll learn how to use Python scripts and web APIs to gather and process data from thousands—or even millions—of web pages at once. Ideal for programmers, security professionals, and web administrators familiar with Python, this book not only teaches basic web scraping mechanics, but also delves into more advanced topics, such as analyzing raw data or using scrapers for frontend website testing. Code samples are available to help you understand the concepts in practice. Learn how to parse complicated HTML pages Traverse multiple pages and sites Get a general overview of APIs and how they work Learn several methods for storing the data you scrape Download, read, and extract data from documents Use tools and techniques to clean badly formatted data Read and write natural languages Crawl through forms and logins Understand how to scrape JavaScript Learn image processing and text recognition

This latest edition of The Definitive Guide to Django is updated for Django 1.1, and, with the forward–compatibility guarantee that Django now provides, should serve as the ultimate tutorial and reference for this popular framework for years to come. Django, the Python–based equivalent to Ruby's Rails web development framework, is one of the hottest topics in web development today. Lead developer Jacob Kaplan–Moss and Django creator Adrian Holovaty show you how they use this framework to create award–winning web sites by guiding you through the creation of a web application reminiscent of ChicagoCrime.org. The Definitive Guide to Django is broken into three parts, with the first introducing Django fundamentals such as installation and configuration, and creating the components that together power a Django–driven web site. The second part delves into the more sophisticated features of Django, including outputting non–HTML content such as RSS feeds and PDFs, caching, and user management. The appendixes serve as a detailed reference to Django's many configuration options and commands.

Practical recipes for building fast, robust, and secure web apps using Django 3 and Python Key Features Explore the latest version of Django, and learn effectively with the help of practical examples Follow a task-based approach to develop professional web apps using Django and Python Learn to deploy, scale, and secure apps using Docker and Amazon Web Services(AWS) Book Description Django is a web framework for perfectionists with deadlines, designed to help you build manageable medium and large web projects in a short time span. This fourth edition of Django Web Development Cookbook is updated with Django 3's latest features to guide you effectively through the development process. This Django book starts by helping you create a virtual environment and project structure for building Python web apps. You'll learn how to build models, views, forms, and templates for your web apps and then integrate JavaScript in your Django apps to add more features. As you advance, you'll create responsive multilingual websites, ready to be shared on social networks. The book will take you through uploading and processing images, rendering data in HTML5, PDF, and Excel, using and creating APIs, and navigating different data types in Django. You'll become well-versed in security best practices and caching techniques to enhance your website's security and speed. This edition not only helps you work with

the PostgreSQL database but also the MySQL database. You'll also discover advanced recipes for using Django with Docker and Ansible in development, staging, and production environments. By the end of this book, you will have become proficient in using Django's powerful features and will be equipped to create robust websites. What you will learn Discover how to set the basic configurations to start any Django project Understand full-stack web application development using Django Build a database structure using reusable model mixins Implement security, performance, and deployment features in your web apps Import data from local sources and external web services and export it to your app Secure web applications against malicious usage and find and fix common performance bottlenecks Who this book is for This Django book is for Python web developers who want to build fast and secure web apps that can scale over time. You'll also find this book useful if you want to upgrade to the latest Django framework. Knowledge of Python 3, along with a basic understanding of the Django framework will help you make the most of this book.

A comprehensive guide to Python programming for web development using the most popular Python web framework - Django Key Features Learn the fundamentals of programming with Python and building web apps Build web applications from scratch with Django Create real-world RESTful web services with the latest Django framework Book Description If you want to develop complete Python web apps with Django, this Learning Path is for you. It will walk you through Python programming techniques and guide you in implementing them when creating 4 professional Django projects, teaching you how to solve common problems and develop RESTful web services with Django and Python. You will learn how to build a blog application, a social image bookmarking website, an online shop, and an e-learning platform. Learn Web Development with Python will get you started with Python programming techniques, show you how to enhance your applications with AJAX, create RESTful APIs, and set up a production environment for your Django projects. Last but not least, you'll learn the best practices for creating real-world applications. By the end of this Learning Path, you will have a full understanding of how Django works and how to use it to build web applications from scratch. This Learning Path includes content from the following Packt products: Learn Python Programming by Fabrizio Romano Django RESTful Web Services by Gastón C. Hillar Django Design Patterns and Best Practices by Arun Ravindran What you will learn Explore the fundamentals of Python programming with interactive projects Grasp essential coding concepts along with the basics of data structures and control flow Develop RESTful APIs from scratch with Django and the Django REST Framework Create automated tests for RESTful web services Debug, test, and profile RESTful web services with Django and the Django REST Framework Use Django with other technologies such as Redis and Celery Who this book is for If you have little experience in coding or Python and want to learn how to build full-fledged web apps, this Learning Path is for you. No prior experience with RESTful web services, Python, or Django is required, but basic Python programming experience is needed to understand the concepts covered.

Take full creative control of your web applications with Flask, the Python-based microframework. With this hands-on book, you'll learn Flask from the ground up by developing a complete social blogging application step-by-step. Author Miguel Grinberg walks you through the framework's core functionality, and shows you how to extend

applications with advanced web techniques such as database migration and web service communication. Rather than impose development guidelines as other frameworks do, Flask leaves the business of extensions up to you. If you have Python experience, this book shows you how to take advantage of that creative freedom. Learn Flask's basic application structure and write an example app Work with must-have components—templates, databases, web forms, and email support Use packages and modules to structure a large application that scales Implement user authentication, roles, and profiles Build a blogging feature by reusing templates, paginating item lists, and working with rich text Use a Flask-based RESTful API to expose app functionality to smartphones, tablets, and other third-party clients Learn how to run unit tests and enhance application performance Explore options for deploying your web app to a production server

Rust is a new and fast programming language that provides memory safety without a garbage collector. With its low memory footprint, it allows web developers to build high-performance and secure web apps with relative ease. This book will help web developers to adopt Rust for web app development, while addressing safety and high-performance issues.

