

Django 2 0 Tutorial For Beginners

Being a beginner's guide this book has a very simple and clear approach. It is a practical guide that will help you learn the features of Django and help you build a dynamic website using those features. This book is for web developers who want to see how to build a complete site with Web 2.0 features, using the power of a proven and popular development system, but do not necessarily want to learn how a complete framework functions in order to do this. Basic knowledge of Python development is required for this book, but no knowledge of Django is expected.

Welcome to the Django Girls Tutorial! We are happy to see you here:) In this tutorial, we will take you on a journey under the hood of web technologies, offering you a glimpse of all the bits and pieces that need to come together to make the web work as we know it. As with all unknown things, this is going to be an adventure - but no worries, since you already worked up the courage to be here, you'll be just fine:) 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.

The original, best-selling Django programmer's reference completely rewritten for Django 2 and 3.

Build powerful web applications, quickly and cleanly, with the Django application framework.

Learn how to hack systems like black hat hackers and secure them like security experts
Key Features Understand how computer systems work and their vulnerabilities Exploit weaknesses and hack into machines to test their security Learn how to secure systems from hackers
Book Description This book starts with the basics of ethical hacking, how to practice hacking safely and legally, and how to install and interact with Kali Linux and the Linux terminal. You will explore network hacking, where you will see how to test the security of wired and wireless networks. You'll also learn how to crack the password for any Wi-Fi network (whether it uses WEP, WPA, or WPA2) and spy on the connected devices. Moving on, you will discover how to gain access to remote computer systems using client-side and server-side attacks. You will also get the hang of post-exploitation techniques, including remotely controlling and interacting with the systems that you compromised. Towards the end of the book, you will be able to pick up web application hacking techniques. You'll see how to discover, exploit, and prevent a number of website vulnerabilities, such as XSS and SQL injections. The attacks covered are practical techniques that work against real systems and are purely for educational purposes. At the end of each section, you will learn how to detect, prevent, and secure systems from these attacks. What you will learn Understand ethical hacking and the different fields and types of hackers Set up a penetration testing lab to practice safe and legal hacking Explore Linux basics, commands, and how to interact with the terminal Access password-protected networks and spy on connected clients Use server and client-side attacks to hack and control remote computers Control a hacked system remotely and use it to hack other systems Discover, exploit, and prevent a number of web application vulnerabilities such as XSS and SQL injections Who this book is for Learning Ethical Hacking from Scratch is for anyone interested in learning how to hack

and test the security of systems like professional hackers and security experts.

"Two scoops of Django introduces you to various tips, tricks, patterns, code snippets, and techniques . . ."--Page 4 of cover.

Apply decoupling patterns, properly test a decoupled project, and integrate a Django API with React, and Vue.js. This book covers decoupled architectures in Django, with Django REST framework and GraphQL. With practical and simple examples, you'll see firsthand how, why, and when to decouple a Django project. Starting with an introduction to decoupled architectures versus monoliths, with a strong focus on the modern JavaScript scene, you'll implement REST and GraphQL APIs with Django, add authentication to a decoupled project, and test the backend. You'll then review functional testing for JavaScript frontends with Cypress. You will also learn how to integrate GraphQL in a Django project, with a focus on the benefits and drawbacks of this new query language. By the end of this book, you will be able to discern and apply all the different decoupling strategies to any Django project, regardless of its size. What You'll Learn Choose the right approach for decoupling a Django project Build REST APIs with Django and a Django REST framework Integrate Vue.js and GraphQL in a Django project Consume a Django REST API with Next.js Test decoupled Django projects Who This Book Is For Software developers with basic Django skills keen to learn decoupled architectures with Django. JavaScript developers interested in learning full-stack development and decoupled architectures with Django.

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.

