

PizzaDronz Test Plan

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Requirements

The requirements for the PizzaDronz project are outlined in the [project proposal](#). In summary, the requirements are as follows:

- The system must be able to retrieve data from the REST API, including orders, restaurants and no-fly-zones.
- The system must be able to deserialise the JSON data returned by the REST API.
- The system must be able to validate each order to check if it should be delivered or not.
- The system must be able to calculate the optimal route from a given restaurant to Appleton Tower, without entering any no-fly-zones.
- The system must be able to stitch each route together to create a single route for all orders.
- The system must be able to serialise the route and order validation results into JSON and GeoJSON formats.
- The system must be able to provide these output in three files in the resultfiles directory.
- The system should be able to complete the entire process in under 60 seconds.
- The system should be data driven and scalable to allow for further development in the future.
- The system should be well documented to allow others developers to pick up the project in the future.

Scaffolding and Instrumentation

As this system is only concerned with the data retrieval and route planning, as opposed to the actual delivery system itself, there is little scaffolding or instrumentation required. The testing process will require simulated data to test the system's ability to validate orders and plan routes, as well as the ability to serialise the results into the correct formats. There will also need to be some REST API available to test the order retrieval and deserialisation process.

Process and Risk

Given the small amount of scaffolding and instrumentation required, it will not take long to build it. The simulated data can be written alongside the tests, and will not take much time to complete.