# Specification

## Description

The parcel delivery tracking application will allow users across multiple levels of privilege to create, update, view, and cancel deliveries of one or more parcels per order. It will allow updates to the parcels and orders as well as deletion of parcels no longer being sold, and the ability to view metrics of each driver’s total deliveries and average time to complete statistics.

## User types

1. Recipient (The person who receives the parcel)
   1. Can view their orders
   2. Can drill down to view progress of specific order
2. Seller (The person who originally owns the parcel and is sending to the recipient)
   1. Can manage parcels and orders
   2. Can view statistics of driver performance
3. Driver (The person who transports the parcel from Seller to Recipient)
   1. Can record progress of deliveries

## Entities

1. Parcel (A single item being sold)
   1. Id, name, type, weight, sellerId, dateAdded, dateModified, timesSold
2. Order (A group of 1 or more parcels with delivery instructions to a single recipient)
   1. Id, recipient, seller, driver, dateAdded, dateCompleted, completedBy, isCompleted
3. Transaction (An action completed against an order, including “Order collected”, “Order delivered”)
   1. Id, orderId, name, addedBy, dateAdded
4. User (A collection of user details including username, shipping address)
   1. Id, firstName, lastName, username, password, dateAdded, dateModified, address, town, county, postcode, email, phoneNo, isActive
5. Role (A/Some roles can be applied to each user to determine permissions within the application)
   1. Id, name, isActive

## Use cases:

1. **Seller** can create a parcel
2. **Seller** can edit a parcel
3. **Seller** can delete a parcel which is no longer sold
4. **Seller** can create an order
5. **Seller** can edit an order
6. **Seller** can cancel an order
7. **Driver** can view list of deliveries
8. **Driver** can start a delivery by marking the parcel as collected
9. **Driver** can Add delivery progress
10. **Driver** can remove delivery progress when recorded in error
11. **Recipient** can view delivery progress when they are the named recipient
12. **Seller** can view driver metrics including count of deliveries and average times per driver