Completely updated for Django 3.1 & Django REST Framework 3.11 Django for APIs is a

project-based guide to building modern APIs with Django & Django REST Framework. It is suitable for beginners who have never built an API before as well as professional programmers looking for a fast-paced introduction to Django fundamentals and best practices. In the book you'll learn how to:

- * Build 3 Django backends from scratch, including a Library API, Todo API, and Blog API
- * Connect to a React JavaScript front-end
- * Integrate user authentication: basic, sessions, and tokens
- * Add permissions and proper documentation
- * Use viewsets and routers for concise code

If you're curious about Python-based APIs, Django for APIs is a best-practices guide to writing and customizing your own quickly.

This book offers a highly accessible introduction to natural language processing, the field that supports a variety of language technologies, from predictive text and email filtering to automatic summarization and translation. With it, you'll learn how to write Python programs that work with large collections of unstructured text. You'll access richly annotated datasets using a comprehensive range of linguistic data structures, and you'll understand the main algorithms for analyzing the content and structure of written communication. Packed with examples and exercises, Natural Language Processing with Python will help you:

- Extract information from unstructured text, either to guess the topic or identify "named entities"
- Analyze linguistic structure in text, including parsing and semantic analysis
- Access popular linguistic databases, including WordNet and treebanks
- Integrate techniques drawn from fields as diverse as linguistics and artificial intelligence

This book will help you gain practical skills in natural language processing using the Python programming language and the Natural Language Toolkit (NLTK) open source library. If you're interested in developing web applications, analyzing multilingual news sources, or documenting endangered languages -- or if you're simply curious to have a programmer's perspective on how human language works -- you'll find Natural Language Processing with Python both fascinating and immensely useful.

Django for Beginners takes you from total beginner to confident Django developer. Proceed step-by-step through four progressively more complex web applications: from a "Hello World" app all the way to a robust Blog app with forms and user accounts. Learn current best practices around class-based views, templates, urls, user authentication, testing, and deployment. The material is up-to-date with the latest versions of both Django (2.0) and Python (3.6).

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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.

Completely updated for Django 3.1 Django for Professionals takes your web development skills to the next level, teaching you how to build production-ready websites with Python and Django. Once you have learned the basics of Django there is a massive gap between building simple "toy apps" and what it takes to build a "production-ready" web application suitable for deployment to thousands or even millions of users. In the book you'll learn how to:

- * Build a Bookstore website from scratch
- * Use Docker and PostgreSQL locally to mimic production settings
- * Implement advanced user registration with email
- * Write comprehensive tests
- * Adopt advanced security and performance improvements
- * Add search and file/image uploads

If you want to take advantage of all that Django has to offer, Django for Professionals is a comprehensive best practices guide to building and deploying modern websites.

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

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 website
- Deploy online using security best practices
- Customize the look and feel of your sites
- Write tests and run them for all your code
- Integrate user authentication, email, and custom user models
- Add permissions and authorizations to make your app more secure
- Identify common mistakes and errors so you can build your own websites

If you're curious about Python-based web development, Django for Beginners is your guide to writing and deploying your own websites quickly.

Get complete instructions for manipulating, processing, cleaning, and crunching datasets in Python. Updated for Python 3.6, the second edition of this hands-on guide is packed with practical case studies that show you how to solve a broad set of data analysis problems effectively. You'll learn the latest versions of pandas, NumPy, IPython, and Jupyter in the process. Written by Wes McKinney, the creator of the Python pandas project, this book is a practical, modern introduction to data science tools in Python. It's ideal for analysts new to Python and for Python programmers new to data science and scientific computing. Data

files and related material are available on GitHub. Use the IPython shell and Jupyter notebook for exploratory computing Learn basic and advanced features in NumPy (Numerical Python) Get started with data analysis tools in the pandas library Use flexible tools to load, clean, transform, merge, and reshape data Create informative visualizations with matplotlib Apply the pandas groupby facility to slice, dice, and summarize datasets Analyze and manipulate regular and irregular time series data Learn how to solve real-world data analysis problems with thorough, detailed examples

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.

