Flask Web Development Developing Applications With Python Miguel Grinberg

Instant Flask Web DevelopmentReal-Time Web Application DevelopmentFlask Web Development, 2nd EditionDEVELOPING WEB APPLICATIONSFLASK Web DevelopmentDjango for BeginnersWeb Scraping with PythonBuilding Web Applications with FlaskFlask: Building Python Web ServicesFlask Framework CookbookBuilding REST APIs with FlaskExplore FlaskDjango 2 by ExampleDjango Project BlueprintsHands-On Enterprise Application Development with PythonPython API Development FundamentalsFlask By ExamplePython Web ProgrammingThe Hitchhiker's Guide to PythonBuilding Web Apps with WordPressArchitecture Patterns with PythonPython for Unix and Linux System AdministrationThe New and Improved Flask Mega-TutorialDeveloping Large Web ApplicationsLearning Flask FrameworkCherrypy EssentialsMastering FlaskPython API Development FundamentalsDrupal for DesignersDjango 3 By ExamplePython Microservices DevelopmentMastering Flask Web DevelopmentTest-Driven Development with PythonMastering Flask Web Development - Second EditionBuilding RESTful Python Web ServicesHands-On RESTful Python Web ServicesLearn Web Development with PythonFlask Web DevelopmentBuilding Web Applications with Python and Neo4jFlask Framework Cookbook

Instant Flask Web Development

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.

Real-Time Web Application Development

How do you create a mission-critical site that provides exceptional performance while remaining flexible, adaptable, and reliable 24/7? Written by the manager of a UI group at Yahoo!, Developing Large Web Applications offers practical steps for building rock-solid applications that remain effective even as you add features, functions, and users. You'll learn how to develop large web applications with the extreme precision required for other types of software. Avoid common coding and maintenance headaches as small websites add more pages, more code, and more programmers Get comprehensive solutions for refining HTML, CSS, JavaScript, PHP, and Ajax for large-scale web applications Make changes in one place that ripple through all affected page elements Embrace the virtues of modularity, encapsulation, abstraction, and loosely coupled components Use tried-and-true techniques for managing data exchange, including working with forms and cookies Learn often-overlooked best practices in code management and software engineering Prepare your code to make performance enhancements and testing easier

Flask Web Development, 2nd Edition

Python is an ideal language for solving problems, especially in Linux and Unix networks. With this pragmatic book, administrators can review various tasks that often occur in the management of these systems, and learn how Python can provide a more efficient and less painful way to handle them. Each chapter in Python for Unix and Linux System Administration presents a particular administrative issue, such as concurrency or data backup, and presents Python solutions through hands-on examples. Once you finish this book, you'll be able to develop your own set of command-line utilities with Python to tackle a wide range of problems. Discover how this language can help you: Read text files and extract information Run tasks concurrently using the threading and forking options Get information from one process to another using network facilities Create clickable GUIs to handle large and complex utilities Monitor large clusters of machines by interacting with SNMP programmatically Master the IPython Interactive Python shell to replace or augment Bash, Korn, or Z-Shell Integrate Cloud Computing into your infrastructure, and learn to write a Google App Engine

Application Solve unique data backup challenges with customized scripts Interact with MySQL, SQLite, Oracle, Postgres, Django ORM, and SQLAlchemy With this book, you'll learn how to package and deploy your Python applications and libraries, and write code that runs equally well on multiple Unix platforms. You'll also learn about several Python-related technologies that will make your life much easier.

DEVELOPING WEB APPLICATIONS

"This book covers the CherryPy library for Python web development from its history and installation through its main features and core concepts to its integration with Python and other products to construct, test, and deploy a sample photoblog application. The author Sylvain Hellegouarch is dedicated to the development of free software projects and has been coordinating and administrating the community efforts around the CherryPy project since 2004. The approach based on an example application introduces many other common Python libraries, providing transferable skills also relevant for non-web Python projects"--Resource description p.

FLASK Web Development

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

Django for Beginners

Web Scraping with Python

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.

Building Web Applications with Flask

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.

Flask: Building Python Web Services

The Flask Mega-Tutorial is an overarching tutorial for Python beginner and intermediate developers that teaches web development with the Flask framework. The tutorial has been thoroughly revised and expanded in 2017, now containing 23 chapters. The concepts that are covered go well beyond Flask, including a wide range of topics Python web developers need to know when writing their own applications.

