Data Wrangling with Python

Category: AI, Data & Analytics | **Vendor:** Logical Operations

Duration: 24.00 hours (3 days) **19.5 CPD Hours** **Rating:** ⭐ 4.6 (5,878 reviews)

Course Information

Delivery Format: Instructor Led - Online

Course Overview

In this course you will start with the absolute basics of Python, focusing mainly on data structures. Then you will delve into the fundamental tools of data wrangling like NumPy and Pandas libraries. You'll explore useful insights into why you should stay away from traditional ways of data cleaning, as done in other languages, and take advantage of the specialized pre-built routines in Python.This combination of Python tips and tricks will also demonstrate how to use the same Python backend and extract/transform data from an array of sources including the Internet, large database vaults, and Excel financial tables. To help you prepare for more challenging scenarios, you'll cover how to handle missing or wrong data, and reformat it based on the requirements from the downstream analytics tool. The course will further help you grasp concepts through real-world examples and datasets.

About This Course

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Who Should Attend

Data Wrangling with Python takes a practical approach to equip beginners with the most essential data analysis tools in the shortest possible time. It contains multiple activities that use real-life business scenarios for you to practice and apply your new skills in a highly relevant context.

Learning Outcomes

Upon successful completion of this course, participants will be able to:

By the end of this course, you will be confident in using a diverse array of sources to extract, clean, transform, and format your data efficiently.

Detailed Course Outline

Introduction to Data Structure using Python

- Python for Data Wrangling
- Lists, Sets, Strings, Tuples, and Dictionaries

Advanced Operations on Built-In Data Structure

- Advanced Data Structures
- Basic File Operations in Python

Introduction to NumPy, Pandas, and Matplotlib

- NumPy Arrays
- Pandas DataFrames
- Statistics and Visualization with NumPy and Pandas
- Using NumPy and Pandas to Calculate Basic Descriptive Statistics on the DataFrame

Deep Dive into Data Wrangling with Python

- Subsetting, Filtering, and Grouping
- Detecting Outliers and Handling Missing Values
- Concatenating, Merging, and Joining
- Useful Methods of Pandas

Get Comfortable with a Different Kind of Data Sources

- Reading Data from Different Text-Based (and Non-Text-Based) Sources
- Introduction to BeautifulSoup4 and Web Page Parsing

Learning the Hidden Secrets of Data Wrangling

- Advanced List Comprehension and the zip Function
- Data Formatting

Advanced Web Scraping and Data Gathering

- Basics of Web Scraping and BeautifulSoup libraries
- Reading Data from XML

RDBMS and SQL

- Refresher of RDBMS and SQL
- Using an RDBMS (MySQL/PostgreSQL/SQLite)

Application in real life and Conclusion of course

- Applying Your Knowledge to a Real-life Data Wrangling Task
- An Extension to Data Wrangling

Additional Course Details

Nexus Humans Data Wrangling with Python training program is a workshop that presents an invigorating mix of sessions, lessons, and masterclasses meticulously crafted to propel your learning expedition forward.

This immersive bootcamp-style experience boasts interactive lectures, hands-on labs, and collaborative hackathons, all strategically designed to fortify fundamental concepts.

Guided by seasoned coaches, each session offers priceless insights and practical skills crucial for honing your expertise. Whether you're stepping into the realm of professional skills or a seasoned professional, this comprehensive course ensures you're equipped with the knowledge and prowess necessary for success.

While we feel this is the best course for the Data Wrangling with Python course and one of our Top 10 we encourage you to read the course outline to make sure it is the right content for you.

Additionally, private sessions, closed classes or dedicated events are available both live online and at our training centres in Dublin and London, as well as at your offices anywhere in the UK, Ireland or across EMEA.

Frequently Asked Questions

Q: What delivery options are available for Data Wrangling with Python?

We offer multiple delivery formats:

- Live Instructor-Led Classroom Online (Virtual/Live Online)
- Traditional Instructor-Led Classroom Training (ILT)
- On-site delivery at your offices anywhere in United Kingdom
- Private dedicated courses customized for your team

Q: How many CPD hours does this course provide?

The 3-day Data Wrangling with Python course provides up to 19.5 CPD hours of structured learning. CPD certificates can be provided upon request.

Q: What is the duration of the Data Wrangling with Python training?

The training takes place over 3 day(s), with each day lasting approximately 24.00 hours including breaks for lunch and refreshments.

Q: Do you provide corporate training for Data Wrangling with Python?

Yes, we provide corporate training, dedicated training, and closed classes for Data Wrangling with Python. Training can take place anywhere in United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online allowing teams from across United Kingdom or internationally to attend.

Q: Why choose Nexus Human for Data Wrangling with Python?

Nexus Human is recognized as one of the leading training providers. Our trainers have won multiple awards including:

- Small Firms Best Trainer Award
- National Training Partner of the Year (Ireland) - Multiple Years
- Global Top 30 Instructor Awards (2012, 2019, 2021)
- Tech Excellence Award Nominations
- Learning Performance Institute (LPI) External Training Provider Sponsor 2024

Q: Are there any discount codes available?

Yes! Use discount code **PENPAL5** when booking your Data Wrangling with Python training. Please note that only one discount code can be used per booking and cannot be combined with other special offers.

Nexus Human

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