Rachel Burke

Prof. Panos Linos

SE463

14 March 2018

Assignment 11

In this assignment, the Robust Worst-Case Boundary Value Test was the most effective BVT according to the metrics measured. However, it did not detect all the faults like the Worst-Case Boundary Value Test did. The reason Fault 4 was not detected is there were no test cases that had a weight of 6. It was simply by pure design of the test cases that this fault was not caught.

Similar to the Boundary Value Tests, the Strong Robust Equivalence Class Test was the most effective ECT according to the metrics measured. However, it detected fewer faults than that of the BVT tests, as only Fault 5 was detected. Again, this was caused by the design of the tests. Had values for weight or mileage been chosen, these faults would have been detected.

Lastly, the Decision Table Test and Special Value Test were very effective with the metrics measured but were also ineffective with detecting faults. Again, this is by design. Values could have been chosen that triggered this fault.

Of all the faults, the Multiple-Condition Coverage Test was the most interesting. The Robust Worst-Case BVT included 9/10 of the possible combinations permitted by the program. More impressively, the Strong Robust ECT and the Decision Table Test included all of the possible combinations permitted by the program.

I believe that of the tests used in this program, although the Strong Robust ECT was 100% for all metrics measured, the Robust Worst-Case BVT was the most effective test as it had high metric measurement percentages as well as detected most of the faults.