

SENG 301



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TR 12-12:50 & 1-1:50

Test Coverage

- **Test coverage** refers to how much of the software has been run in test code.
- 100% test coverage is very unlikely - need to test strategically
 - Know the problems you want to look for (purpose)

Categories

- Categories of test selection:
 - Black-box testing - black-box analysis used to ensure conformance to interface
 - White-box testing - white-box analysis used to ensure that the code is more fully exercised

Techniques

- Black-box techniques:
 - Equivalence-based selection
 - Boundary-based selection
- White-box techniques:
 - Path-based selection
 - Branch-based selection
- Combination techniques:
 - State-based selection
 - Polymorphism-based selection

Lab 8: Test Coverage

In this lab, you will be seeking to unit test the `AbstractHardware` class in the hardware simulator for the vending machine (again, you are using `simulator-1.0.jar`).

Note that `Object`, `Class`, `Method`, `String`, and `Vector` are all classes in the Java Standard Library, so it is reasonable to treat them as bug-free (i.e., your test code is more likely to have bugs than these classes). `SimulationException` is simple so it is not worth trying to stub out.