Learn the fundamentals of Python (3.7) and how to apply it to data science, programming, and web development. Fully updated to include hands-on tutorials and projects. Key Features Learn the fundamentals of Python programming with interactive projects Apply Python to data science with tools such as IPython and Jupyter Utilize Python for web development and build a real-world app using Django Book Description Learn Python Programming is a quick, thorough, and practical introduction to Python - an extremely flexible and powerful programming language that can be applied to many disciplines. Unlike other books, it doesn't bore you with elaborate explanations of the basics but gets you up-and-running, using the language. You will begin by learning the fundamentals of Python so that you have a rock-solid foundation to build upon. You will explore the foundations of Python programming and learn how Python can be manipulated to achieve results. Explore different programming paradigms and find the best approach to a situation; understand how to carry out performance optimization and effective debugging; control the flow of a program; and utilize an interchange format to exchange data. You'll also walk through cryptographic services in Python and understand secure tokens. Learn Python Programming will give you a thorough understanding of the Python language. You'll learn how to write programs, build websites, and work with data by harnessing Python's renowned data science libraries. Filled with real-world examples and projects, the book covers various types of applications, and concludes by building real-world projects based on the concepts you have learned. What you will learn Get Python up and running on Windows, Mac, and Linux Explore fundamental concepts of coding using data structures and control flow Write elegant, reusable, and efficient code in any situation Understand when to use the functional or OOP approach Cover the basics of security and concurrent/asynchronous programming Create bulletproof, reliable software by writing tests Build a simple website in Django Fetch, clean, and manipulate data Who this book is for Learn Python Programming is for individuals with relatively little experience in coding or Python. It's also ideal for aspiring programmers who need to write scripts or programs to accomplish tasks. The book shows you how to create a full-fledged application.

This book is for beginners or advanced in python and total beginners in web programming with python. You should have a basic python knowledge. Quick test: 1. You know how to convert a string to a number and vice-versa ? 2. Can you write a simple for loop in python ? 3. Can you create a simple class ? If the answer to all above is "YES" then go ahead. If you don't know, then you really should start with some basic python. There are lots of nice and free resources on net. It helps if you know a little html too, like "What does do ?" for example. Flask is minimal and simple. You don't get ORM's, Admin Panels and other stuff that Django has out of the box. You can install a very cool admin panel with just 1 line of code: "pip install flask-admin" and integrate it with 3-4 lines in your app. It is easy to learn, powerful and combined with Tornado it produces awesome performance even on a small VPS of 1Ghz. We'll build a simple user-tracking database management system with pagination, admin panel, login, security.

The need for web apps has been on the rise. However, most languages that support web development do not provide an easy means by which to implement the modern need for web apps. This means that developers spend longer periods of time developing these apps. Django is a Python framework that provides web developers with a mechanism to develop web apps in a quick and easy manner. Therefore you need to know how to use the Python framework. This book explores this in detail. Make sure that you install Python Python 2.6.5 or higher. Enjoy reading! Django allows developers to build websites that are deep and dynamic in a very short time. It takes the hard work out of developing leaving users to focus on the fun and taking away the repetitive parts of the job. Because of this, Django can provide high-level abstractions of the most common patterns in web development, shortcuts for programming jobs done frequently, and very clear conventions on solving problems. While providing all this, Django does its best not to get in the way leaving you to do as much work outside the framework scope as you want. Django is about making web development fun and easy. Over the course of this section, we will look at the basics of installing and using the framework. TABLE OF CONTENTS Introduction Chapter 1- Why Django Chapter 2- Setting up the Environment Chapter 3- The Admin Interface Chapter 4- Creating Views in Django Chapter 5- URL Mapping Chapter 6- Template System Chapter 7- Models Chapter 8- Page Redirection Chapter 9- Sending E-mails Chapter 10- Form Processing in Django Chapter 11- Handling Cookies Chapter 12- Sessions in Django Chapter 13- Memory Caching in Django Conclusion

Using the simple, robust, Python-based Django framework, you can build powerful Web solutions with remarkably few lines of code. In Python Web Development with Django®, three experienced Django and Python developers cover all the techniques, tools, and concepts you need to make the most of Django 1.0, including all the major features of the new release. The authors teach Django through in-depth explanations, plus provide extensive sample code supported with images and line-by-line explanations. You'll discover how Django

