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Introduction to PyTest

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Why test your code?

🔥 If you don't test, you are testing in production



Why test

🔥 If you don't





Why test your code?

- 🔥 If you don't test, you are testing in production
- 😊 Ensure desired behavior
- 🐛 Discover and squash bugs
- 🌱 Grow your codebase without breaking existing things
- 📄 Tests document how your code can be used
- 💡 Tests can help discover awkward interfaces or coupling

Test-Driven Development

- 👉 Core flow:
 - ✍️ Write tests first
 - Fail all tests
 - 🧒 Implement the simplest code to pass all tests
 - Pass all tests
 - Refactor the implementation as needed
- 🤔 See also: “Code towards an interface”, Backward Design

Beck, K. (2003). *Test-driven development : by example* (1st edition). Addison-Wesley.

Why PyTest?

 PyTest is an open-source testing framework for Python

 Easy and unintrusive to write simple tests

 Elegantly scales to more complex testing scenarios

 A community standard



pytest



Let's get started!

Hands-on





Summary



Tests are great!







PyTest lets you automate and scale testing in an unintrusive way



Test-Driven Development is a useful paradigm to thoughtfully grow your codebase

What's next?

-  Explore the PyTest documentation
-  Automate testing with GitHub Actions
-  Learn about Mocking
-  Actually write (any kind of) tests!



Thank you

dartgo.org/intro-to-pytest