## Requirements:

#### Functional:

- the system must be able to handle the majority of the orders
- the delivery time should be short.
- the drone should be able to handle the weight of the
- orders and the drone should pick up and deliver orders to the right location

### Measurable Quality attributes:

- the drone needs to complete all orders within 1500 moves
- the algorithm chosen has to yield the highest monetary value
- the time the system is offline is minimised
- the software should have a fast runtime of less than 60 seconds
- it should use minimal storage

## Qualitative requirements:

- the flight of the drone should be safe for the public (it does not run out of battery and crash or goes into no fly zones)
- The delivery should be secure for the user with encryption and log on methods
- the software should also be simple to review, maintain and upgrade for the developer
- the orders are delivered safely
- the system is reliable

# level of Requirements:

#### System:

- flightpath modelled should be able to complete deliveries fast and accurately(close to the latitude and longitude location given)
- the flight algorithm should yield the highest average monetary value
- the system should be safe for the public and secure for the users
- the system is reliable. It has a long uptime and the time to get it running again is short.
- The system can be scaled to handle higher loads

# Integration:

- the performance of the software should be fast where it should finish modelling the path in less than 60 seconds and use as little space as possible
- the system is easy to maintain and upgrade

## Unit:

- the software should allow the drone to fly based on data-driven approaches (the no fly zones and pickup point are based on those retrieved from the database and not hardcoded)
- The drone should have a limit on the amount of food it can carry
- the navigation of the drone should be accurate to be able to identify its location.