leverages Python's development speed and flexibility to help you solve a wide spectrum of Web development problems and learn Django best practices covered nowhere else. You'll build your first Django application in just minutes and deepen your real-world skills through start-to-finish application projects including Simple Web log (blog) Online photo gallery Simple content management system Ajax-powered live blogger Online source code sharing/syntax highlighting tool How to run your Django applications on the Google App Engine This complete guide starts by introducing Python, Django, and Web development concepts, then dives into the Django framework, providing a deep understanding of its major components (models, views, templates), and how they come together to form complete Web applications. After a discussion of four independent working Django applications, coverage turns to advanced topics, such as caching, extending the template system, syndication, admin customization, and testing. Valuable reference appendices cover using the command-line, installing and configuring Django, development tools, exploring existing Django applications, the Google App Engine, and how to get more involved with the Django community. Introduction 1 Part I: Getting Started Chapter 1: Practical Python for Django 7 Chapter 2: Django for the Impatient: Building a Blog 57 Chapter 3: Starting Out 77 Part II: Django in Depth Chapter 4: Defining and Using Models 89 Chapter 5: URLs, HTTP Mechanisms, and Views 117 Chapter 6: Templates and Form Processing 135 Part III: Django Applications by Example Chapter 7: Photo Gallery 159 Chapter 8: Content Management System 181 Chapter 9: Liveblog 205 Chapter 10: Pastebin 221 Part IV: Advanced Django Techniques and Features Chapter 11: Advanced Django Programming 235 Chapter 12: Advanced Django Deployment 261 Part V: Appendices Appendix A: Command Line Basics 285 Appendix B: Installing and Running Django 295 Appendix C: Tools for Practical Django Development 313 Appendix D: Finding, Evaluating, and Using Django Applications 321 Appendix E: Django on the Google App Engine 325 Appendix F: Getting Involved in the Django Project 337 Index 339 Colophon 375
Are you looking for a super-fast computer programming course? Would you like to learn the Python Programming Language like a pro in 7 days? Do you want to increase your online business thanks to the web applications? If so, keep reading: this bundle book is for you! Finally on launch the most complete Python guide for beginners: Python will introduce you many selected practices for coding . You will discover as a beginner the world of data science, machine learning and artificial intelligence. I'd like to say that Machine Learning with Python can be complicated, and the whole concept of Data Analysis can be daunting to starters. You have to take time and study the whole concept before you start to be proficiency. But this book will be your guide: the following list is just a tiny fraction of what you will learn in Python for beginners. ? The basics of Python programming ? Differences among programming languages ? Vba, SQL, R, Python ? Game creation with Pyhton ? Easy-to-follow steps for reading and

writing codes. ? Control flow statements and Error handling ? 3 best strategies with NumPy, Pandas, Matplotlib ? 3 reasons why Python is fundamental for Data Science ? 5 Most important Machine Learning Algorithms Even if you have never written a programming code before, you will quickly grasp the basics thanks to visual charts and guidelines for coding. Examples and step-by-step guides will guide you during the code-writing learning process. The description of each topic is crystal-clear and you can easily practice with related exercises and Predictive modelling concepts are explained in simple terms You will also learn 3 best tricks of writing codes. If you really wish to to learn Python and master its language, please click the BUY NOW button.

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, Kindle, 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, garbage collection, 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 and consume 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 your 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 assumes you're 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 contributor to the Ruby and Go communities. Table of Contents PART 1 GO AND WEB APPLICATIONS Go and web applications Go ChitChat 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

Build real-world Artificial Intelligence applications with Python to intelligently interact with the world around you About This Book Step into the amazing world of intelligent apps using this comprehensive guide Enter the world of Artificial Intelligence, explore it, and create your own applications Work through simple yet insightful examples that will get you up and running with Artificial Intelligence in no time Who This Book Is For This book is for Python developers who want to build real-world Artificial Intelligence applications. This book is friendly to Python beginners, but being familiar with Python would be useful to play around with the code. It will also be useful for experienced Python programmers who are looking

to use Artificial Intelligence techniques in their existing technology stacks. What You Will Learn Realize different classification and regression techniques Understand the concept of clustering and how to use it to automatically segment data See how to build an intelligent recommender system Understand logic programming and how to use it Build automatic speech recognition systems Understand the basics of heuristic search and genetic programming Develop games using Artificial Intelligence Learn how reinforcement learning works Discover how to build intelligent applications centered on images, text, and time series data See how to use deep learning algorithms and build applications based on it In Detail Artificial Intelligence is becoming increasingly relevant in the modern world where everything is driven by technology and data. It is used extensively across many fields such as search engines, image recognition, robotics, finance, and so on. We will explore various real-world scenarios in this book and you'll learn about various algorithms that can be used to build Artificial Intelligence applications. During the course of this book, you will find out how to make informed decisions about what algorithms to use in a given context. Starting from the basics of Artificial Intelligence, you will learn how to develop various building blocks using different data mining techniques. You will see how to implement different algorithms to get the best possible results, and will understand how to apply them to real-world scenarios. If you want to add an intelligence layer to any application that's based on images, text, stock market, or some other form of data, this exciting book on Artificial Intelligence will definitely be your guide! Style and approach This highly practical book will show you how to implement Artificial Intelligence. The book provides multiple examples enabling you to create smart applications to meet the needs of your organization. In every chapter, we explain an algorithm, implement it, and then build a smart application.

By taking you through the development of a real web application from beginning to end, the second edition of this hands-on guide demonstrates the practical advantages of test-driven development (TDD) with Python. You'll learn how to write and run tests before building each part of your app, and then develop the minimum amount of code required to pass those tests. The result? Clean code that works. In the process, you'll learn the basics of Django, Selenium, Git, jQuery, and Mock, along with current web development techniques. If you're ready to take your Python skills to the next level, this book—updated for Python 3.6—clearly demonstrates how TDD encourages simple designs and inspires confidence. Dive into the TDD workflow, including the unit test/code cycle and refactoring Use unit tests for classes and functions, and functional tests for user interactions within the browser Learn when and how to use mock objects, and the pros and cons of isolated vs. integrated tests Test and automate your deployments with a staging server Apply tests to the third-party plugins you integrate into your site Run tests automatically by using a Continuous Integration environment Use TDD to build a REST API with a front-end Ajax interface

Django is a popular Python-based framework for web application development. Like Python, Django is easy for beginners to learn and enables constant progress. This book will help aspiring web developers gain the skills to use Django to develop robust web apps.