Flask Framework Cookbook

Architect scalable, reliable, and maintainable applications for enterprises with Python Key Features Explore various Python design patterns used for enterprise software development Apply best practices for testing and performance optimization to build stable applications Learn about different attacking strategies used on enterprise applications and how to avoid them Book Description Dynamically typed languages like Python are continuously improving. With the addition of exciting new features and a wide selection of modern libraries and frameworks, Python has emerged as an ideal language for developing enterprise applications. Hands-On Enterprise Application Development with Python will show you how to build effective applications that are stable, secure, and easily scalable. The book is a detailed guide to building an end-to-end enterprise-grade application in Python. You will learn how to effectively implement Python features and design patterns that will positively impact your application lifecycle. The book also covers advanced concurrency techniques that will help you build a RESTful application with an optimized frontend. Given that security and stability are the foundation for an enterprise application, you'll be trained on effective testing, performance analysis, and security practices, and understand how to embed them in your codebase during the initial phase. You'll also be guided in how to move on from a monolithic architecture to one that is service oriented, leveraging microservices and serverless deployment techniques. By the end of the book, you will have become proficient at building efficient enterprise applications in Python. What you will learn Understand the purpose of design patterns and their impact on application lifecycle Build applications that can handle large amounts of data-intensive operations Uncover advanced concurrency techniques and discover how to handle a large number of requests in production Optimize frontends to improve the client-side experience of your application Effective testing and performance profiling techniques to detect issues in applications early in the development cycle Build applications with a focus on security Implement large applications as microservices to improve scalability Who this book is for If you're a developer who wants to build enterprise-grade applications, this book is for you. Basic to intermediate-level of programming experience with Python and database systems is required to understand the concepts covered in this book.

Building REST APIs with Flask

Unleash the full potential of the Flask web framework by creating small to large and powerful web applicationsAbout This Book* Create your own world-class applications and master the art of Flask by unravelling its enigma through this journey* Packed with recipes containing lots of sample applications to help you understand the intricacies of Flask web programming* Work with scalable Flask application structures to create complex web appsWho This Book Is ForThis learning path is ideal developers who know the basics of Python and want to learn how to use the Flask framework to build powerful web solutions in Python.What You Will Learn* Build three web applications from the ground up using the powerful Python micro framework, Flask.* Extend your applications to build advanced functionality, such as a user account control

system using Flask-Login* Learn about web application security and defend against common attacks, such as SQL injection and XSS* Integrate with technologies like Redis, Sentry, MongoDB and so on* Build applications with integrations to most of the login mechanisms available* Don't just stop at development. Learn about deployment and post-deployment* Use SQLAlchemy to programmatically query a database* Develop a custom Flask extensionIn DetailAre you a fan of Python? Want to use it to create powerful web applications? Then Flask is the perfect choice for you. This course will take you through the intricacies of the Flask Microframework, covering all it's components and elements and how to integrate it with useful third party libraries. Dive deep into what Flask has to offer and then you will create multiple Python apps from scratch on your own.The first module will introduce you to web development using Flask to building fully functional web applications. Hands-on and pragmatic, this tutorial goes right to the crux of Flask by showing you how to build challenging real-world applications.The second module introduces you to a number of recipes that will help you understand the power of Flask and its extensions. Start by seeing the different configurations that a Flask application can make use of. By the end of this module, you will have gained all the knowledge required to write Flask applications in the best possible way, and scale them with best practices.The final module will walk you through advanced Flask topics while providing practical examples of for all your lessons learned. The module closes with a discussion of the different platforms that are available to deploy a Flask app on, the pros and cons of each one, and how to deploy on each one.This Learning Path combines some of the best that Packt has to offer in one complete, curated package. It includes content from the following Packt products:* Flask By-Example: Gareth Dwyer* Flask Framework Cookbook: Shalabh Aggarwal* Mastering Flask: Jack StoufferStyle and approachFilled with practical examples and recipes, this course is a great combination of example-driven learning complemented by exciting techniques to build powerful Python web applications with the Flask framework

Explore Flask

Flask is a powerful web framework that helps you build great projects using your favorite tools. Flask takes the flexible Python programming language and provides a simple template for web development. Once imported into Python, Flask can be used to save time building web applications. It goes against the flow with the microframework concept, leaving most of the architecture choices to the developer. Through its great API, extensions, and powerful patterns, Flask helps you create simple projects in minutes and complex ones as soon as possible. What You Will Learn - Introduction to Python-Flask Webapp Framework - Getting Started with Python-Flask - Routes and View Functions - Jinja2 Template Engine - Web Forms via Flask-WTF and WTForms Extensions - SQLAlchemy - RESTful Web Services API - Unit Testing and Acceptance Testing for Flask Apps - Some Useful Flask Extensions - Structuring Large Application with Blueprints - Deploying Your Flask Webapp Who This Book Is For If you are a Python web developer who wants to learn more about developing applications in Flask and scaling them with industry-standard practices, this is the book for you

Django 2 by Example

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.

