



ASSUMPTIONS:

- Each person lives in one unique address.
- Some customers could have more than one type of phone number; if this is the case, they must choose only one phone number as their primary phone number for the organisation to record.
- The address entity set does not need to have the country attribute because this ERD is only for Sails: Water Taxi Service which is based in Auckland, New Zealand.
- A person can be both a staff and a customer.
- A staff must at least have one skill to be able to operate at least one type of vehicle.
- The same skill can be obtained by many staff members and the same skill requirement may be common amongst many vehicles.
- A vehicle must be assigned to at least one staff (e.g. multiple cleaners, mechanical engineers, etc.) and each vehicle must have at least one skill required for its operation.
- A vehicle must need at least one type of maintenance work and the same type of maintenance work can be required for many vehicles.
- Only one vehicle is used per taxi ride.
- Each port has a unique address.
- The customers who charter whole vehicles (or place charter-orders) are members of the organisation's loyalty scheme.
- A vehicle must at least be assigned to one taxi ride unless the vehicle is under maintenance.
- There must be at least one taxi ride ticket that is assigned to an unchartered taxi ride.
- If staff is a manager, then that staff is not managed by anyone else and if the staff is managed by a manager, then that staff do not manage anyone else.
- Some taxi ride tickets do not belong in a season ticket if they are strictly individual tickets.
- Not all customers that are in the database charter whole vehicles; some customers are in the database because they buy many taxi rides (unchartered taxi rides) and make the payment in advance.
- A chartered taxi ride must only belong to one unique charter order.
- Each person in the database can only choose one other name for the organisation to record.
- Each person must have at least one type and each type can be common amongst many people.
- Some member special offers do not apply to some charter orders because the members who placed those charter orders may not live in the right city and some charter orders do not have a unique offer available because it may not be the right month.
- Each supplier in the database is considered as an organisation.
- Only one staff (a driver) is scheduled to operate each taxi ride.