core PYTHON programming

- **New to Python?** This is *the* guide to Python development!
- **Covers** core Python features *and* advanced topics
- **Learn** about regular expressions, multithreaded programming, Web development, GUI development—and more
- **Also includes** important new features found in the newest Python releases
- **CD-ROM:** Complete Python distributions (source code, documentation, and various binaries), plus all examples in the book

WESLEY J. CHUN

Core Python Programming

Wesley J. Chun
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Review

New to Python? This is the developer's guide to Python development!

Learn the core features of Python as well as advanced topics such as regular expressions, multithreaded programming, Web/Internet and network development, GUI development with Tk(inter) and more

Also includes features found in the new Python 1.6 and 2.0 releases

CD-ROM: Complete Python distributions (source code, documentation, and various binaries) plus all example scripts in the book

Python is an Internet and systems programming language that is soaring in popularity in today's fast-paced software development environment, and no wonder: it's simple (yet robust), object-oriented (yet can be used as a procedural language), extensible, scalable and features an easy to learn syntax that is clear and concise. Python combines the power of a compiled object language like Java and C++ with the ease of use and rapid development time of a scripting language. In fact, its syntax is so easy to understand that you are more likely to pick it up faster than any of the other popular scripting languages in use today!

In *Core Python Programming*, Internet software engineer and technical trainer Wesley Chun provides intermediate and experienced developers all they need to know to learn Python-fast. Like all Core Series books, Core Python Programming delivers hundreds of industrial-strength code snippets and examples, all targeted at professional developers who want to leverage their existing skills! In particular, *Core Python Programming* presents numerous interactive examples that can be entered into the Python interpreter right in front of you! Finally, we present a chapter that shows you step-by-step how to extend Python using C or C++.

Python syntax and style

Development and Run-time Environments

Objects and Python memory management

Standard data types, methods, and operators

Loops and conditionals

Files and Input/Output

Exceptions and error handling

Functions, scope, arguments, and functional programming

Importing modules and module attributes

Object-oriented Programming with classes, methods, and instances

Callable Objects

Extending Python

Coverage of the Python standard module library and client-server application development includes comprehensive introductions to the following topics in Python programming:

Regular expressions

TCP/IP and UDP/IP Network programming using sockets

Operating system interface

GUI development with Tk using Tkinter

Multithreaded programming

Interactive Web/CGI/Internet applications

Executing code in a restricted environment

Inheritance, type emulation, operator overloading, and delegation in an OOP environment

Finally, we provide an introduction to the new features introduced in Python 1.6. These include Unicode string support, the new function invocation syntax which lets the caller provide a tuple of positional arguments and/or a dictionary of keyword arguments, and the new string methods. We also provide a glimpse into features that will only be found in the newer 2.0 release.

Every Core Series book:

DEMONSTRATES how to write commercial-quality code

FEATURES dozens of programs and examples!

FOCUSES on the features and functions most important to real developers

PROVIDES objective, unbiased coverage of cutting-edge technologies-no

hype!

Core Python Programming delivers:

Coverage of the core parts of the Python language

Real-world insights for developing Web/Internet, network, multithreaded and GUI applications

Tables and charts detailing Python modules, built-in functions, operators, and attributes

Code snippets to try live with Python's interactive interpreter, hammering the concepts home

Extensive code examples-including several complete sample applications

CD-ROM includes complete Python source code and documentation distributions for Unix/Linux along with binaries for Windows and Macintosh platforms plus source code for all examples in the book.

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To my parents,

who taught me that everybody is different.

And to my wife,

who *lives* with someone who is different.

Table of Contents