Django Project Blueprints

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

Hands-On Enterprise Application Development with Python

If you are a web developer who wants to learn more about developing applications in Flask and scale them with industry-standard practices, this is the book for you. This book will also act as a handy tool if you are aware of Flask's major extensions and want to make the best use of them. It is assumed that you have knowledge of Python and a basic understanding of Flask. If you are completely new to Flask, reading the book from the first chapter and going forward will help in getting acquainted with Flask as you go ahead.

Python API Development Fundamentals

Gain expertise in Flask to create dynamic and powerful web applications About This Book Work with scalable Flask application structures to create complex web apps Discover the most powerful Flask extensions and learn how to create one Deploy your application to real-world platforms using this step-by-step guide Who This Book Is For If you are a Flask user who knows the basics of the library and how to create basic web pages with HTML and CSS, and you want to take your applications to the next level, this is the book for you. Harnessing the full power of Flask will allow you to create complex web applications with ease. What You Will Learn Set up a best practices Python environment Use SQLAlchemy to programmatically query a database Develop templates in Jinja Set up an MVC environment for Flask Discover NoSQL, when to use it, when not to, and how to use it Develop a custom Flask extension Use Celery to create asynchronous tasks In Detail Flask is a library that allows programmers to create web applications in Python. Flask is a micro-framework that boasts a low learning curve, a large community, and the power to create complex web apps. However, Flask is easy to learn but difficult to master. Starting from a simple Flask app, this book will walk through advanced topics while providing practical examples of the lessons learned. After building a simple Flask app, a proper app structure is demonstrated by transforming the app to use a Model-View-Controller (MVC) architecture. With a scalable structure in hand, the next chapters use Flask extensions to provide extra functionality to the app, including user login and registration, NoSQL querying, a REST API, an admin interface, and more. Next, you'll discover how to use unit testing to take the guesswork away from making sure the code is performing as it should. The book closes with a discussion of the different platforms that are available to deploy a Flask app on, the pros and cons of each one, and how to deploy on each one. Style and approach With plenty of useful examples, this guide introduces new concepts and then shows you how those concepts can be used in a real-world environment. Most sections are based around a single example app that is developed throughout the book.

Flask By Example

As Python continues to grow in popularity, projects are becoming larger and more complex. Many Python developers are

now taking an interest in high-level software design patterns such as hexagonal/clean architecture, event-driven architecture, and the strategic patterns prescribed by domain-driven design (DDD). But translating those patterns into Python isn't always straightforward. With this hands-on guide, Harry Percival and Bob Gregory from MADE.com introduce proven architectural design patterns to help Python developers manage application complexity—and get the most value out of their test suites. Each pattern is illustrated with concrete examples in beautiful, idiomatic Python, avoiding some of the verbosity of Java and C# syntax. Patterns include: Dependency inversion and its links to ports and adapters (hexagonal/clean architecture) Domain-driven design's distinction between entities, value objects, and aggregates Repository and Unit of Work patterns for persistent storage Events, commands, and the message bus Command-query responsibility segregation (CQRS) Event-driven architecture and reactive microservices

Python Web Programming

Py2neo is a simple and pragmatic Python library that provides access to the popular graph database Neo4j via its RESTful web service interface. This brings with it a heavily refactored core, a cleaner API, better performance, and some new idioms. You will begin with licensing and installing Neo4j, learning the fundamentals of Cypher as a graph query language, and exploring Cypher optimizations. You will discover how to integrate with various Python frameworks such as Flask and its extensions: Py2neo, Neomodel, and Django. Finally, the deployment aspects of your Python-based Neo4j applications in a production environment is also covered. By sequentially working through the steps in each chapter, you will quickly learn and master the various implementation details and integrations of Python and Neo4j, helping you to develop your use cases more quickly.

The Hitchhiker's Guide to Python

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.

Building Web Apps with WordPress

Learn Django 2.0 with four end-to-end projects Key Features Learn Django by building real-world web applications from scratch Develop powerful web applications quickly using the best coding practices Integrate other technologies into your application with clear, step-by-step explanations and comprehensive example code Book Description If you want to learn about the entire process of developing professional web applications with Django, then this book is for you. This book will walk you through the creation of four professional Django projects, teaching you how to solve common problems and implement best practices. You will learn how to build a blog application, a social image-bookmarking website, an online shop, and an e-learning platform. The book will teach you how to enhance your applications with AJAX, create RESTful APIs, and set up a production environment for your Django projects. The book walks you through the creation of real-world applications, while solving common problems and implementing best practices. By the end of this book, you will have a deep understanding of Django and how to build advanced web applications What you will learn Build practical, real-world web applications with Django Use Django with other technologies, such as Redis and Celery Develop pluggable Django applications Create advanced features, optimize your code, and use the cache framework Add internationalization to your Django projects Enhance your user experience using JavaScript and AJAX Add social features to your projects Build RESTful APIs for your applications Who this book is for If you are a web developer who wants to see how to build professional sites with Django, this book is for you. You will need a basic knowledge of Python, HTML, and JavaScript, but you don't need to have worked with Django before.