Today, anyone in a scientific or technical discipline needs programming skills. Python is an ideal first programming language, and Introduction to Programming in Python is the best guide to learning it. Princeton University's Robert Sedgewick, Kevin Wayne, and Robert Dondero have crafted an accessible, interdisciplinary introduction to programming in Python that emphasizes important and engaging applications, not toy problems. The authors supply the tools needed for students to learn that programming is a natural, satisfying, and creative experience. This example-driven guide focuses on Python's most useful features and brings programming to life for every student in the sciences, engineering, and computer science. Coverage includes Basic elements of programming: variables, assignment statements, built-in data types, conditionals, loops, arrays, and I/O, including graphics and sound Functions, modules, and libraries: organizing programs into components that can be independently debugged, maintained, and reused Object-oriented programming and data abstraction: objects, modularity, encapsulation, and more Algorithms and data structures: sort/search algorithms, stacks, queues, and symbol tables Examples from applied math, physics, chemistry, biology, and computer science—all compatible with Python 2 and 3 Drawing on their extensive classroom experience, the authors provide Q&As, exercises, and opportunities for creative practice throughout. An extensive amount of supplementary information is available at introcs.cs.princeton.edu/python. With source code, I/O libraries, solutions to selected exercises, and much more, this companion website empowers people to use their own computers to teach and learn the material. Learn all that's needed to build a fully functional web application from scratch. Key Features Delve deep into the principle behind RESTful API Learn how to build a scalable web application with the RESTful API architecture and Flask framework Know what are the exact tools and methodology to test your applications and how to use them Book Description Python is a flexible language that can be used for much more than just script development. By knowing the Python RESTful APIs work, you can build a powerful backend for web applications and mobile applications using Python. You'll take your first steps by building a simple API and learning how the frontend web interface can communicate with the backend. You'll also learn how to serialize and deserialize objects using the marshmallow library. Then, you'll learn how to authenticate and authorize users using Flask-JWT. You'll also learn how to enhance your APIs by adding useful features, such as email, image upload, searching, and pagination. You'll wrap up the whole book by deploying your APIs to the cloud. By the end of this book, you'll have the confidence and skill to leverage the power of RESTful APIs and Python to build efficient web applications. What you will learn Understand the concept of a RESTful API Build a RESTful API using Flask and the Flask-Restful extension Manipulate a database using Flask-SQLAlchemy and Flask-Migrate Send out

plaintext and HTML format emails using the Mailgun API Implement a pagination function using Flask-SQLAlchemy Use caching to improve API performance and efficiently obtain the latest information Deploy an application to Heroku and test it using Postman Who this book is for This book is ideal for aspiring software developers who have a basic-to-intermediate knowledge of Python programming and who want to develop web applications using Python. Knowledge of how web applications work will be beneficial but is not essential.

More than 8 Hours of Video Instruction Overview Advanced Web Development in Python with Django LiveLessons is intended for people familiar with web development who understand the basics of Django and want to get more out of it but are unfamiliar with more difficult topics such as authentication, database query optimization, and caching. The course builds directly on top of Andrew Pinkham's previous course, Web Development in Python with Django LiveLessons, starting with the same code base where the class left off and building new features in the same project, making for a clear and clean learning progression. While the previous course is not a hard prerequisite, the prerequisites for that course and the concepts introduced in it will be necessary to understand the videos. A review lesson enables people to judge for themselves whether the course is appropriate for their level. About the Instructor Andrew Pinkham is the founder and lead engineer at JamBon Software, which provides development consulting services. He is the author of Django Unleashed ¬†(Pearson) and a popular speaker at DjangoCon U.S., and provides instruction in Python and Django. Andrew specializes in web and mobile products and enjoys communicating complex ideas in simple ways. He is also passionate about usability, security, and distributed systems. He is a 2009 graduate of Dartmouth College and currently resides in Boston, Massachusetts. Skill Level Intermediate Learn How To Write tests for Django Implement authentication in Django Optimize Django performance Enhance applications Enable user media and processing with a Celery queue Utilize asynchronous Python Who Should Take This Course Python programmers and other software developers interested in leveraging the Django web framework to build web applications Course Requirements Python programming experience Lesson Descriptions Lesson 1: Dip Your Toes Into Test Writing Lesson 1 starts off the course with testing, which is crucial to successful software development. The lesson begins by looking at the why, what, and how of testing, and then dives into how to test all the different components in Django. You also get a taste of Django's check framework. Lesson 2: Protect Site Access with Authentication Lesson 2 starts with authentication, or login and logout, but the focus is not limited to just that. As always, the lesson begins by discussing the fundamentals, and then dives into how they work with Django. We'll build login and...

