# Intent Testing

CMPUT 301 Lab 7

# What is Intent/UI Testing

Automated Black Box testing

- Automated testing: Write software to help test software
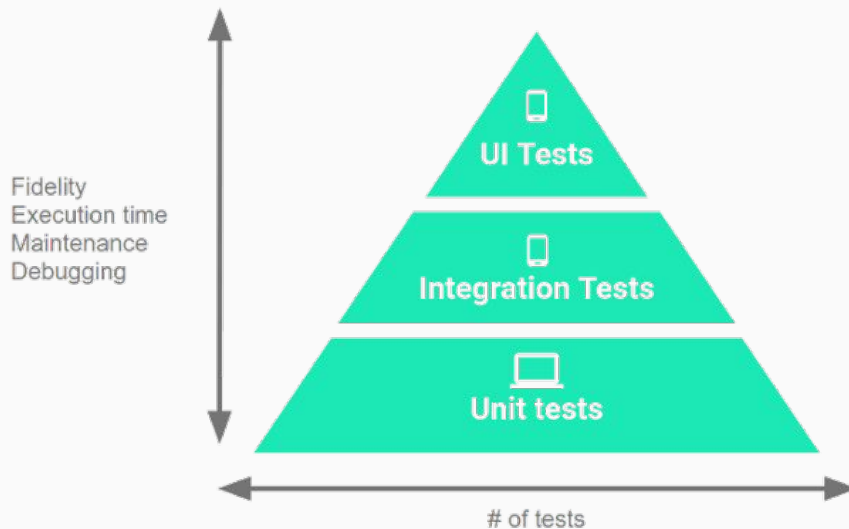- Black Box testing: end-to-end tests

# Why do we need Intent/UI testing

- Verification
  - Check that requirements are satisfied
- Confirming Normal Behavior
  - Ensures the product is working correctly
- Avoiding regression
  - Prevent previous from reoccurring

# Best Practices

- Unit Tests:
  - Tests one class at a time
- Integration Tests:
  - Interactions between units
- UI Tests:
  - End-to-end workflows

Recommended ratio by Google: 7:2:1



Fidelity
Execution time
Maintenance
Debugging

UI Tests

Integration Tests

Unit tests

# of tests

*Source:https://www.youtube.com/watch?v=pK7W5npkhho&start=111*

# Testing Libraries

- [Expresso](#): Recommended in the Android Documentation

- [Robotium](#): Blackbox UI Testing Framework
  - Allows automation UI testing and therefore saves time
  - Can be used with AcitivityInstrumentationTestCase2
  - Downside:
    - Not as fast as Expresso
    - Can work weirdly if the screen is off

# Demo

Let's follow the instructions in the *Lab7 Instructions.pdf* to create some tests