Architecture Patterns with Python

A practical approach to conquering the complexities of Microservices using the Python tooling ecosystem About This Book A very useful guide for Python developers who are shifting to the new microservices-based development A concise, up-to-date guide to building efficient and lightweight microservices in Python using Flask, Tox, and other tools Learn to use Docker containers, CoreOS, and Amazon Web Services to deploy your services Who This Book Is For This book is for developers who have basic knowledge of Python, the command line, and HTTP-based application principles, and those who want to learn how to build, test, scale, and manage Python 3 microservices. No prior experience of writing microservices in Python is assumed. What You Will Learn Explore what microservices are and how to design them Use Python 3, Flask, Tox, and other tools to build your services using best practices Learn how to use a TDD approach Discover how to document your microservices Configure and package your code in the best way Interact with other services Secure, monitor, and scale your services Deploy your services in Docker containers, CoreOS, and Amazon Web Services In Detail We often deploy our web applications into the cloud, and our code needs to interact with many third-party services. An efficient way to build applications to do this is through microservices architecture. But, in practice, it's hard to get this right due to the complexity of all the pieces interacting with each other. This book will teach you how to overcome these issues and craft applications that are built as small standard units, using all the proven best practices and avoiding the usual traps. It's a practical book: you'll build everything using Python 3 and its amazing tooling ecosystem. You will understand the principles of TDD and apply them. You will use Flask, Tox, and other tools to build your services using best practices. You will learn how to secure connections between services, and how to script Nginx using Lua to build web application firewall features such as rate limiting. You will also familiarize yourself with Docker's role in microservices, and use Docker containers, CoreOS, and Amazon Web Services to deploy your services. This book will take you on a journey, ending with the creation of a complete Python application based on microservices. By the end of the book, you will be well versed with the fundamentals of building, designing, testing, and deploying your Python microservices. Style and approach This book is an linear, easy-to-follow guide on how to best design, write, test, and deploy your microservices. It includes real-world examples that will help Python developers create their own Python microservice using the most efficient methods.

Python for Unix and Linux System Administration

Create web services that are lightweight, maintainable, scalable, and secure using the best tools and techniques designed for Python About This Book Develop RESTful Web Services using the most popular frameworks in Python Configure and fine-tune your APIs using the best tools and techniques available This practical guide will help you to implement complete REST-based APIs from scratch Who This Book Is For This book is for web developers who have working knowledge of Python and would like to build amazing web services by taking advantage of the various frameworks of Python. You should have some knowledge of RESTful APIs. What You Will Learn Develop complex RESTful APIs from scratch with Python combined with and without data sources Choose the most appropriate (micro) framework based on the specific requirements of a RESTful API /

web service Debug, test, and profile RESTful APIs with each of the frameworks Develop a complex RESTful API that interacts with a PostgreSQL database Add authentication and permissions to a RESTful API built in each of the frameworks Map URL patterns to request handlers and check how the API works Profile an existing API and refactor it to take advantage of asynchronous code In Detail Python is the language of choice for millions of developers worldwide, due to its gentle learning curve as well as its vast applications in day-to-day programming. It serves the purpose of building great web services in the RESTful architecture. This book will show you the best tools you can use to build your own web services. Learn how to develop RESTful APIs using the popular Python frameworks and all the necessary stacks with Python, Django, Flask, and Tornado, combined with related libraries and tools. We will dive deep into each of these frameworks to build various web services, and will provide use cases and best practices on when to use a particular framework to get the best results. We will show you everything required to successfully develop RESTful APIs with the four frameworks such as request handling, URL mapping, serialization, validation, authentication, authorization, versioning, ORMs, databases, custom code for models and views, and asynchronous callbacks. At the end of each framework, we will add authentication and security to the RESTful APIs and prepare tests for it. By the end of the book, you will have a deep understanding of the stacks needed to build RESTful web services. Style and approach The book takes a straightforward approach, not spending time getting you started with RESTful APIs and web services. It will give you the best use cases for each framework to build great web services in Python.

