

4.1 Identify gaps in the Testing Process

The main gaps in the testing come from the purely functional nature and the randomly generated test points.

The purely functional nature of my testing means that there aren't any formal code coverage measures. This means it not possible to state how much of the implementation was exercised and tested. Additionally, techniques such as mutation and fault-injection testing weren't used, so the number of residual faults was not identified.

The randomly generated test points mean that edge cases were potentially not covered, even with tests being repeated 10 times, and the generated points may not reflect real-world usage. A smaller gap is found in the performance testing. While the test used does meet the 30-second requirement, no insight is provided into any potential bottlenecks or how performance is spread.