How can you take advantage of the Django framework to integrate complex client-side interactions and real-time features into your web applications? Through a series of rapid application development projects, this hands-on book shows experienced Django developers how to include REST APIs, WebSockets, and client-side MVC frameworks such as Backbone.js into new or existing projects. Learn how to make the most of Django's decoupled design by choosing the components you need to build the lightweight applications you want. Once you finish this book, you'll know how to build single-page applications that respond to interactions in real time. If you're familiar with

Python and JavaScript, you're good to go. Learn a lightweight approach for starting a new Django project Break reusable applications into smaller services that communicate with one another Create a static, rapid prototyping site as a scaffold for websites and applications Build a REST API with django-rest-framework Learn how to use Django with the Backbone.js MVC framework Create a single-page web application on top of your REST API Integrate real-time features with WebSockets and the Tornado networking library Use the book's code-driven examples in your own projects Praise for Core Python Programming The Complete Developer's Guide to Python New to Python? The definitive guide to Python development for experienced programmers Covers core language features thoroughly, including those found in the latest Python releases–learn more than just the syntax! Learn advanced topics such as regular expressions, networking, multithreading, GUI, Web/CGI, and Python extensions Includes brand-new material on databases, Internet clients, Java/Jython, and Microsoft Office, plus Python 2.6 and 3 Presents hundreds of code snippets, interactive examples, and practical exercises to strengthen your Python skills Python is an agile, robust, expressive, fully object-oriented, extensible, and scalable programming language. It combines the power of compiled languages with the simplicity and rapid development of scripting languages. In Core Python Programming, Second Edition , leading Python developer and trainer Wesley Chun helps you learn Python quickly and comprehensively so that you can immediately succeed with any Python project. Using practical code examples, Chun introduces all the fundamentals of Python programming: syntax, objects and memory management, data types, operators, files and I/O, functions, generators, error handling and exceptions, loops, iterators, functional programming, object-oriented programming and more. After you learn the core fundamentals of Python, he shows you what you can do with your new skills, delving into advanced topics, such as regular expressions, networking programming with sockets, multithreading, GUI development, Web/CGI programming and extending Python in C. This edition reflects major enhancements in the Python 2.x series, including 2.6 and tips for migrating to 3. It contains new chapters on database and Internet client programming, plus coverage of many new topics, including new-style classes, Java and Jython, Microsoft Office (Win32 COM Client) programming, and much more. Learn professional Python style, best practices, and good programming habits Gain a deep understanding of Python's objects and memory model as well as its OOP features, including those found in Python's new-style classes Build more effective Web, CGI, Internet, and network and other client/server applications Learn how to develop your own GUI applications using Tkinter and other toolkits available for Python Improve the performance of your Python applications by writing extensions in C and other languages, or enhance I/O-bound applications by using multithreading Learn about Python's database API and how to use a variety of database systems with Python, including MySQL, Postgres, and SQLite Features appendices on Python 2.6 & 3, including tips on migrating to the next generation!
Invent Your Own Computer Games with Python will teach you how to make computer games using the popular Python programming language—even if you've never programmed before! Begin by building classic games like Hangman, Guess the Number, and Tic-Tac-Toe, and then work your way up to more advanced games, like a text-based treasure hunting game and an animated collision-dodging game with sound

effects. Along the way, you'll learn key programming and math concepts that will help you take your game programming to the next level. Learn how to: –Combine loops, variables, and flow control statements into real working programs –Choose the right data structures for the job, such as lists, dictionaries, and tuples –Add graphics and animation to your games with the pygame module –Handle keyboard and mouse input –Program simple artificial intelligence so you can play against the computer –Use cryptography to convert text messages into secret code –Debug your programs and find common errors As you work through each game, you'll build a solid foundation in Python and an understanding of computer science fundamentals. What new game will you create with the power of Python? The projects in this book are compatible with Python 3.

"Imagine powering up your tablet and browsing a site you built. Or discovering the skills necessary to launch a career in web programming. Or imagine, after years of thinking about it, finally crossing 'become code literate' off your bucket list. The Stone River eLearning course Python Web Programming will ease you through the big, vast world of Python web programming. Over the course of 7 hours, you'll be introduced to all the innovative concepts and foundational principles necessary to master web programming with Python. So whether you're an upstart programmer, an aspiring web developer, or someone just looking to gain a deeper understanding of python web programming, with this course you'll acquire the understanding and the confidence to conquer all things Python."--Resource description page.

This book will show you how you can leverage your Python skills to learn JavaScript by comparing them at the syntactical and semantical level. You'll discover why and when to use JavaScript, connect to a Node.js backend to create meaningful experiences, and finally create a full-stack application utilizing all layers of a web application.

Design, build and test RESTful web services with the Django framework and Python Key Features Create efficient real-world RESTful web services with the latest Django framework Authenticate, secure, and integrate third-party packages efficiently in your Web Services Leverage the power of Python for faster Web Service development Book Description Django is a Python web framework that makes the web development process very easy. It reduces the amount of trivial code, which simplifies the creation of web applications and results in faster development. It is very powerful and a great choice for creating RESTful web services. If you are a Python developer and want to efficiently create RESTful web services with Django for your apps, then this is the right book for you. The book starts off by showing you how to install and configure the environment, required software, and tools to create RESTful web services with Django and the Django REST framework. We then move on to working with advanced serialization and migrations to interact with SQLite and non-SQL data sources. We will use the features included in the Django REST framework to improve our simple web service. Further, we will create API views to process diverse HTTP requests on objects, go through relationships and hyperlinked API management, and then discover the necessary steps to include security and permissions related to data models and APIs. We will also apply throttling rules and run tests to check that versioning works as expected. Next we will run automated tests to improve code coverage. By the end of the book, you will be able to build RESTful web services with Django. What you will learn The best way to build a RESTful Web Service or API with Django and the Django

REST Framework Develop complex RESTful APIs from scratch with Django and the Django REST Framework Work with either SQL or NoSQL data sources Design RESTful Web Services based on application requirements Use third-party packages and extensions to perform common tasks Create automated tests for RESTful web services Debug, test, and profile RESTful web services with Django and the Django REST Framework Who this book is for This book is for Python developers who want to create RESTful web services with Django; you need to have a basic working knowledge of Django but no previous experience with RESTful web services is required.