Learn how to code web apps and get on the path to building your next side project, your lifestyle business, or your startup. Hello Web App is written for non-programmers by a designer, and will walk you through every step you need before launching your web app live to real customers. No jargon, using simple

and friendly language. This book doesn't walk you through a specific tutorial, but instead uses a generic example (a "collection of things") to allow you to create something that interests you. A blog is a collection of posts, a store is a collection of products, a directory is a collection of people. The possibilities are endless! Learn by doing--creating a project unique to you while teaching yourself how to build a web app.

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.

Django is a framework designed to balance rapid web development with high performance. It handles high levels of user traffic and interaction, integrates with a variety of databases, and collects and processes data in real time. This book follows a task-based approach to guide you through developing with the Django 2.1 framework, starting with ...

This book is for web developers who want to get started with Django for web development. Basic knowledge of Python programming is required but no knowledge of Django is expected.

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.

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

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Django, the Python-based Web development framework, is one of the hottest topics in Web development today. Its creator (and co-author of this book) Adrian Holovaty has built a compelling array of Web applications using Django, including <http://chicagocrime.org>. Django creator Adrian Holovaty and lead developer Jacob Kaplan-Moss have created this book as the definitive guide to the technology. Beginning with fundamentals such as installation and configuration, the book tackles sophisticated features of Django, such as outputting non-HTML content such as RSS feeds and PDFs, caching, and user management. Also includes a detailed reference to Django's many configuration options and commands.

Discover the Django web application framework and get started building Python-based web applications. This book takes you from the basics of Django all the way through to cutting-edge topics such as creating RESTful applications. Beginning Django also covers ancillary, but essential, development topics, including configuration settings, static resource management, logging, debugging, and email. Along with material on data access with SQL queries, you'll have all you need to get up and running with Django 1.11 LTS, which is compatible with Python 2 and Python 3. Once you've built your web application, you'll need to be the admin, so the next part of the book covers how to enforce permission management with users and groups. This technique allows you to restrict access to URLs and content, giving you total control of your data. In addition, you'll work with and customize the Django admin site, which provides access to a Django project's data. After reading and using this book, you'll be able to build a Django application top to bottom and be ready to move on to more advanced or complex Django application development. What You'll Learn Get started with the Django framework Use Django views, class-based views, URLs, middleware, forms, templates, and Jinja templates Take advantage of Django models, including model relationships, migrations, queries, and forms Leverage the Django admin site to get access to the database used by a Django project

Deploy Django REST services to serve as the data backbone for mobile, IoT, and SaaS systems Who This Book Is For Python developers new to the Django web application development framework and web developers new to Python and Django.

This latest edition of The Definitive Guide to Django is updated for Django 1.11, 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.

Django is an amazingly powerful system for creating modern, dynamic websites. But programming Django hasn't always been easy—until now. Django Unleashed is your step-by-step, beginner-friendly guide to leveraging Django's core capabilities and its powerful contributed library. You'll learn in the most effective way possible: hands on, by building a fully functional Django website from scratch. You'll even deploy the website to the cloud. As you build your website, expert Django consultant and trainer Andrew Pinkham reveals how websites operate; how Django makes building websites easy; how to write Python code that leverages its immense capabilities; and how to build solutions that are robust, reliable, and secure. You'll start simply and learn to solve increasingly challenging problems: mastering new features and understanding how Django's architecture shapes their behavior, and gaining essential knowledge for working with any web framework, not just Django.

Every other day we hear about new ways to put deep learning to good use: improved medical imaging, accurate credit card fraud detection, long range weather forecasting, and more. PyTorch puts these superpowers in your hands, providing a comfortable Python experience that gets you started quickly and then grows with you as you—and your deep learning skills—become more sophisticated. Deep Learning with PyTorch will make that journey engaging and fun. Summary Every other day we hear about new ways to put deep learning to good use: improved medical imaging, accurate credit card fraud detection, long range weather forecasting, and more. PyTorch puts these superpowers in your hands, providing a comfortable Python experience that gets you started quickly and then grows with you as you—and your deep learning skills—become more sophisticated.

