

Topic :-Case Study On Johnson

Car dealership

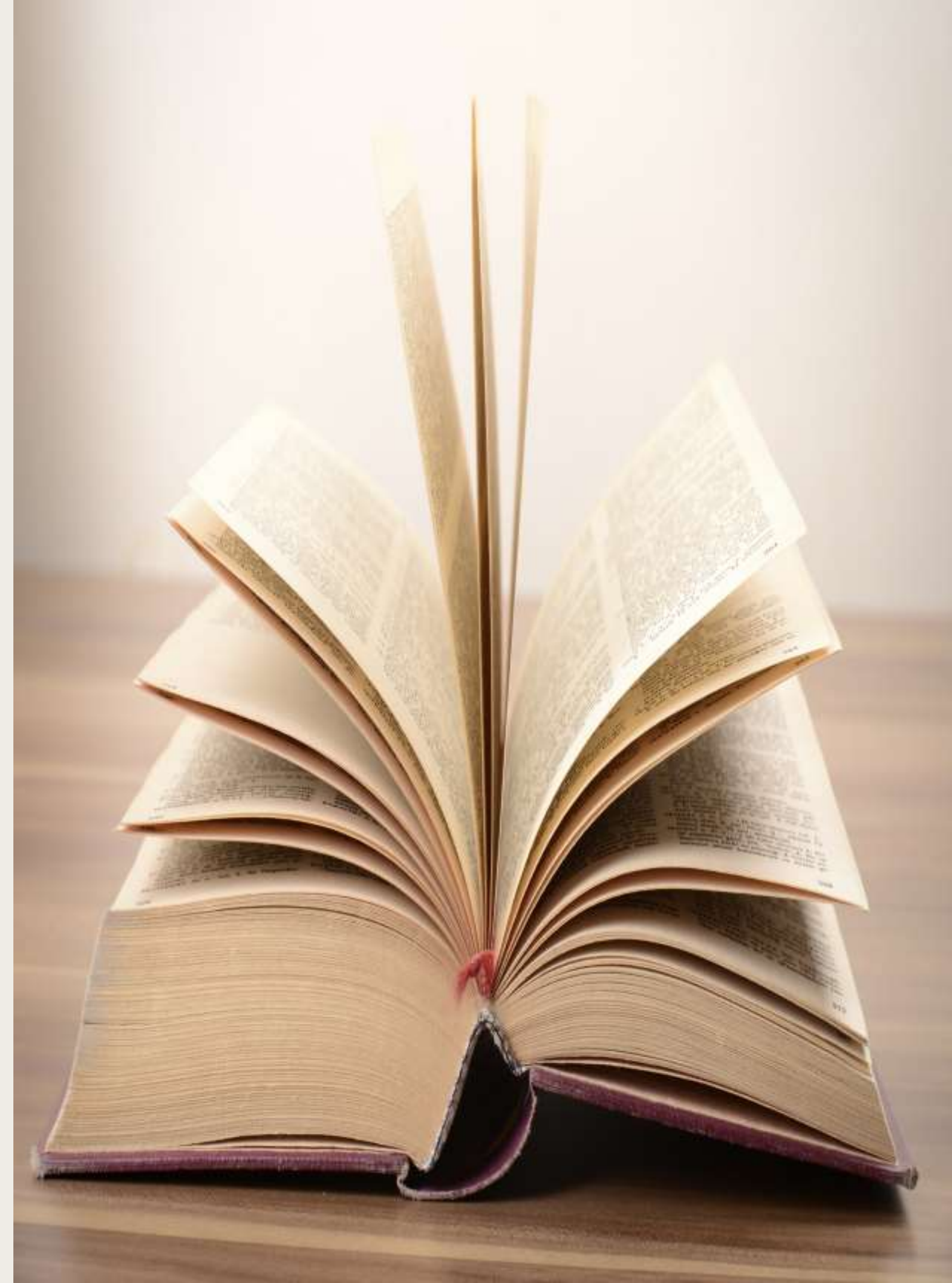
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Company Overview

Johnson Motors owns three dealerships in Calgary. They are looking to upgrade their outdated database system that lacks data sharing and causes conflict between salespeople. Discover the history, vision, and core values that drive our successful automotive dealership business.



Our Purpose

The implementation of a new Centralized relational database system at Johnson Motors will provide enhanced customer insights, improved sales efficiency, and increased customer satisfaction through personalized experiences.



