**Project Summary**

For our project, we have chosen to make an application to model the employees, products, and transactions of a chain of car dealerships. We will have the functionality of purchasing a car with different customers, salesman, cars, etc. We will also be able to change the attributes of cars, customers, salesman, and dealerships.

**Technical Details**

Our database will be built in SQL Server Management Studio. Our current plan is to pull the information from SQL into C# using Microsoft Visual Studio. Using two Microsoft products will allow for a more seamless flow of information. We will use Visual Studio to create the end user GUI that is used to manage the database.

**Relations**

Customers(CustumerID, FirstName, LastName, PhoneNumber, AddressID, Email)

Dealerships(DealershipID, Name, AddressID, OpenTime, CloseTime, PhoneNumber)

Cars(CarID, Make, Model, Year, Color, Milage, OwnerCount, Dealership, AskPrice, PurchasePrice, Sale, PurchaseDate)

Employees(EmployeeID, FirstName, LastName, PhoneNumber, AddressID, Email, Salary, DealershipID, Title)

Sales(SaleID, EmployeeID, CustomerID, DateSold, CarID, SaleAmount, PurchasePrice, DealerShipID)

Address(AddressID, City, State, Street1, Street2, ZipCode)

CarFeatures(CarID, FeatureID)

Features(FeatureID, Name)

**Data Interactions**

Customers - Select, Insert, Update

Dealerships - Select, Insert, Update

Cars - Select, Insert, Update

Employees - Select, Insert, Update

Sales - Select, Insert

Address - Select, Insert, Update

CarFeatures - Select, Insert, Update

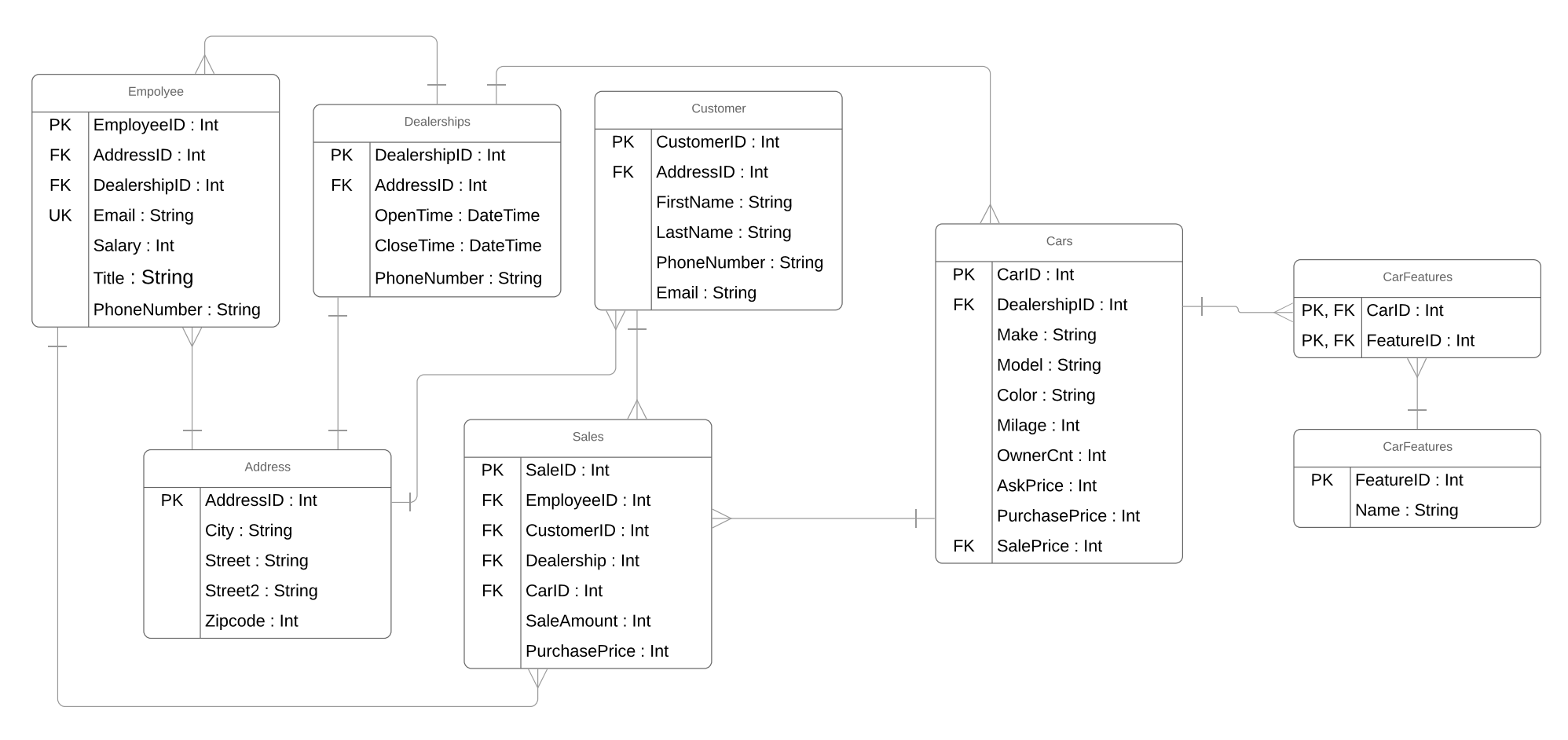
Features - Select, Insert, Update, Delete

**ER Diagram**

<https://www.lucidchart.com/invitations/accept/c217e731-e797-4be9-b43d-805017f3c677>

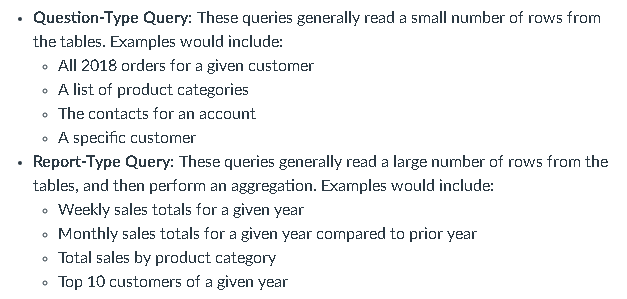
Username: [bkrull@ksu.edu](mailto:bkrull@ksu.edu)

Password: CIS560group14

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**Tasks:**

* Git repo: [git@github.com](mailto:git@github.com):BKrull9/560\_grp\_14.git
  + <https://github.com/BKrull9/560_grp_14.git>
* Create Table scripts
* Populate tables with fake data
* Possible queries (i.e. employee sales, dealership sales, ask vs sell price, etc.)
* GUI design (client, admin)



**Queries:**

* Report:
  + Employee Performance (ask vs sale price, cars sold)
    - Over Date range
    - Total sales
    - Sales over asking price
  + Dealership Performance
    - Over Date range
    - By week/month/year
  + Fetch features of a car
* Question:
  + List of Cars/Search
    - List by Make | Model | etc. (this could be hard to do “right” i.e. repopulating drop downs when making selections/no Ford makes when Honda is selected)
    - Specific car Information (w/ features)
  + List of Employees
    - Specific Employee Information (w/ sales #, save more detail for report)
  + Customer information
  + Statistics of Current Stock
* Random:
  + Add Customer/Employee/Car

**Pages:**

* Sell Page
* Car Info Page
* Cars list (with search) – click a car to sell it -> go to sell page
* Employees list
* Dealership list
* Main Menu
* Management