

# Week 4 - ERD Assignment

## USE ERD to Create SQL Database

### *Car Dealership*

*Create an ERD for a car dealership. The dealership sells both new and used cars, and it operates a service facility. Base your design on the following business rules:*

- 1. A salesperson may sell many cars, but each car is sold by **only one** salesperson.*
- 2. A customer may buy many cars, but each car is **purchased by only one customer**.*
- 3. A salesperson writes a **single invoice** for each car he or she sells.*
- 4. A customer gets **an** invoice for each car he or she buys.*
- 5. A customer may come in just to have his or her car serviced; that is, **a customer need not buy a car to be classified as a customer**.*
- 6. When a customer takes one or more cars in for repair or service, **one service ticket is written for each car**.*
- 7. The car dealership maintains a service history for each of the cars serviced. The service records are referenced by the car's serial number.*
- 8. A car brought in for service can be worked on by many mechanics, and each mechanic may work on many cars.*
- 9. A car that is serviced may or may not need parts (e.g., adjusting a carburetor or cleaning a fuel injector nozzle does not require providing new parts).*

*After the tables have been created, use SQL to add data to the database*

Each person will need to create their own ERD diagram using Lucidchart and create their own SQL database.