ISYS2095 – Assessment 1

Adam Mutimer (S3875753)

# Task 1

Diagram

Description automatically generated with medium confidence

I believe my diagram clearly shows my assumptions for this task.

# Task 2

## Part A)

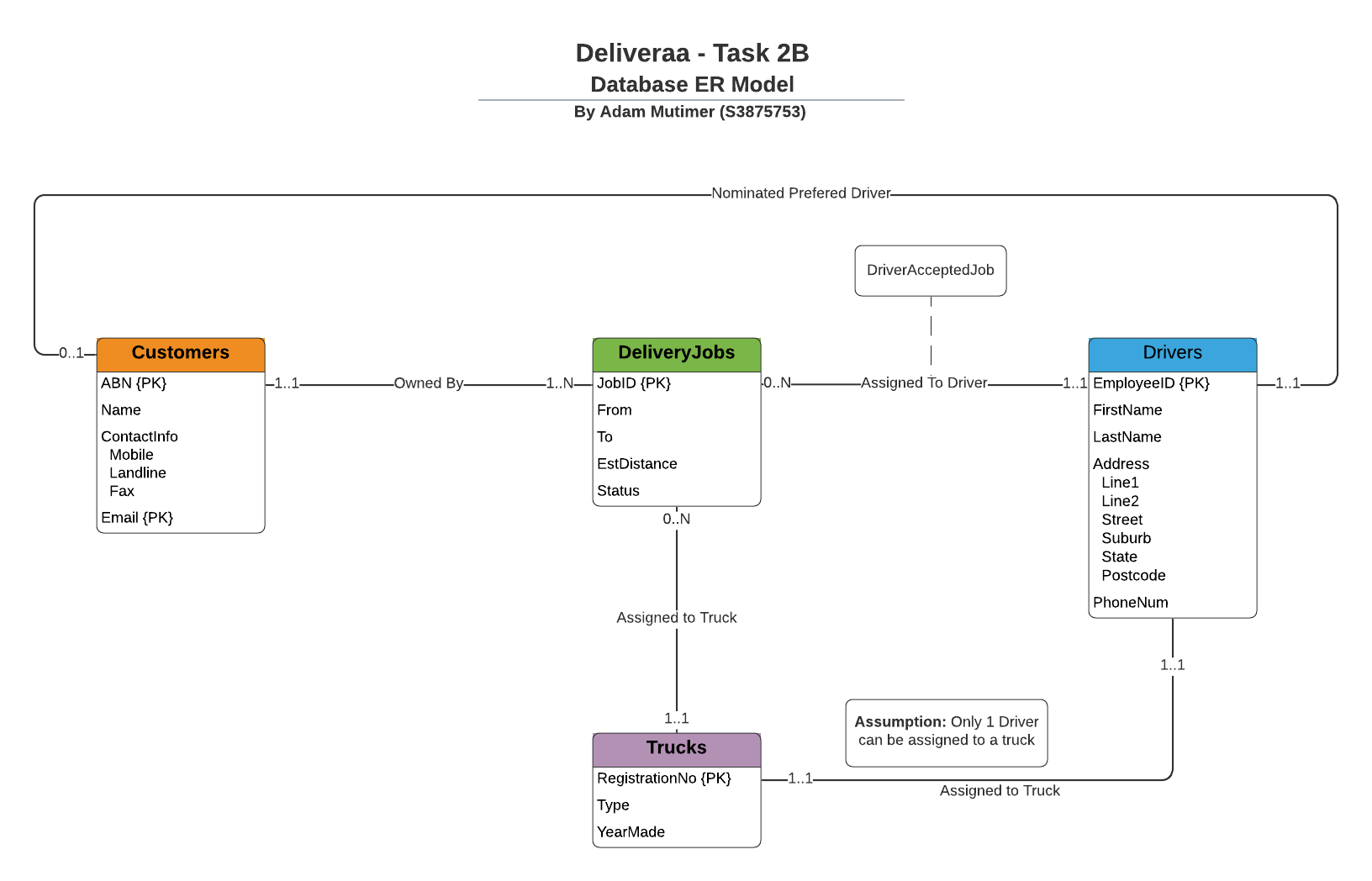
Diagram

Description automatically generated

For this task I believe my assumptions are clear; I have assumed that only one driver can be assigned to a truck as delivery jobs are assigned to both a driver and a truck.

Which is problematic if the delivery assigned to a driver and a truck, but the driver only has one delivery assigned to that truck whilst all his other deliveries are in another truck.

