Task 2 – The Angel Warehouse

Scenario

This is a database which stores a record of items that are in this warehouse and the location of which bin and bay the item is stored. It also shows the features of each bay such as if it has a parking space for a fork lift and the fork lift assigned. There is also a way to track which bin the item is currently in if it is to change.

Example entities and attributes

Bays (entity)

Bay_ID – 1234 (primary key)

Bay_location - row 5

Bay_height – 10

Num_of_bins – 50

Parking_spot – yes

Bins (entity)

Bin_ID – b123 (primary key)

Bin_size – 5

Bin_Max_weight – 30

Bay_ID -1234 (foreign key)

Items (entity)

Item_ID – e1234 (primary key)

Date_entered – 10/02/21

Item_weight – 30

Bin_ID – b123 (foreign key)

Fork lift (entity)

Lift_ID – fl123 (primary key)

Bay_ID – 1234 (foreign key)

FL_Max_weight – 20

Fuel_type - petrol

Bin allocation (event entity)

Bin_ID – b123

Item_ID – e1234

Date_allocated – 11/02/21

Example queries

1. Which bin is a specific object in?

   Attributes needed:

   - Bin_ID, item_ID
2. Which bay is a specific fork lift assigned to?

   Attributes needed:

   - Lift_ID, bay_ID
3. Where is a specific bay located?
   Attributes needed:
   - Bay_ID, bay_location
4. When did an item arrive at the warehouse?
   Attributes needed:
   - Item_ID, date_entered
5. How many bins are stored in a specific bay?
   Attributes needed:
   - Bay_ID, Num_of_bins