As two of the leading MVC web frameworks for Python, Django and TurboGears allow you to develop and launch sites in a fraction of the time compared to traditional techniques and they provide greater stability, scalability, and management than alternatives. Packed with examples, this book will help you discover a new methodology for designing, coding, testing, and deploying rich web applications. A team of expert authors shows you the power of MVC frameworks and the capabilities of the TurboGears and Django packages. The Django chapters show you how to automate production of common web development tasks, portal creation, and content management, so you can focus on higher-level application issues and design. The TurboGears chapters illustrate how to rapidly create modern, highly interactive Web 2.0 applications. For both frameworks, you'll create useful applications that exemplify common Web 2.0 design paradigms and their solutions. Ultimately, you'll leverage your Python skills using Django and TurboGears and go from novice to RIA expert. What you will learn from this book * How you can use frameworks to save you time and frustration in the development cycle * The elements, differences, and similarities of the TurboGears and Django frameworks * Advanced capabilities of both frameworks and how they easily solve issues common to web applications * Approaches to simplifying your client side JavaScript(r) with MochiKit, a Pythonic JavaScript library * How to pair TurboGears with Flash for even more possibilities Who this book is for This book is for Python developers who want to learn rapid Web 2.0 development techniques using frameworks and incorporating a model-view-controller architecture. Wrox Professional guides are planned and written by working programmers to meet the real-world needs of programmers, developers, and IT professionals. Focused and relevant, they address the issues technology professionals face every day. They provide examples, practical solutions, and expert education in new technologies, all designed to help programmers do a better job.

Take full creative control of your web applications with Flask, the Python-based microframework. With the second edition of this hands-on book, you'll learn Flask from the ground up by developing a complete, real-world application created by author Miguel Grinberg. This refreshed edition accounts for important technology changes that have occurred in the past three years. Explore the framework's core functionality, and learn how to extend applications with advanced web techniques such as database migrations and an application programming interface. The first part of each chapter provides you with reference and background for the topic in question, while the second part guides you through a hands-on implementation. If you have Python experience, you're ready to take advantage of the creative freedom Flask provides. Three sections include: A thorough introduction to Flask: explore web application development basics with Flask and an application structure appropriate for medium and large applications Building Flasky: learn how to build an open source blogging application step-by-step by reusing templates, paginating item lists, and working with rich text Going the last mile: dive into unit testing strategies, performance analysis techniques, and deployment options for your Flask application

From an idea to a prototype – a complete guide for web development with the Django framework About This Book Explore the best practices to develop applications of a superior

quality with Django framework Unravel the common problems of web development in Django This course teaches you major Django functions and will help you improve your skills by developing models, forms, views, and templates Experience the challenges of working on an end-to-end social network project Who This Book Is For Web developers who want to use modern Python-based web frameworks like Django to build powerful web applications. The course is mostly self-contained and introduces web development with Python to a reader who is familiar with web development concepts and can help him become an expert in this trade. It's intended for all levels of web developers, both students and practitioners from novice to experts. What You Will Learn Use Django models to store information in the database and generate queries to access a database across models Quickly develop web pages to create, read, update, and delete data from the model using class-based views Generate very maintainable forms with Django Import data from local sources and external web services as well as exporting your data to third parties Deep dive into various aspects of Django from models and views to testing and deployment Familiarize yourself with the various nuances of web development such as browser attacks and databases In Detail Data science is hot right now, and the need for multitalented developers is greater than ever before. A basic grounding in building apps with a framework as minimalistic, powerful, and easy-to-learn as Django will be a useful skill to launch your career as an entrepreneur or web developer. Django is a web framework that was designed to strike a balance between rapid web development and high performance. This course will take you on a journey to become an efficient web developer thoroughly understanding the key concepts of Django framework. This learning path is divided into three modules. The course begins with basic concepts of the Django framework. The first module, Django Essentials, is like a practical guide, filled with many real-world examples to build highly effective Django web application. After getting familiar with core concepts of Django, it's time to practice your learning from the first module with the help of over 90 recipes available in this module. In the second module, Web Development with Django Cookbook, you'll learn varying complexities to help you create multilingual, responsive, and scalable websites with Django. By the end of this module, you will have a good understanding of the new features added to Django 1.8 and be an expert at web development processes.The next step is to discover the latest best practices and idioms in this rapidly evolving Django framework. This is what you'll be learning in our third module, Django Design Patterns and Best Practices. This module will teach you common design patterns to develop better Django code. By the end of the module, you will be able to leverage the Django framework to develop a fully functional web application with minimal effort. Style and approach This course includes all the resources that will help you jump into the web development field with Django and learn how to make scalable and robust web applications. The aim is to create a smooth learning path that will teach you how to get started with the powerful Django framework and perform various web development techniques in depth. Through this comprehensive course, you'll learn web development with Django from scratch to finish!

Python for Everybody is designed to introduce students to programming and software development through the lens of exploring data. You can think of the Python programming language as your tool to solve data problems that are beyond the capability of a spreadsheet.Python is an easy to use and easy to learn programming language that is freely available on Macintosh, Windows, or Linux computers. So once you learn Python you can use it for the rest of your career without needing to purchase any software.This book uses the Python 3 language. The earlier Python 2 version of this book is titled "Python for Informatics: Exploring Information".There are free downloadable electronic copies of this book in various formats and supporting materials for the book at www.pythonlearn.com. The course materials are available to you under a Creative Commons License so you can adapt them to teach your own Python course.

