Training: Python Academy
Professional Testing with pytest and tox

TRAINING GOALS:

Testing is essential for code quality. Tests need to be automated and regularly run to benefit from them. Frameworks such as pytest are based on many years of exercise and help you apply best practices to your tests.

Testing and releasing your code for many different Python versions and implementations can be hard. The new library tox is an effect tool to integrate testing and deployment. It works with and connects to established tools including those for Continuous Integration.

Applying the Python philosophy that simple things should be simple and complex task should be possible, pytest and tox make it easy to get started but at the same time provide powerful features for professional software development.

CONSPECT:

- Testing terms: functional, unit, integration, acceptance
- Test driven development, "after it work" and legacy-code testing
- Pytest basic usage: command line options, test discovery, capturing stdout, assert, expecting exceptions, interactive debugger, simple fixtures
- Integrating nose, twisted, django and unittest/2 style tests
- Load balancing across multiple CPUs or machines
- Configuring and using test coverage analysis
- Special test outcomes: skip, xfail and when to use them
- Using fixture functions for managing test state
- Using fixture functions for controlling external processes
- When and how to use mocking to avoid expensive setups
- Using tox to run tests against installed libraries and applications
- Using tox to build and test sphinx documentation
- Using tox to integrate with Jenkins CI or travis-ci.org

Each step consists of an input, discussion and self-practice phase.

Compendium Centrum Edukacyjne Spółka z o.o.
ul. Tatarska 5, 30-103 Kraków, tel.: (12) 298 47 77
ul. Postępu 18B, 02-676 Warszawa, tel.: (22) 417 41 70

BNP Paribas Bank Polska S.A.
EUR: PL 79 1600 1462 1853 6451 3000 0006
USD: PL 52 1600 1462 1853 6451 3000 0007

REQUIREMENTS:

- You should have intermediate Python experience or attend the course **Python for Programmers** before.
- You might be also interested in the course **Advanced Python**.

Difficulty level



CERTIFICATE:

The participants will obtain certificates signed by Python Academy.

TRAINER:

Authorized Python Academy Trainer.

Compendium Centrum Edukacyjne Spółka z o.o.
ul. Tatarska 5, 30-103 Kraków, tel.: (12) 298 47 77
ul. Postępu 18B, 02-676 Warszawa, tel.: (22) 417 41 70

BNP Paribas Bank Polska S.A.
EUR: PL 79 1600 1462 1853 6451 3000 0006
USD: PL 52 1600 1462 1853 6451 3000 0007