Goals

1. Allowing Flexibility and scalability needed as the dealerships grow.
2. Vehicle Inventory Tracking
3. Integrated Communication channels within organization



➤ List of Subjects :

1. Location
2. Customer
3. Sales_Person
4. Vehicle
5. Deal



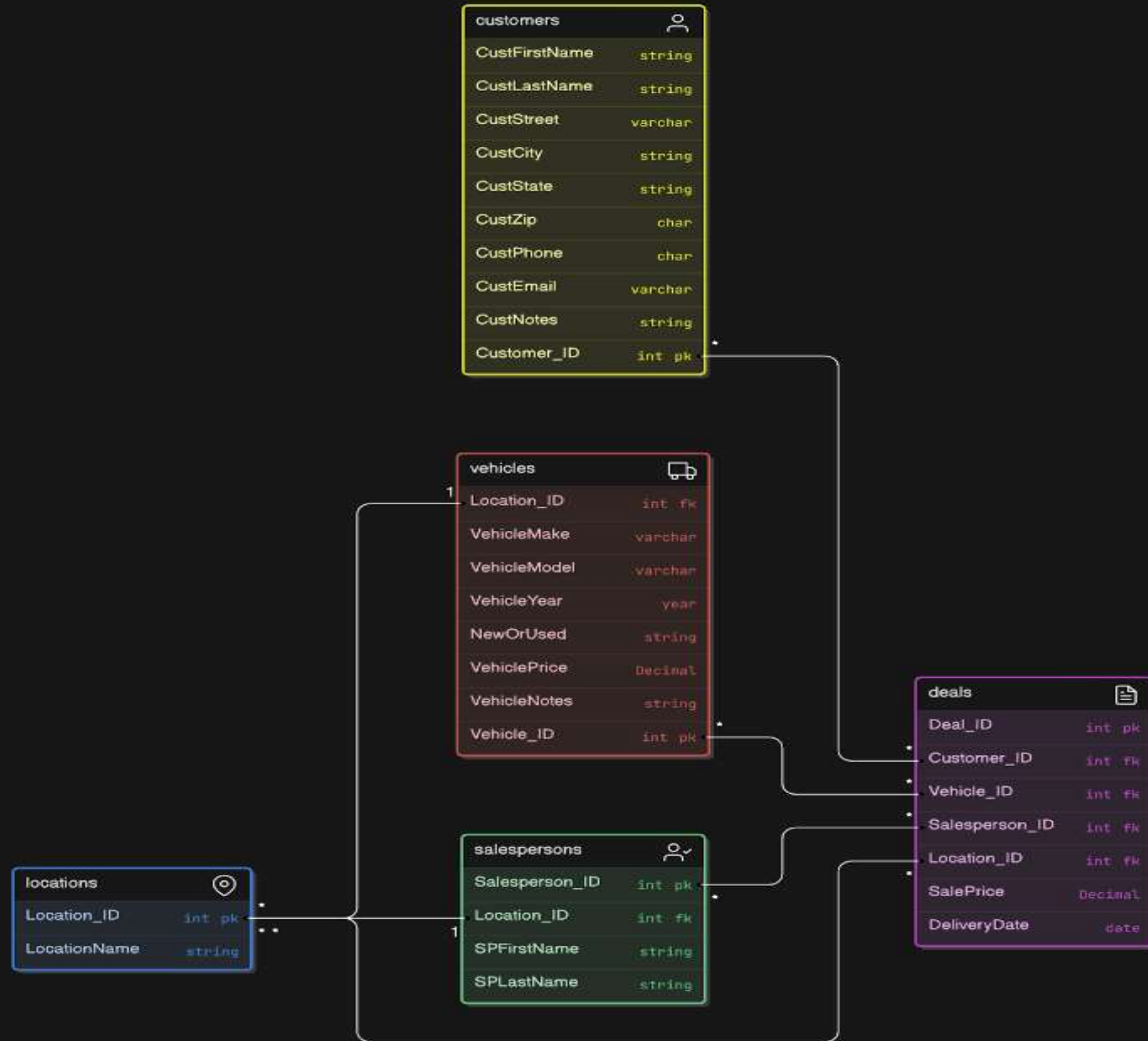
➤ List of Tables :-

1. Location : Store dealerships location details.
2. Customer : Stores information about the customers who make purchases.
3. Salesperson : Contains information about the salesperson.
4. Vehicle : Stores information about the vehicles available in inventory.
5. Deal - Records details of each sales transaction, including the customer, salesperson, sale date, total amount.



ER Diagram

Car Dealership ERD →



Entity Relationships

❖ **Customers and Deals** : Relationship: One-to-Many (One Customer to Many Deals)

Definition: Each customer can participate in multiple deals, but each deal is associated with one customer.

