



Python
Users'
Group



Auckland

Testing Python Code

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About Me

Found behind computer keyboards since... 1985?

Swinging between Dev and SysAdmin

NOT A TESTER! Take a pinch of salt on everything here

As of late, focusing on Automation and Ansible



Testing? What is Testing?

“Software testing is the act of examining the artifacts and the behavior of the software under test by validation and verification. Software testing can also provide an objective, independent view of the software to allow the business to appreciate and understand the risks of software implementation”

-- “Software testing”, Wikipedia

Types of Tests

- Unit tests
- Integration tests
- Smoke tests
- Regression tests
- User acceptance tests

We Want Automation!!

- Automated tests
- Agile
- Junit (Kent Beck & Erich Gamma)
- Agility! Small changes, small risks, fast cycle

Unit Tests

Automated tests applied to a “unit”, usually a small section, function, method, class, to assert it works as intended.

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Python Testing

Package **unittest** is part of Python since 2.1

Lately **pytest** has been catching up, must install with **pip**

Hands-On Demo

Coverage Reports

- Python coverage

Test Drive Development

- Write the test for the new feature
- It will fail
- Write code until it passes the test

Good Practices

- Smaller bits of code are easily tested
- No need to test the language itself
- Keep tests independent

Find the presentation files (inc. Code) at:

<https://github.com/russoz/aklpug-testing-python-code>

Happy Testing!

Thank You!

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