

3.2 - Evaluation criteria for the adequacy of the testing

As only functional testing was performed, only one set of evaluation criteria was required:

1. Whether implemented tests met or exceed the requirements outlined for it in 1.x
2. How well these tests implemented the test planning document outlined in 2.x

Given this set of evaluation criteria, my system level testing was adequate as it generates a realistic set of delivery locations for the endpoint to visit, and accurately times the response time of my service, asserting that it takes no longer than 30 seconds for any given input, and exactly follows the test plan laid out in the Test Planning Document. This is more than adequate, as for the ILP coursework only a few delivery locations are expected to be handled in a single query, whereas my testing shows that my implementation can handle up to 9 delivery locations before taking over 30 seconds to respond with a path.

My integration level testing was adequate as it fulfils all stated requirements in 1.3, and follows the plans outlined in the Test Planning Document. Functional/black box testing was appropriate, as I was analysing the output of the endpoint, not the internals.

My unit level tests exactly aligned with both the requirements and the test plan, ensuring the lower-level requirements of the path generation were met. One way the quality of testing here could've been improved was if I was using random no-fly zones. As this is coursework, I tested with the provided no-fly zones around the centre of Edinburgh. These zones do test well, as they are a variety of shapes (concave/convex), and have some areas which make corner cutting or going through a zone in one move possible, however for real-world applications you would likely want a more broad level of testing here.