## Part B)

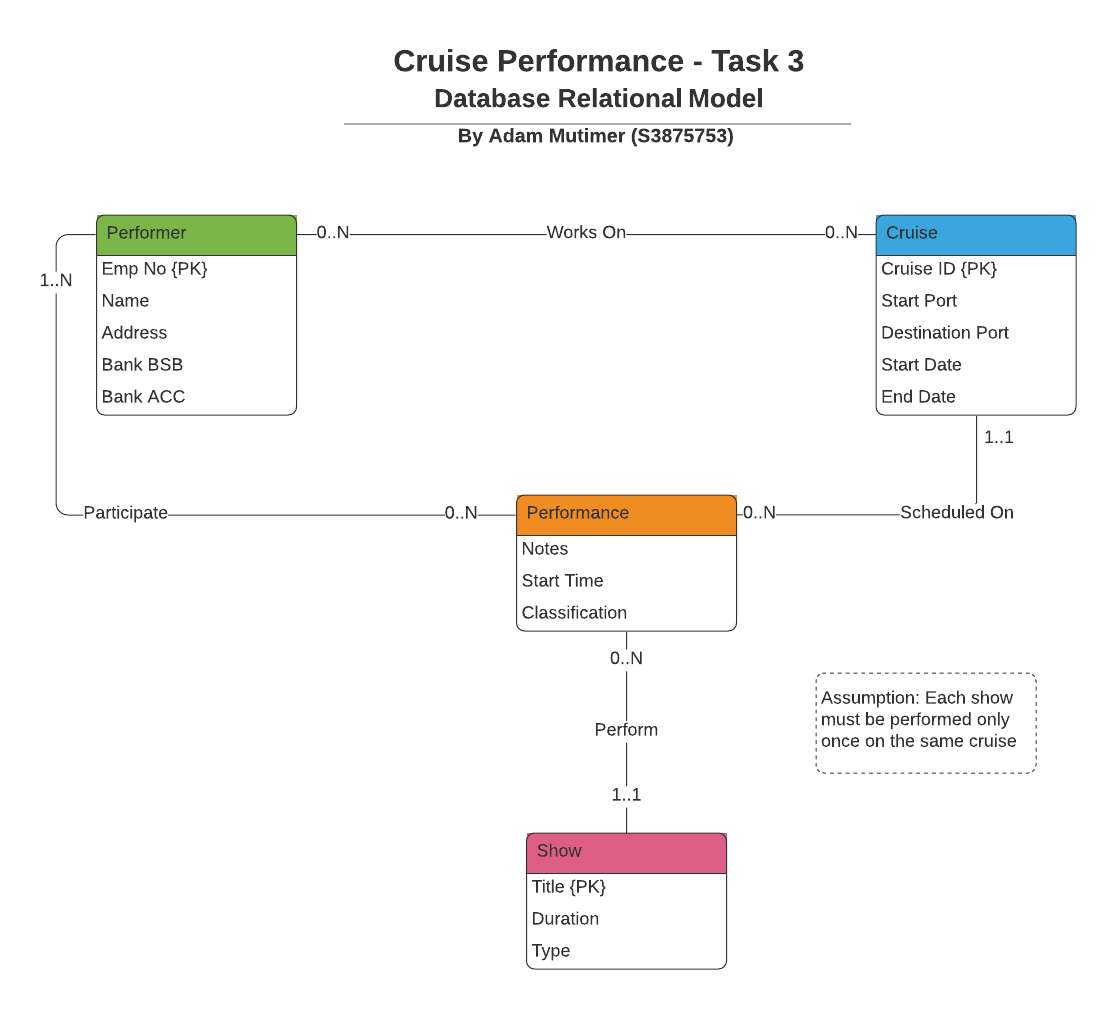


As per the clients change of specification, I have amended the ER model to reflect the new requirements.

* Customers are now able to be assigned a preferred driver (only 1)
* Drivers are now able to accept or reject jobs and a report can be generated using this modal.

All other assumptions remain the same as “Part A” at this time.

# Task 3: Mapping the ER model to the relational model



Step 1: Map Entities

#### Map 1:1 relationship’s

Performer (Emp No, Name, Address, Bank BSB, Bank ACC)

Cruise (Cruise ID, Start Port, Destination Port, Start Date, End Date)

Show (Title, Duration, Type)

#### Map weak entities

Performance (Show\_Title\*, Notes, Start Time, Classification)  
Together (Title, Start Time) form the primary key of the new relation (underlined)

Step 2: Map Relationships

#### Map 1:1 relationship’s

Performance (Notes, Start Time, Classification, Show\_Title\*, Cruise\_ID\*)

Scheduled On (Cruise\_ID\*, Performance\_Time\*)

#### Map 1:n relationship’s

#### Map N:M relationship’s

Works On (Emp No\*, Cruise ID)

The below diagram I made while mapping out the diagram and isn’t required by this task or assignment and is only included as I found it useful.