Deep Learning with PyTorch will make that journey engaging and fun. Foreword by Soumith Chintala, Cocreator of PyTorch. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the technology Although many deep learning tools use Python, the PyTorch library is truly Pythonic. Instantly familiar to anyone who knows PyData tools like NumPy and scikit-learn, PyTorch simplifies deep learning without sacrificing advanced features. It's excellent for building quick models, and it scales smoothly from laptop to enterprise. Because companies like Apple, Facebook, and JPMorgan Chase rely on PyTorch, it's a great skill to have as you expand your career options. It's easy to get started with PyTorch. It minimizes cognitive overhead without sacrificing the access to advanced features, meaning you can focus on what matters the most - building and training the latest and greatest deep learning models and contribute to making a dent in the world. PyTorch is also a snap to scale and extend, and it partners well with other Python tooling. PyTorch has been adopted by hundreds of deep learning practitioners and several first-class players like FAIR, OpenAI, FastAI and Purdue. About the book Deep Learning with PyTorch teaches you to create neural networks and deep learning systems with PyTorch. This practical book quickly gets you to work building a real-world example from scratch: a tumor image classifier. Along the way, it covers best practices for the entire DL pipeline, including the PyTorch Tensor API, loading data in Python, monitoring training, and visualizing results. After covering the basics, the book will take you on a journey through larger projects. The centerpiece of the book is a neural network designed for cancer detection. You'll discover ways for training networks with limited inputs and start processing data to get some results. You'll sift through the unreliable initial results and focus on how to diagnose and fix the problems in your neural network. Finally, you'll look at ways to improve your results by training with augmented data, make improvements to the model architecture, and perform other fine tuning. What's inside Training deep neural networks Implementing modules and loss functions Utilizing pretrained models from PyTorch Hub Exploring code samples in Jupyter Notebooks About the reader For Python programmers with an interest in machine learning. About the author Eli Stevens had roles from software engineer to CTO, and is currently working on machine learning in the self-driving-car industry. Luca Antiga is cofounder of an AI engineering company and an AI tech startup, as well as a former PyTorch contributor. Thomas Viehmann is a PyTorch core developer and machine learning trainer and consultant. consultant based in Munich, Germany and a PyTorch core developer. Table of Contents PART 1 - CORE PYTORCH 1 Introducing deep learning and the PyTorch Library 2 Pretrained networks 3 It starts with a tensor 4 Real-world data representation using tensors 5 The mechanics of learning 6 Using a neural network to fit the data 7 Telling birds from airplanes: Learning from images 8 Using convolutions to generalize PART 2 - LEARNING FROM IMAGES IN THE REAL WORLD: EARLY DETECTION OF LUNG CANCER 9 Using PyTorch to

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In just 24 lessons of one hour or less, you will be able to build full-featured production websites using Django, the powerful web development framework based on Python. Designed for experienced website developers who have at least some familiarity with the Python programming language, this book uses a straightforward, step-by-step approach. Each lesson builds on the previous ones, enabling you to learn the essentials of implementing the Django framework on a website from the ground up. Step-by-step instructions carefully walk you through the most common Django tasks. Q&As, quizzes, and exercises at the end of each lesson help you test your knowledge. Notes and tips point out shortcuts and solutions. Learn how to...

Install and configure the Django web development framework
Cleanly separate data, logic, and view layers
Implement site interfaces with build templates and views
Utilize templates and views to store, access, and retrieve data
Use the Django forms library
Define custom tags and filters to minimize coding
Secure sites with registration, authorization, logins, and permissions
Manage sessions and cookies
Implement middleware for request and response handling
Create sitemaps to inform search engines of your content
Internationalize your site
Optimize performance with caching
Deploy Django in multiple configurations
Maintain sites with Django's administrator interface