The New and Improved Flask Mega-Tutorial

Explore the best tools and techniques to create lightweight, maintainable, and scalable Python web services Key Features Combine Python with different data sources to build complex RESTful APIs from scratch Configure and fine-tune your APIs using the best tools and techniques available Use command-line and GUI tools to test CRUD operations performed by RESTful Web Services or APIs Book Description Python is the language of choice for millions of developers worldwide that builds great web services in RESTful architecture. This second edition of Hands-On RESTful Python Web Services will cover the best tools you can use to build engaging web services. This book shows you how to develop RESTful APIs using the most popular Python frameworks and all the necessary stacks with Python, combined with related libraries and tools. You'll learn to incorporate all new features of Python 3.7, Flask 1.0.2, Django 2.1, Tornado 5.1, and also a new framework, Pyramid. As you advance through the chapters, you will get to grips with each of these frameworks to build various web services, and be shown use cases and best practices covering when to use a particular framework. You'll then successfully develop RESTful APIs with all frameworks and understand how each framework processes HTTP requests and routes URLs. You'll also discover best practices for validation, serialization, and deserialization. In the concluding chapters, you will take advantage of specific features available in certain frameworks such as integrated ORMs, built-in authorization and authentication, and work with asynchronous code. At the end of each framework, you will write tests for RESTful APIs and improve code

coverage. By the end of the book, you will have gained a deep understanding of the stacks needed to build RESTful web services. What you will learn Select the most appropriate framework based on requirements Develop complex RESTful APIs from scratch using Python Use requests handlers, URL patterns, serialization, and validations Add authentication, authorization, and interaction with ORMs and databases Debug, test, and improve RESTful APIs with four frameworks Design RESTful APIs with frameworks and create automated tests Who this book is for This book is for web developers who have a working knowledge of Python and would like to build amazing web services by taking advantage of the various frameworks of Python. You should have some knowledge of RESTful APIs.

Developing Large Web Applications

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.

Learning Flask Framework

The Hitchhiker's Guide to Python takes the journeyman Pythonista to true expertise. More than any other language, Python

was created with the philosophy of simplicity and parsimony. Now 25 years old, Python has become the primary or secondary language (after SQL) for many business users. With popularity comes diversity—and possibly dilution. This guide, collaboratively written by over a hundred members of the Python community, describes best practices currently used by package and application developers. Unlike other books for this audience, The Hitchhiker's Guide is light on reusable code and heavier on design philosophy, directing the reader to excellent sources that already exist.

Cherrypy Essentials

Learn Django 3 with four end-to-end web projects Key Features Learn Django 3 by building real-world web applications from scratch in Python, using coding best practices Integrate other technologies into your application with clear, step-by-step explanations and comprehensive example code Implement advanced functionalities like a full-text search engine, a user activity stream, or a recommendation engine Add real-time features with Django Channels and WebSockets Book Description If you want to learn the entire process of developing professional web applications with Python and Django, then this book is for you. In the process of building four professional Django projects, you will learn about Django 3 features, how to solve common web development problems, how to implement best practices, and how to successfully deploy your applications. In this book, you will build a blog application, a social image bookmarking website, an online shop, and an e-learning platform. Step-by-step guidance will teach you how to integrate popular technologies, enhance your applications with AJAX, create RESTful APIs, and set up a production environment for your Django projects. By the end of this book, you will have mastered Django 3 by building advanced web applications. What you will learn Build real-world web applications Learn Django essentials, including models, views, ORM, templates, URLs, forms, and authentication Implement advanced features such as custom model fields, custom template tags, cache, middleware, localization, and more Create complex functionalities, such as AJAX interactions, social authentication, a full-text search engine, a payment system, a CMS, a RESTful API, and more Integrate other technologies, including Redis, Celery, RabbitMQ, PostgreSQL, and Channels, into your projects Deploy Django projects in production using NGINX, uWSGI, and Daphne Who this book is for This book is intended for developers with Python knowledge who wish to learn Django in a pragmatic way. Perhaps you are completely new to Django, or you already know a little but you want to get the most out of it. This book will help you to master the most relevant areas of the framework by building practical projects from scratch. You need to have familiarity with programming concepts in order to read this book. Some previous knowledge of HTML and JavaScript is assumed.

