



Curtin University

Testing

ISYS5002, School of Marketing and Management

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I acknowledge the traditional custodians of
the land on which I work and live, and
recognise their continuing connection to land,
water and community. I pay respect to elders
past, present and emerging.



You already doing tests!

- We check for features
- Experiment with input
- Exploratory testing



3 Ways of Thinking

- You users (Black box)
- The testers (grey Box)
- Developers (White Box)



Black Box

- Functionality
- Input Validation
- Output Results
- Boundary cases



Grey Box

- Same things a Black Box
- Logging
- Add System information



White Box

- Test all branches of code
- Proper Error Handling
- Test input/outputs of functions
- Resource constraints

Types of Testing

- Unit test
- Integration testing
- System testing



Options in Python

- assert statement
- Frameworks
 - doctest
 - unittest
 - nose (or nose2)
 - pytest
 - testbook (notebooks)
 - ipython-unittest (notebooks)
 - many others



Testing Everything

- Build up a suite of Tests
- Run all test with one command
- Regression testing
- Test Table

