

This document contains an exhaustive list of requirements, grouped by the type of requirement.

**Functional Requirements:**

1. The system should be able to generate valid drone paths from a pickup point (Appleton Towers) to a drop-off point (a restaurant).
2. The system should be able to save information about orders that have been processed.
3. The system should be able to validate a set of user submitted orders.
4. The system should be able to establish a connection to a web-server and interact with it via HTTP.

**Non functional Requirements / Measurable Attributes:**

1. The system should gracefully handle errors without throwing exceptions and breaking the execution path.
2. The pathfinding should be performant (under 1s per order).
3. The generated paths should be close to optimal.
4. The connection to the web server must be SSL.
5. The system should be robust towards unexpected inputs.
6. The system should be reasonably memory efficient.