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Django is the leading Python web application development framework. Learn

how to leverage the Django web framework to its full potential in this advanced tutorial and reference. Endorsed by Django, Pro Django more or less picks up where The Definitive Guide to Django left off and examines in greater detail the unusual and complex problems that Python web application developers can face and how to solve them. Provides in-depth information about advanced tools and techniques available in every Django installation Runs the gamut from the theory of Django's internal operations to actual code that solves real-world problems for high-volume environments Goes above and beyond other books, leaving the basics behind Shows how Django can do things even its core developers never dreamed possible

Delivers absolutely everything you will ever need to know to become a master Django programmer About This Book Gain a complete understanding of Django—the most popular, Python-based web framework in the world Gain the skills to successfully designing, developing, and deploying your app This book is packaged with fully described code so you can learn the fundamentals and the advanced topics to get a complete understanding of all of Django's core functions Who This Book Is For This book assumes you have a basic understanding of the Internet and programming. Experience with Python or Django would be an advantage, but is not necessary. It is ideal for beginner to intermediate programmers looking for a fast, secure, scalable, and maintainable alternative web development platform to those based on PHP, Java, and dotNET. What You Will Learn Use Django to access user-submitted form data, validate it, and work with it Get to know advanced URLconf tips and tricks Extend Django's template system with custom code Define models and use the database API to create, retrieve, update, and delete records Fully extend and customize the default implementation as per your project's needs Test and deploy your Django application Get to know more about Django's session, cache Framework, and middleware In Detail Mastering Django: Core is a completely revised and updated version of the original Django Book, written by Adrian Holovaty and Jacob Kaplan-Moss - the creators of Django. The main goal of this book is to make you a Django expert. By reading this book, you'll learn the skills needed to develop powerful websites quickly, with code that is clean and easy to maintain. This book is also a programmer's manual that provides complete coverage of the current Long Term Support (LTS) version of Django. For developers creating applications for commercial and business critical deployments, Mastering Django: Core provides a complete, up-to-date resource for Django 1.8LTS with a stable code-base, security fixes and support out to 2018. Style and approach This comprehensive step-by-step practical guide offers a thorough understanding of all the web development concepts related to Django. In addition to explaining the features of Django, this book provides real-world experience on how these features fit together to build extraordinary apps.

Build a Django content management system, blog, and social networking site with James Bennett as he introduces version 1.1 of the popular Django framework. You'll

work through the development of each project, implementing and running the applications while learning new features along the way. Web frameworks are playing a major role in the creation of today's most compelling web applications, because they automate many of the tedious tasks, allowing developers to instead focus on providing users with creative and powerful features. Python developers have been particularly fortunate in this area, having been able to take advantage of Django, a very popular open-source web framework whose stated goal is to "make it easier to build better web applications more quickly with less code." Practical Django Projects introduces this popular framework by way of a series of real-world projects. Readers follow along with the development of each project, implementing and running each application while learning new features along the way. This edition is updated for Django 1.1 and includes an all-new chapter covering practical development tools and techniques you'll be able to apply to your own development workflow.

Django Cookbook Web Development with Django This book is an exploration of Django, which is a Python framework used for the development of web apps. This book provides you with an explanation of what the framework is and its relationship to Python. The first chapter guides you on how to set up the environment ready for programming with Django. The Admin Interface in Django will also be discussed. After reading, you will learn how to set up, launch and use this interface. This book also guides you as to how to create views in Django. The process of URL mapping, models in Django, and how to perform page redirection will also be discussed in this book. The various ways to send E-mails in Django will also be covered. Generic views as well as form processing will also be discussed in detail, as well as the processes for handling both cookies and sessions. Here is a preview of what you'll learn: Setting up the Environment The Admin Interface Creating Views in Django - URL Mapping Template System Models Page Redirection Sending E-mails Generic Views Form Processing in Django Uploading Files Handling Cookies Sessions in Django Memory Caching in Django Download your copy of " h1 Django Cookbook " by scrolling up and clicking "Buy Now With 1-Click" button.

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.

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

* Quick start to learning python—very example oriented approach * Book has its own Web site established by the author: <http://diveintopython.org/> Author is well known in the Open Source community and the book has a unique quick approach to learning an object oriented language.

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

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.

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