Mastering Flask

Build dynamic, data-driven websites and modern web applications with Flask About This Book Discover the most popular Flask resources on the web with ease Familiarize yourself with third-party libraries commonly used with Flask Create a fast,

interactive, and secure web app with this hands-on guide Who This Book Is For This book is for anyone who wants to develop their knowledge of Python into something that can be used on the web. Flask follows the Python design principles and can be easily understood by anyone who knows Python, and even by those who do not. What You Will Learn Create your web pages to add modularity and flexibility to your web app using templates Store and retrieve relational data using SQLAlchemy Develop schema migrations with Alembic Produce an admin section using flask-admin Build RESTful APIs using Flask-Restless Simulate requests and sessions using the Flask test client Make Ajax requests from Jinja2 templates In Detail Flask is a small and powerful web development framework for Python. It does not presume or force a developer to use a particular tool or library. Flask supports extensions that can add application features as if they were implemented in Flask itself. Flask's main task is to build web applications quickly and with less code. With its lightweight and efficient web development framework, Flask combines rapid development and clean, simple design. This book will take you through the basics of learning how to apply your knowledge of Python to the web. Starting with the creation of a "Hello world" Flask app, you will be introduced to the most common Flask APIs and Flask's interactive debugger. You will learn how to store and retrieve blog posts from a relational database using an ORM and also to map URLs to views. Furthermore, you will walk through template blocks, inheritance, file uploads, and static assets. You will learn to authenticate users, build log in/log out functionality, and add an administrative dashboard for the blog. Moving on, you will discover how to make Ajax requests from the template and see how the Mock library can simplify testing complex interactions. Finally, you will learn to deploy Flask applications securely and in an automated, repeatable manner, and explore some of the most popular Flask resources on the web. Style and approach A comprehensive guide packed with real-world examples and popular use cases; starting with basic overviews and diving into the practical aspects of Flask Framework.

Python API Development Fundamentals

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

Drupal for Designers

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 3 By Example

With Early Release ebooks, you get books in their earliest form — the author's raw and unedited content as he or she writes — so you can take advantage of these technologies long before the official release of these titles. You'll also receive updates when significant changes are made, new chapters are available, and the final ebook bundle is released. 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 the framework from the ground up by developing, step-by-step, a real-world project created by author Miguel Grinberg. This refreshed edition accounts for important technology changes that have occurred in the past three years. You'll learn the framework's core functionality, as well as how to extend applications with advanced web techniques such as database migration and web service communication. The first part of each chapter provides you with reference and background for the topic in question, while the second part guides you though a hands-on implementation of the topic. If you have Python experience, this book shows you how to take advantage of the creative freedom Flask provides.

Python Microservices Development

Build state-of-the-art web applications quickly and efficiently using Flask and related technologies with Python 3 Key Features Updated to Flask 1.0.3 and Python 3.7 with coverage of Microservices Get the most out of the powerful Flask framework and maintain the flexibility of your design choices Write cleaner and maintainable code with the help of sample apps Book Description Flask, the lightweight Python web framework, is popular due to its powerful modular design that lets you build scalable web apps. With this recipe-based guide, you'll explore modern solutions and best practices for Flask web development. Updated to the latest version of Flask and Python 3, this second edition of Flask Framework Cookbook moves away from some of the old and obsolete libraries and introduces recipes on bleeding edge technologies. You'll discover different ways of using Flask to create, deploy, and manage microservices. This Flask Python book starts by covering the different configurations that a Flask application can make use of, and then helps you work with templates and learn about the ORM and view layers. You'll also be able to write an admin interface and get to grips with debugging and logging errors. Finally, you'll grasp a variety of deployment and post-deployment techniques for platforms such as Apache, Tornado, and Heroku. By the end of this book, you'll have gained all the knowledge you need to write Flask applications in the best

possible way and scale them using standard industry practices. What you will learn Explore web application development in Flask, right from installation to post-deployment stages Make use of advanced templating and data modeling techniques Discover effective debugging, logging, and error handling techniques in Flask Integrate Flask with different technologies such as Redis, Sentry, and MongoDB Deploy and package Flask applications with Docker and Kubernetes Design scalable microservice architecture using AWS LambdaContinuous integration and Continuous deployment Who this book is for If you are a web developer who wants to learn more about developing scalable and production-ready applications in Flask, this is the book for you. You'll also find this book useful if you are already aware of Flask's major extensions and want to use them for better application development. Basic Python programming experience along with basic understanding of Flask is assumed.

