CSC 116
Discussion 7

GINA BAI

Logistics

- Project 1 → due this Friday at 11:45pm

- Midterm exam 1
  - Lecture 1 – 6
  - Study Guide posted

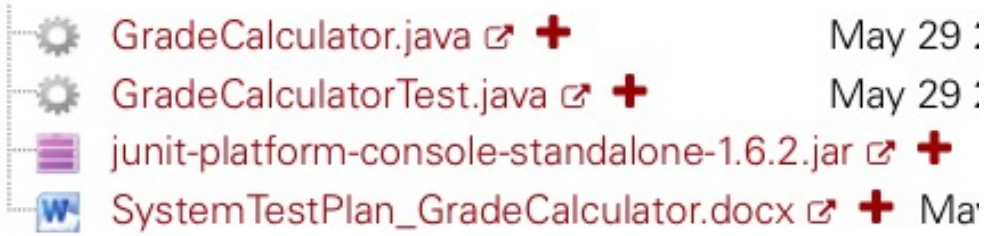
Testing vs. Debugging

- Testing
  - Verify the program behavior
  - Identify the existence of the bugs
- Debugging
  - Locate and fix the bugs

Black-box Testing vs. White-box Testing

- Black-box Testing
  - No code access
  - Manual
  - Programming knowledge is not needed
  - Equivalence portioning, boundary value analysis, …
- White-box Testing
  - Code access
  - Automated
  - Programming knowledge is needed
  - Code coverage: instruction, branch, path…

Lab 7



1. Set up the directory → src, test, lib, bin
2. Read and understand the source code
3. Compile and run both source file and test file
4. Check the expected output and actual output for both system test and unit test
5. Fix the source code
6. Recompile and rerun the source file and test file
7. Add more system tests (at least 10)
8. Implement the tests in the test file
9. Recompile and rerun the source file and test file
10. Iterative process → Fix, recompile, rerun, check the output, fix, …