"Learn by doing: less theory, more results"--Cover.

Get a comprehensive, in-depth introduction to the core Python language with this hands-on book. Based on author Mark Lutz's popular training course, this updated fifth edition will help you quickly write efficient, high-quality code with Python. It's an ideal way to begin, whether you're new to programming or a professional developer versed in other languages. Complete with quizzes, exercises, and helpful illustrations, this easy-to-follow, self-paced tutorial gets you started with both Python 2.7 and 3.3— the latest releases in the 3.X and 2.X lines—plus all other releases in common use today. You'll also learn some advanced language features that recently have become more common in Python code. Explore Python's major built-in object types such as numbers, lists, and dictionaries Create and process objects with Python statements, and learn Python's general syntax model Use functions to avoid code redundancy and package code for reuse Organize statements, functions, and other tools into larger components with modules Dive into classes: Python's object-oriented programming tool for structuring code Write large programs with Python's exception-handling model and development tools Learn advanced Python tools, including decorators, descriptors, metaclasses, and Unicode processing

Learn to build modern, secure, highly available web MVC applications and API's using Python`s Flask framework. Key Features Create production-ready MVC and REST API with the dynamic features of Flask Utilize the various extensions like Flask-JWT and Flask-SQLAlchemy to develop powerful applications Deploy your flask application on real-world platforms like AWS and Heroku on VM's or Docker containers Book Description Flask is a popular Python framework known for its lightweight and modular design. Mastering Flask Web Development will take you on a complete tour of the Flask environment and teach you how to build a production-ready application. You'll begin by learning about the installation of Flask and basic concepts such as MVC and accessing a database using an ORM. You will learn how to structure your application so that it can scale to any size with the help of Flask Blueprints. You'll then learn how to use Jinja2 templates with a high level of expertise. You will also learn how to develop with SQL or NoSQL databases, and how to develop REST APIs and JWT authentication. Next, you'll move on to build role-based access security and authentication using LDAP, OAuth, OpenID, and database. Also learn how to create asynchronous tasks that can scale to any load using Celery and RabbitMQ or Redis. You will also be introduced to a wide range of Flask extensions to leverage technologies such as cache, localization, and debugging. You will learn how to build your own Flask extensions, how to write tests, and how to get test coverage reports. Finally, you will learn how to deploy your application on Heroku and AWS using various technologies, such as Docker, CloudFormation, and Elastic Beanstalk, and will also learn how to develop Jenkins pipelines to build, test, and deploy applications. What you will learn Develop a Flask extension using best practices Implement various authentication methods: LDAP, JWT, Database, OAuth, and OpenID Learn how to develop role-based access security and become an expert on Jinja2 templates Build tests for your applications and APIs Install and configure a distributed task queue using Celery and RabbitMQ Develop RESTful APIs and secure REST API's Deploy highly available applications that scale on Heroku and AWS using Docker or VMs Who this book is for The ideal target audience for this book would be Python developers who want to use Flask and its advanced features to create Enterprise grade and lightweight applications. The book is for those who have some exposure of Flask and want to take it from introductory to master level. Market_Desc: Both undergraduate and masters course students taking modules with titles such as Website Development and Internet Programming. Programmers migrating to the web and general readership interested in developing applications which spread over several technologies. Special Features: · Students will need little previous programming experience.· Includes HTML, CSS and Cookies/Session, JavaScript, DHTML, XML and XSL/T.· Also

includes strong and timely coverage of new and important areas such as PHP5, MySQL and mobile technologies.· Focuses on open source and freely available software for use, including Apache server, PHP and MySQL.· Defines the surrounding context allowing students to see how the technologies fit together rather than existing as isolated units.· Strong pedagogical features including workshops and exercises, ultimately leading to the creation of a number of applications at the book s end, which depend upon the student s ingenuity to complete.· Encourages a creative rather than a formal approach to developing applications.· Includes topics such as Website Design Issues, Planning a Website Navigation.· A chapter introducing CGI and Perl Programming. About The Book: Developing Web Applications presents script writing and good programming practice but also allows students to see how the individual technologies fit together. It includes recent technical developments to provide a practical and modern introduction to building web applications.Assuming no prior programming experience, this concise, accessible book ensures that essential concepts on the client side are quickly grasped, and goes on to examine the server environment and available languages, including discussion of dynamic, modern scripting languages such as PHP. Network and security issues are also discussed. The aim of this book is to deliver exactly what is needed to start producing working applications as soon as possible -- and have fun along the way.Ideal for course use or self-study, this book includes practical suggestions for mini-projects which encourage the reader to explore his or her own imaginative solutions, as well as more theoretical end-of-chapter questions. It can also easily be used as a reference work as each section is self-contained, amplifying the key aspects of its particular topic. Most software covered is freely available in the public domain and no particular development environments are required. It is a direct, contemporary and extremely useful resource for anyone interested in learning how to program applications for the World Wide Web.

Python Web ProgrammingSams Publishing

Django for Beginners is a project-based introduction to Django, the popular Python-based web framework. Suitable for total beginners who have never built a website before as well as professional programmers looking for a fast-paced guide to modern web development and Django fundamentals.In the book you'll learn how to:Build 5 websites from scratch, including a Blog and Newspaper websiteDeploy online using security best practicesCustomize the look and feel of your sitesWrite tests and run them for all your codeIntegrate user authentication, email, and custom user modelsAdd permissions and authorizations to make your app more secureIdentify common mistakes and errors so you can build your own websitesIf you're curious about Python-based web development, Django for Beginners is your guide to writing and deploying your own websites quickly.

