Python Unit Testing

Level: medium

Length: 8 hours

Course Objective: enter the unit testing in software development world: become familiar with the available tools, how they are used to construct test suites, the importance of integrating them in CI/CD (Continuous Integration/Continuous Delivery) pipelines.

What You Will Learn

- Understand the role and importance of unit testing in software development.
- Learn how to set up and write unit tests using Python's built-in unittest module.
- Explore pytest, a more advanced and popular testing framework.
- Understand test-driven development (TDD) concepts.
- Be able to mock external dependencies using unittest.mock.
- Testing and CI/CD workflows.
- Gain hands-on experience writing effective unit tests for real-world Python applications

Who can participate

- Software developers (beginner to intermediate) who want to improve the reliability of their Python applications.
- Quality assurance engineers interested in automating tests.
- DevOps professionals looking to incorporate testing into their CI/CD pipelines.

Prerequisites: comfortable with Python at least at the basic level

Required infrastructure: workstation with Python installed and an IDE for writing code, for example Community PyCharm

Related Courses: Fundamentals of Python, Advanced Python Programming

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