Mastering Flask Web Development

Are you a solo web designer or part of a small team itching to build interesting projects with Drupal? This hands-on book provides the tools and techniques to get you going. Award-winning designer Dani Nordin guides you through site planning, teaches you how to create solid, user-centered design for the Drupal framework, and shows you tricks for using real, honest-to-goodness, developer Ninja Magick. This book is a compilation of three short guides—Planning Drupal Projects, Design and Prototyping for Drupal, and Drupal Development Tricks for Designers—plus exclusive "director's material." If you're familiar with HTML and CSS, but struggling with Drupal's learning curve, this is the book you've been looking for. Get extra material, including an expanded Grids chapter, more recommended modules, and a Short Form Project plan Learn how to work user-centered design practices into Drupal projects Choose the right modules for your project, and discover several go-to modules Use strategies for sketching, wireframing, and designing effective layouts Manage Drupal's markup, including code generated by the powerful Views module Learn how to work with Drupal on the command line Set up your development environment and collaborate with other designers and developers Learn the basics of Git, the free open source version control system

Test-Driven Development with Python

Develop stunning web application projects with the Django framework About This Book Build six exciting projects and use them as a blueprint for your own work Extend Django's built-in models and forms to add common functionalities into your project, without reinventing the wheel Gain insights into the inner workings of Django to better leverage it Who This Book Is For If you are a Django web developer able to build basic web applications with the framework, then this book is for you. This book will help you gain a deeper understanding of the Django web framework by guiding you through the development of seven amazing web applications. What You Will Learn Create a blogging platform and allow users to share posts on

different blogs Prioritise user-submitted content with an intelligent ranking algorithm based on multiple factors Create REST APIs to allow non-browser based usage of your web apps Customize the Django admin to quickly create a full-featured and rich content management system Use Elasticsearch with Django to create blazing fast e-commerce websites Translate your Django applications into multiple languages Dive deep into Django forms and how they work internally In Detail Django is a high-level web framework that eases the creation of complex, database-driven websites. It emphasizes on the reusability and pluggability of components, rapid development, and the principle of don't repeat yourself. It lets you build high-performing, elegant web applications quickly. There are several Django tutorials available online, which take as many shortcuts as possible, but leave you wondering how you can adapt them to your own needs. This guide takes the opposite approach by demonstrating how to work around common problems and client requests, without skipping the important details. If you have built a few Django projects and are on the lookout for a guide to get you past the basics and to solve modern development tasks, this is your book. Seven unique projects will take you through the development process from scratch, leaving no stone unturned. In the first two projects, you will learn everything from adding ranking and voting capabilities to your App to building a multiuser blog platform with a unique twist. The third project tackles APIs with Django and walks us through building a Nagios-inspired infrastructure monitoring system. And that is just the start! The other projects deal with customizing the Django admin to create a CMS for your clients, translating your web applications to multiple languages, and using the Elasticsearch search server with Django to create a high performing e-commerce web site. The seventh chapter includes a surprise usage of Django, and we dive deep into the internals of Django to create something exciting! When you're done, you'll have consistent patterns and techniques that you can build on for many projects to come. Style and approach This easy-to-follow guide is full of examples that will take you through building six very different web applications with Django. The code is broken down into manageable bites and then thoroughly explained.

Mastering Flask Web Development - Second Edition

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 the framework from the ground up by developing, step-by-step, a real-world project created by author Miguel Grinberg. This refreshed edition accounts for important technology changes that have occurred in the past three years. You'll learn the framework's core functionality, as well as how to extend applications with advanced web techniques such as database migration and web service communication. The first part of each chapter provides you with reference and background for the topic in question, while the second part guides you though a hands-on implementation of the topic. If you have Python experience, this book shows you how to take advantage of the creative freedom Flask provides.

Building RESTful Python Web Services

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.

Hands-On RESTful Python Web Services

Filled with practical, step-by-step instructions and clear explanations for the most important and useful tasks. The book uses a bottom-up approach to help you build applications, and is full of step-by-step instructions and practical examples to help you improve your knowledge.Instant Flask Web Development is for developers who are new to web programming, or are familiar with web programming but new to Flask. This book gives you a head start if you have some beginner experience with Python and HTML, or are willing to learn.

Learn Web Development with Python

Design, develop, and deploy a real-world web application by leveraging modern open source technologies. This book shows you how to use ASP.NET Core to build cross-platform web applications along with SignalR to enrich the application by enabling real-time communication between server and clients. You will use Docker to containerize your application, integrate with GitHub to package the application, and provide continuous deployment to Azure's IaaS platform. Along the way, Real-Time Web Application Development covers topics including designing a Materialize CSS theme, using a test-driven development approach with xUnit.net, and securing your application with the OAuth 2.0 protocol. To further your understanding of the technology, you will learn logging and exception handling; navigation using view components; and how to work with forms and validations. The rich code samples from this book can be used to retrofit or upgrade existing ASP.NET Core applications. What You Will Learn Design and develop a real-world web application Implement security and data storage with OAuth2 and Azure Table Storage Orchestrate real-time notifications through SignalR Use GitHub and Travis CI for continuous integration of code Master Docker containerization and continuous deployment with Docker Cloud to Azure Linux virtual machines Who This Book Is For Developers and software engineers interested in learning an end-to-end approach to application development using Microsoft technologies.