Web Programming with Dart is for programmers who want to master the new Dart programming language from Google, and also web developers who want to understand how Dart can integrate perfectly with HTML5 and CSS3. With this book you will understand the ins and outs of the language, how the tools work, and how to get the most from the core functions and libraries. Web Programming with Dart is a practical, example-led book, with case studies involving developing UI animations for the web, working with web services such as JSON, server side Dart applications, and the new Polymer.dart library for advanced HTML UI web components generation. Take a full tour of Dart's core features and its advanced functionality Learn the tools that come with Dart SDK and the most important

libraries. Additionally you will work with the newest Polymer.dart library for web component creation. Develop your own command-line and server side applications and, of course, web applications with Dart.

Are you looking for a crash course that will help you learn Python? Do you want to master data science using Python? If yes, then keep reading! Python is one of the most popular programming languages in the word in 2020 and specially for data science. Every day people use it to do cool things like Automation, they use it in Artificial Intelligence, Machine Learning, as well as Building Applications and Websites like Instagram and Dropbox. YouTube, Pinterest, and SurveyMonkey are all built on Python. So if you are looking for a trendy job, like data scientist, Python is for you. This is a Python guide with 2 Books in 1: Python crash course Python for data analysis Python has seen an explosion in popularity in recent years, driven by several aspects that make it an incredibly versatile and intuitive language. Moreover, data analysis plays a significant job in numerous parts of your regular day to day existence today. Organizations use information to Understand Their Customer Needs and produce the Best Possible Product or Service. Python Programming Language is one of the best framework with regards to information examination. Data Scientist is the most requested job of the 21st century and Python is the most popular programming language of the 21st century. So it's pretty obvious that anyone have skills in both Data Science and Python will be in great demand in industry. You needn't bother with an exhausting and costly reading material. This guide is the best one for every readers. This guide covers: The world of data science technologies Application of machine learning Data scientist: the sexiest job in the 21st century Learning Python from scratch Data analysis with Python NumPy for numerical data processing Data visualization with Python Projects on Python And much more! Despite its simplicity, Python is also sturdy and robust enough to carry out complex scientific and mathematical tasks. Python has been designed with features that drastically simplify the visualization and analysis of data, and Python is also the go-to choice for the creation of machine learning models and artificial intelligence. Be it machine learning, data analytics, data processing, web development, enterprise software development or taking the photo of Blackhole: Python is everywhere. Beloved by the data scientists and new generation developers, Pyhton will eat the word! Ready to get started? Click the BUY NOW button!

The second edition of this best-selling Python book (over 500,000 copies sold!) uses Python 3 to teach even the technically uninclined how to write programs that do in minutes what would take hours to do by hand. There is no prior programming experience required and the book is loved by liberal arts majors and geeks alike. If you've ever spent hours renaming files or updating hundreds of spreadsheet cells, you know how tedious tasks like these can be. But what if you could have your computer do them for you? In this fully revised second edition of the best-selling classic Automate the Boring Stuff with Python, you'll

learn how to use Python to write programs that do in minutes what would take you hours to do by hand--no prior programming experience required. You'll learn the basics of Python and explore Python's rich library of modules for performing specific tasks, like scraping data off websites, reading PDF and Word documents, and automating clicking and typing tasks. The second edition of this international fan favorite includes a brand-new chapter on input validation, as well as tutorials on automating Gmail and Google Sheets, plus tips on automatically updating CSV files. You'll learn how to create programs that effortlessly perform useful feats of automation to: • Search for text in a file or across multiple files • Create, update, move, and rename files and folders • Search the Web and download online content • Update and format data in Excel spreadsheets of any size • Split, merge, watermark, and encrypt PDFs • Send email responses and text notifications • Fill out online forms Step-by-step instructions walk you through each program, and updated practice projects at the end of each chapter challenge you to improve those programs and use your newfound skills to automate similar tasks. Don't spend your time doing work a well-trained monkey could do. Even if you've never written a line of code, you can make your computer do the grunt work. Learn how in Automate the Boring Stuff with Python, 2nd Edition.

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.

Get Programming: Learn to code with Python teaches you the basics of computer programming using the Python language. In this exercise-driven book, you'll be doing something on nearly every page as you work through 38 compact lessons and 7 engaging capstone projects. By exploring the crystal-clear illustrations, exercises that check your understanding as you go, and tips for what to try next, you'll start thinking like a programmer in no time. This book works perfectly alongside our video course Get Programming with Python in Motion, available exclusively at Manning.com: www.manning.com/livevideo/get-programming-with-python-in-motion Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. What's Inside Programming skills you can use in any language Learn to code—no experience required Learn Python, the language for beginners Dozens of exercises and examples help you learn by doing About the Reader No prior programming experience needed. Table of Contents LEARNING HOW TO PROGRAM Lesson 1 - Why should you learn how to program? Lesson 2 - Basic principles of learning a programming language UNIT 1 - VARIABLES, TYPES, EXPRESSIONS, AND STATEMENTS Lesson 3 - Introducing Python: a programming language Lesson 4 - Variables and expressions: giving names and values to things Lesson 5 - Object types and statements of code 46 Lesson 6 - Capstone project: your first Python program-convert hours to minutes UNIT 2 - STRINGS, TUPLES, AND INTERACTING WITH THE USER Lesson 7 - Introducing string objects:

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

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