

Errors

- Diagram Errors
 - Identification dependency cardinality rule
 - Weak entity Account has minimum cardinality of zero Payments
- Design Errors
 - Incomplete specification
 - It is not clear if customers are tracked independently of purchases (for marketing purposes for example, and therefore what the minimum cardinality should be.
 - Incorrect cardinalities
 - Vehicles are on the lot for some period before a sale occurs. The minimum cardinality of vehicle payments, customer and sale employee is zero.
 - Expenses belong to one and only one account. An account may have many expenses.
 - Payments can belong to one and only one account. Accounts can have many payments.
 - Redundant relationships
 - Employees that process payments can be derived from employees that makes sales.
 - Overuse of specialized modeling construct: identification dependency
 - Account need not be identified by payments and expenses.
 - Missing Attribute
 - Vehicles has a transmission type
 - Customers have both primary and cell phone numbers
 - Attribute Expansion
 - Payments may have zero credit cards so credit card attributes are given their own entity
 - Missing Relationship
 - Employees also purchase vehicles

Revised

