## **Test Results Report**

This report summarizes the execution of test cases for the PizzaDronz system. The testing process aims to verify the correctness, robustness, and efficiency of different system components, including API endpoints, order validation, pathfinding algorithms, and combinatorial logic.

## Summary of test cases executed

Test files can be found in

https://github.com/ediithhh/SoftwareTesting/tree/main/src/test/java/uk/ac/ed/inf

Total tests executed: 147

Tests passed: 147

Test Category	Number of Tests	Passed tests
Unit Tests	40	40/40
Combinatorial Tests	20	20/20
Model-Based Tests	32	32/32
Structural Tests	13	13/13
API Tests	42	42/42

• Test completion time: 11sec 695ms

```
① Ľ ∠ >> ✓ Tests passed: 148 of 148 tests – 11 sec 695 ms

      11sec 695ms
      2025-01-23T22:14:38.388Z
      INFO 14364 --- [PizzaDronz] [

      2sec 5ms
      2025-01-23T22:14:38.393Z
      INFO 14364 --- [PizzaDronz] [

      9sec 64ms
      2025-01-23T22:14:38.396Z
      INFO 14364 --- [PizzaDronz] [

✓ <default package>

> ModelBasedTests

✓ APITests

✓ StructuralTests

                                                                      "orderNo": "77DAD717",

✓ OrderValidationImplTestModelBased

                                                                      "pizzasInOrder": [

✓ NoFlyZoneServiceTest

                                                                           { "name": "R3: Super Cheese", "priceInPence"
    ✓ PathfindingAlgorithmTest

✓ RestaurantServiceTest

  PizzaDronzApplicationTests

✓ PathfindingAlgorithmTestsCombinatorial 335 ms

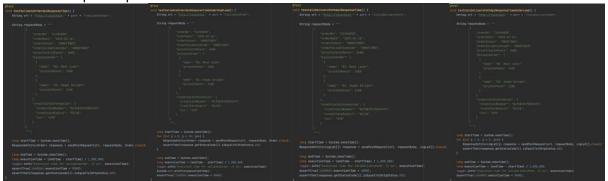
                                                          2025-01-23T22:14:38.400Z INFO 14364 --- [PizzaDronz] [
> PathfindingAlgorithmTestModelBased 33 ms
                                                           2025-01-23T22:14:38.402Z INFO 14364 --- [PizzaDronz] [
  CombinatorialTests

✓ OrderValidationImplTestUnit

                                                                      "position1": { "lng": -3.192473, "lat": 55.946233
                                                                      "position3": { "lng": -3.192473, "lat": 55.946233
```

## Performance tests:

Examples of performance tests:

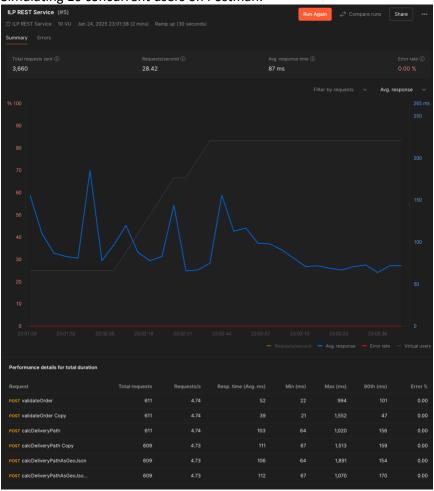


Test log for execution time of calcDeliveryPath:

```
INFO 25229 --- [Pizza@rooz] [http-nio-auto-1-exec-1] o.a.c.c.C.[Tomcat].[localhost].[/] : Initializing Spring DispatcherServlet 'dispatcherServlet'
INFO 25229 --- [Pizza@rooz] [http-nio-auto-1-exec-1] o.s.web.servlet.DispatcherServlet : Initializing Servlet 'dispatcherServlet'
INFO 25229 --- [Pizza@rooz] [http-nio-auto-1-exec-1] o.s.web.servlet.DispatcherServlet : Completed initialization in 0 ms
INFO 25229 --- [Pizza@rooz] [main] uk.ac.ed.inf.APITests : Response from http://localhost:55403/calc@eliveryPath: Status 200 OK, Body [Lng
INFO 25229 --- [Pizza@rooz] [main] uk.ac.ed.inf.APITests : Execution time for calc@eliveryPath: 463 ms
```

Test logs can be found in <a href="https://github.com/ediithhh/SoftwareTesting/blob/main/logs/test.log">https://github.com/ediithhh/SoftwareTesting/blob/main/logs/test.log</a>





## Code Coverage Report

• Overall code coverage:

Classes covered: 95% (20/21)
 Methods covered: 96% (107/111)
 Lines covered: 92% (410/444)

