

## **Scenario:**

### **The Angel Warehouse**

The bay is recognised by a unique bay number, the bay location and the height of the bay. Each bin assigned to a unique number within the bay. Size of each bin is recorded.

Bays have a fork lift to carry items and place items into bins. Maximum carrying weight of the fork lift is stated. Some petrol driven and some electric fork lifts.

Knowledge of the maximum loaded weight for each bin is necessary.

Each item has a unique number given, its weight recorded, and its date. Bins record when an item was put in a specific bin.

### **Entities and Attributes:**

#### **Bay (Entity)**

- Bay Number – 1 (primary key)
- Location – Section A
- Height – 25 meters
- Bin Number – 12 (foreign key)

#### **Bin (Entity)**

- Bin Number – 12 (primary key)
- Height – 3 meters
- Width – 1 metre
- Max Weight – 50kg
- Item Unique Number (foreign key)

#### **Item (Entity)**

- Item Unique Number – 8923 (primary key)
- Weight – 2kg
- Bin Date – 22<sup>nd</sup> September 2024
- Bin Number – 12 (foreign key)
- Bay Number – 1 (foreign key)

#### **Fork Lift (Entity)**

- Fork Lift Number – 3 (primary key)
- Max Carry Weight – 200kg
- Fuel Type – Petrol
- Bay Number – 1 (foreign key)

#### **Item Movement (Event Entity)**

- Item Unique Number – 8923 (foreign key)
- Bin Number – 12 (foreign key)
- Bay Number – 1 (foreign key)
- Bin Date – 21/03/2017