



**Rapid GUI Programming with Python and Qt****Building REST APIs with Flask**

The easy way to learn programming fundamentals with Python Python is a remarkably powerful and dynamic programming language that's used in a wide variety of application domains. Some of its key distinguishing features include a very clear, readable syntax, strong introspection capabilities, intuitive object orientation, and natural expression of procedural code. Plus, Python features full modularity, supporting hierarchical packages, exception-based error handling, and modules easily written in C, C++, Java, and JavaScript that include: functional, imperative, object-oriented, and procedural. Due to its ease of use and flexibility, Python is constantly growing in popularity—and now you can wear your programming hat with pride and join the ranks of the pros with the help of this guide. Inside, expert author John Paul Mueller gives a complete step-by-step overview of all there is to know about Python. From performing common and advanced tasks, to collecting data, to interacting with package—this book covers it all! Use Python with Anaconda and use Magic Functions Benefit from completely updated and revised information since the last edition If you've never used Python or are new to programming in general, Beginning Programming with Python For Dummies is a helpful resource that will set you up for success.

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 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 a wide range of integrations. 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. No matter what you want to do, 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.

To facilitate scalability and resilience, many organizations now run applications in cloud native environments using containers and orchestration. But how do you know if the deployment is secure? This practical book examines key underlying technologies to help developers, operators, and security professionals assess security risks and determine appropriate solutions. Author Liz Rice, Chief Open Source Officer at Isovalent, looks at how the building blocks commonly used in container-based systems are constructed and how to use them to assess potential security risks that could affect your deployments. If you run container applications with kubectl or docker and use Linux command-line tools such as ps and grep, you're ready to get started. Explore attack vectors that affect container deployments Dive into the Linux constructs that underpin containers Examine measures for hardening containers Understand how misconfigurations can compromise container isolation Learn best practices for building container images Identify container image security tooling to prevent attacks on your deployment

This book is for developers who want to learn how to get the most out of Solr in their applications, whether you are new to the field, have used Solr but don't know everything, or simply want a good reference. It would be helpful to have some familiarity with basic programming concepts, but no prior experience is required.

Help for Windows Programmers

Beginning Programming with Python For Dummies

**Essential SQLAlchemy**

Fundamental Technology Concepts that Protect Containerized Applications

Architecture Patterns with Python

***This new edition of Essential SQLAlchemy is the tool developers need to understand the technology. Rather than being a simple tutorial or API reference, this book builds an application step by step. This application is comprised of many of the most common usages of SQLAlchemy, thus showing how to manage complexity and engaging in real world examples. Using easy, common language, the authors teach you how to turn knowledge into usable work.***

***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***

***Class-tested and coherent, this textbook teaches classical and web information retrieval, including web search and the related areas of text classification and text clustering from basic concepts. It gives an up-to-date treatment of all aspects of the design and implementation of systems for gathering, indexing, and searching documents; methods for evaluating systems; and an introduction to the use of machine learning methods on text collections. All the important ideas are explained using examples and figures, making it perfect for introductory courses in information retrieval for advanced undergraduates and graduate students in computer science. Based on feedback from extensive classroom experience, the book has been carefully structured in order to make teaching more natural and effective. Slides and additional exercises (with solutions for lecturers) are also available through the book's supporting website to help course instructors prepare their lectures.***

**Containing Python**

**Beginning Python**

**SQL Primer**