

Figure ERD for the Auto Dealership Database

The ERD below fixes the errors in the original ERD. The following list describes the problem resolutions.

* If account has a unique identifier, ‘Account’ entity cannot be a weak entity type. Hence, the relationships must be changed to regular (diagram error).
* For company accounting purposes, a single account is used for the purpose. Hence Cardinality for ‘IncomeOf’ near account should be (1, 1). One complete payment can be completed through number of modes. Hence, cardinality for payment has to be M (many) (design error).
* The cardinality of the ‘ExpenseOf’ relationship near the account entity should be (1, 1) since the accounting information is stored under single account. The accounting cannot be done for separate accounts. Multiple expenses are made, so the cardinality has to be more than one on expense entity (design error).
* The attribute ‘Transmission type – auto or manual’ missing in the entity ‘Vehicle’ (Diagram error).
* If the sold relation is not eliminated, that would make the diagram redundant because the sale is to be made by Employee once details are received by process relationship.
* A vehicle cannot be necessarily associated to a customer and an employee. It can be associated once a sale process starts, however it can remain in the parking lot for a good time before sale. Hence makesale and purchases on employee and customer side should be 0, 1.



Figure Suggested ERD