Flask Web Development

Develop RESTful web services using the Flask micro-framework and integrate them using MySQL. Use Flask to develop, deploy, and manage REST APIs with easy-to-read and understand Python code. Solve your problem from a choice of libraries. Learn to use MySQL as the web services database for your Flask API using SQLAlchemy ORM. Building REST APIs with Flask provides a primer on Flask, RESTful services, and working with pip to set up your virtual environment. The key differences between NoSQL and SQL are covered, and you are taught how to connect MySQL and Flask using SQLAlchemy. Author Kunal Relan presents best practices for creating REST APIs and guides you in structuring your app and testing REST endpoints. He teaches you how to set up authentication and render HTML using views. You learn how to write unit tests for your REST APIs, and understand mocks, assertions, and integration testing. You will know how to document your REST APIs, deploy your Flask application on all of the major cloud platforms, and debug and monitor your Flask application. What You'll Learn Use MySQL to create Flask REST APIs Test REST endpoints Create CRUD endpoints with Flask and MySQL Deploy Flask on all of the major cloud platforms Monitor your Flask application Who This Book Is For Python developers interested in REST API development using Flask and web developers with basic programming knowledge who want to learn how Python and REST APIs work together. Readers should be familiar with Python (command line, or at least pip) and MySQL.

Building Web Applications with Python and Neo4j

Unleash the full potential of the Flask web framework by creating simple yet powerful web applications About This Book The most up-to-date book on Flask on the market Create your own world-class applications and master the art of Flask by unravelling its enigma through this journey This step-by-step tutorial is packed with examples on blending different technologies with Flask to get you up and running Who This Book Is For Have you looked at PHP and hated the clunky bloated syntax? Or looked at .Net and wished it was more open and flexible? Maybe you've tried your hand at GUI libraries in Python and found them hard to use? If your answer to any one of these questions is a yes, then this is just the book for you. It is also intended for people who know the basics of Python and want to learn how to use it to build powerful solutions with a web front-end. What You Will Learn Build three web applications from the ground up using the powerful Python micro framework, Flask. Dynamically display data to your viewers, based on their requests Store user and static data in SQL and NoSQL databases and use this data to power your web applications Create a good user experience by combining HTML, CSS, and JavaScript Harness the convenience of freely available APIs, including OpenWeatherMap, Open Exchange Rates, and bitly Extend your applications to build advanced functionality, such as a user account control system using Flask-Login Learn about web application security and defend against common attacks, such as SQL injection and XSS In Detail This book will take you on a journey from learning about web development using Flask to building fully functional web applications. In the first major project, we develop a dynamic Headlines application that displays the latest news headlines along with up-to-date currency and weather information. In project two, we build a Crime Map application that is backed by a MySQL database, allowing users to submit information on and the location of crimes in order to plot danger zones and other crime trends within an area. In the final project, we combine Flask with more modern technologies, such as Twitter's Bootstrap and the NoSQL database MongoDB, to create a Waiter Caller application that allows restaurant patrons to easily call a waiter to their table. This pragmatic tutorial will keep you engaged as you learn the crux of Flask by working on challenging real-world applications. Style and approach This book will provide you with rich, practical experience of Flask. Every technology, that is employed along with Flask is comprehensively introduced, while the book focusses on developing web applications. Pointers to educational material are always given if you want to gain in-depth knowledge of the various technologies used.

Flask Framework Cookbook

Flask is a powerful web framework that helps you build great projects using your favorite tools. Flask takes the flexible Python programming language and provides a simple template for web development. Once imported into Python, Flask can be used to save time building web applications. It goes against the flow with the microframework concept, leaving most of the architecture choices to the developer. Through its great API, extensions, and powerful patterns, Flask helps you create simple projects in minutes and complex ones as soon as possible. From the beginning, Building Web Applications with Flask shows you how to utilize Flask's concepts, extensions, and components to create engaging, full-featured web projects. You'll

learn how to properly handle forms using WTForms, devise convenient templates with Jinja2 tags and macros, use NoSQL and SQL databases to store user data, test your projects with features and unit tests, create powerful authentication and user authorization, as well as administrative interfaces with ease, and more. As Flask does not enforce an architectural recipe, neither do we! This book makes no coding assumptions on how you should code, leaving you free to experiment.

ROMANCE ACTION & ADVENTURE MYSTERY & THRILLER BIOGRAPHIES & HISTORY CHILDREN'S YOUNG ADULT FANTASY HISTORICAL FICTION HORROR LITERARY FICTION NON-FICTION SCIENCE FICTION