❖ **Locations and Salespersons**

Relationship: One-to-Many (One Location to Many Salespersons)

Definition: Each location can have multiple salespersons working at it, but each salesperson is associated with one location.

❖ **Locations and Vehicles**

Relationship: One-to-Many (One Location to Many Vehicles)

Definition: Each location can have multiple vehicles stored or available, but each vehicle is associated with one location.

❖ **Salespersons and Deals**

Relationship: One-to-Many (One Salesperson to Many Deals)

Definition: Each salesperson can facilitate multiple deals, but each deal is facilitated by one salesperson.

❖ **Locations and Deals**

Relationship: One-to-Many (One Location to Many Deals)

Definition: Each location can host multiple deals, but each deal takes place at one location.

Importances of Relational database

- ❑ Logical connections

- ❑ Refining Table
Structure

- ❑ Data retrieval
efficiency

- ❑ Ensuring Integrity

Attribute Specification

1

Dealer Management System

Inventory data, sales records, customer profiles, employee management

2

Vehicle Attributes

Make, model, year, mileage, condition, price, features, images

3

Customer Attributes

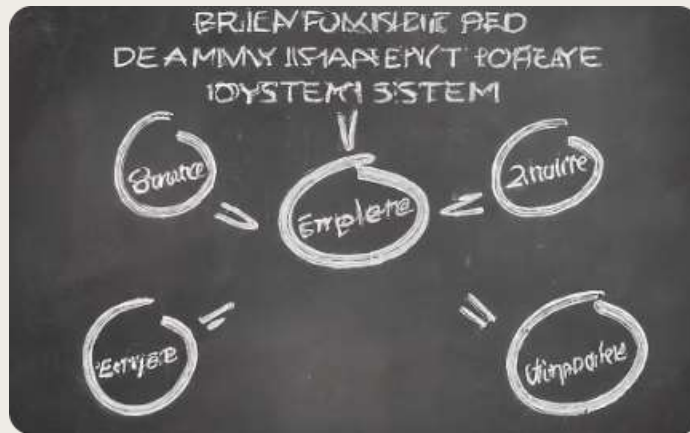
Name, contact info, purchase history, preferences, financing details

4

Employee Attributes

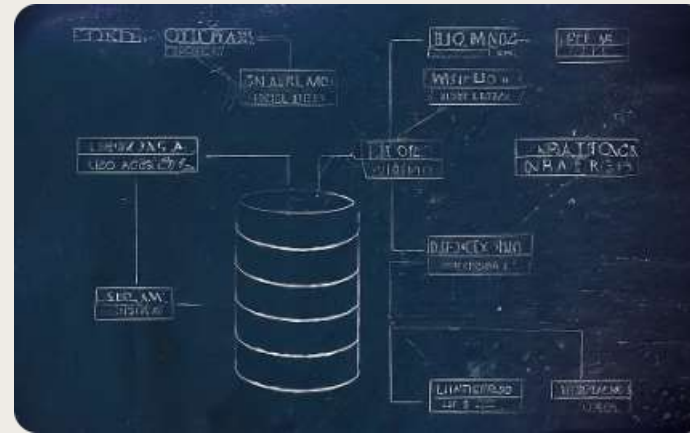
Name, role, contact info, sales performance, customer feedback

Data Integrity Constraints



Referential Integrity

Ensures consistency between related data across tables.



Entity Integrity Constraints

There can be null values anywhere in the table except the primary key column.



Domain Constraints

Ensuring that only valid data entered. Data type can be string, integer, character etc.

Conclusion

Bringing it all together - a comprehensive data-driven approach to powering the dealership's success.







Developing the skill to provide constructive feedback is essential, and it's a distinct ability that needs nurturing. Participate actively in group discussions and provide valuable feedback on the presentations. Remember to assess your own performance in comparison to other groups at the end.

Your group:	G-	Date:	
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Presentation title:

Criteria:	Beginning [0-3]; Developing [4-6]; Accomplished [7-9]; Excellent [10]
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Group Number	Content clarity, organization and Delivery [0-10]	Table/entity identification [0-10]	Relevance of the attribute to the table [0-10]	Relationships and associations and their degree [0-10]	Database diagram [0-10]	Total Score [50]	Your written constructive feedback on the presenting group
G-1	10	9	9	9	9	46	All good
G-2	9	9	9	9	9	45	Good presentation
G-3	9	9	9	9	9	45	Overall Good presentation
G-4	8	8	8	8	8	40	Good Work
G-5	10	8	8	9	9	44	All good work by work