5/11/2015

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[company name]

Leaf & Lawn

Relational Database design proposal

**Executive Summary**

This database describes a landscaping company (Leaf and Lawn). This landscaping company does not only focus on cutting grass and trees, it focuses on its customers, employees and equipment.  The company has multiple employees, trucks and equipment that they must keep track of. They service many customers in different towns.

This database will keep track of their employees, customers, trucks and equipment, payments and appointments.

Upon completion this database will be able to:

·      Keep track of who their customers are.

·      What service their customers require.

·      When the service is required.

·      Who completed the service.

·      Time spend on service.

·      Cost of service.

·      Equipment and tools own by the company.

·      Service date/ Record of equipment/ Trucks.

·      An employee will be able to take multiple orders daily and an order can have multiple

employees.

·      A customer may have multiple homes but each home may have one customer.

·      An employee may use multiple equipment.

·      And vehicle may be driven by many employees’ daily.

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Create Statements

CREATE TABLE Appointment

(

AppointmentId INTEGER NOT NULL ,

"Date" DATE ,

TIME DATE ,

Customers\_CustomerId INTEGER NOT NULL ,

Service\_ServiceId INTEGER NOT NULL ,

Employees\_EmployeeId INTEGER NOT NULL ,

Vehicle\_VIN VARCHAR2 (20) NOT NULL ,

Equipment\_SerialNo INTEGER NOT NULL ,

Property\_PropertyId INTEGER NOT NULL ,

Property\_CustomerId INTEGER NOT NULL

) ;

ALTER TABLE Appointment ADD CONSTRAINT Appointment\_PK PRIMARY KEY ( AppointmentId ) ;

CREATE TABLE Customers

(

CustomerId INTEGER NOT NULL ,

FName VARCHAR2 (20) NOT NULL ,

LName VARCHAR2 (20) NOT NULL ,

SpouseFName VARCHAR2 (20) ,

SpouseLName VARCHAR2 (20) ,

Street VARCHAR2 (20) NOT NULL ,

City VARCHAR2 (30) NOT NULL ,

State VARCHAR2 (30) NOT NULL ,

Zip CHAR

-- WARNING: CHAR size not specified

NOT NULL ,

Phone\_home VARCHAR2 (20) ,

Phone\_work VARCHAR2 (20)

) ;

COMMENT ON COLUMN Customers.SpouseFName

IS

'Optional' ;

COMMENT ON COLUMN Customers.SpouseLName

IS

'Optional' ;

COMMENT ON COLUMN Customers.Phone\_work

IS

'Extention: optional' ;

ALTER TABLE Customers ADD CONSTRAINT Customers\_PK PRIMARY KEY ( CustomerId ) ;

CREATE TABLE Employees

(

EmployeeId INTEGER NOT NULL ,

SSN CHAR (9) ,

FName VARCHAR2 (20) NOT NULL ,

LName VARCHAR2 (20) NOT NULL ,

Street VARCHAR2 (20) NOT NULL ,

City VARCHAR2 (30) NOT NULL ,

State VARCHAR2 (30) NOT NULL ,

Zip CHAR

-- WARNING: CHAR size not specified

NOT NULL ,

Phone\_home VARCHAR2 (20) ,

Phone\_work VARCHAR2 (20)

) ;

COMMENT ON COLUMN Employees.Phone\_work

IS

'Extention: optional' ;

ALTER TABLE Employees ADD CONSTRAINT Employees\_PK PRIMARY KEY ( EmployeeId ) ;

CREATE TABLE Equipment

(

SerialNo INTEGER NOT NULL ,

Name VARCHAR2 (20) ,

Make VARCHAR2 (30) ,

Model VARCHAR2 (30) ,

PurchaseDate DATE ,

ServiceDate DATE ,

Use VARCHAR2 (30)

) ;

ALTER TABLE Equipment ADD CONSTRAINT Equipment\_PK PRIMARY KEY ( SerialNo ) ;

CREATE TABLE Property

(

PropertyId INTEGER NOT NULL ,

CustomerId INTEGER NOT NULL ,

Street VARCHAR2 (30) CONSTRAINT NNC\_Property\_Street NOT NULL ,

City VARCHAR2 (30) CONSTRAINT NNC\_Property\_City NOT NULL ,

State VARCHAR2 (30) CONSTRAINT NNC\_Property\_State NOT NULL ,

Zip CHAR

-- WARNING: CHAR size not specified

CONSTRAINT NNC\_Property\_Zip NOT NULL ,

SquareFt NUMBER

) ;

COMMENT ON COLUMN Property.SquareFt

IS

'Size' ;

ALTER TABLE Property ADD CONSTRAINT Property\_PK PRIMARY KEY ( PropertyId, CustomerId ) ;

CREATE TABLE Service

(

ServiceId INTEGER NOT NULL ,

ServiceType VARCHAR2 (50) ,

PricePerSqFt NUMBER

) ;

ALTER TABLE Service ADD CONSTRAINT Service\_PK PRIMARY KEY ( ServiceId ) ;

CREATE TABLE Vehicle

(

VIN VARCHAR2 (20) NOT NULL ,

Make VARCHAR2 (20) ,

Model VARCHAR2 (20) ,

Color VARCHAR2 (20) ,

YEAR CHAR (4) ,

Plate# VARCHAR2 (10) ,

PurchaseDate DATE ,

LastServiceDate DATE

) ;

ALTER TABLE Vehicle ADD CONSTRAINT Vehicle\_PK PRIMARY KEY ( VIN ) ;

ALTER TABLE Appointment ADD CONSTRAINT Appointment\_Customers\_FK FOREIGN KEY ( Customers\_CustomerId ) REFERENCES Customers ( CustomerId ) ;

ALTER TABLE Appointment ADD CONSTRAINT Appointment\_Employees\_FK FOREIGN KEY ( Employees\_EmployeeId ) REFERENCES Employees ( EmployeeId ) ;

ALTER TABLE Appointment ADD CONSTRAINT Appointment\_Equipment\_FK FOREIGN KEY ( Equipment\_SerialNo ) REFERENCES Equipment ( SerialNo ) ;

ALTER TABLE Appointment ADD CONSTRAINT Appointment\_Property\_FK FOREIGN KEY ( Property\_PropertyId, Property\_CustomerId ) REFERENCES Property ( PropertyId, CustomerId ) ;

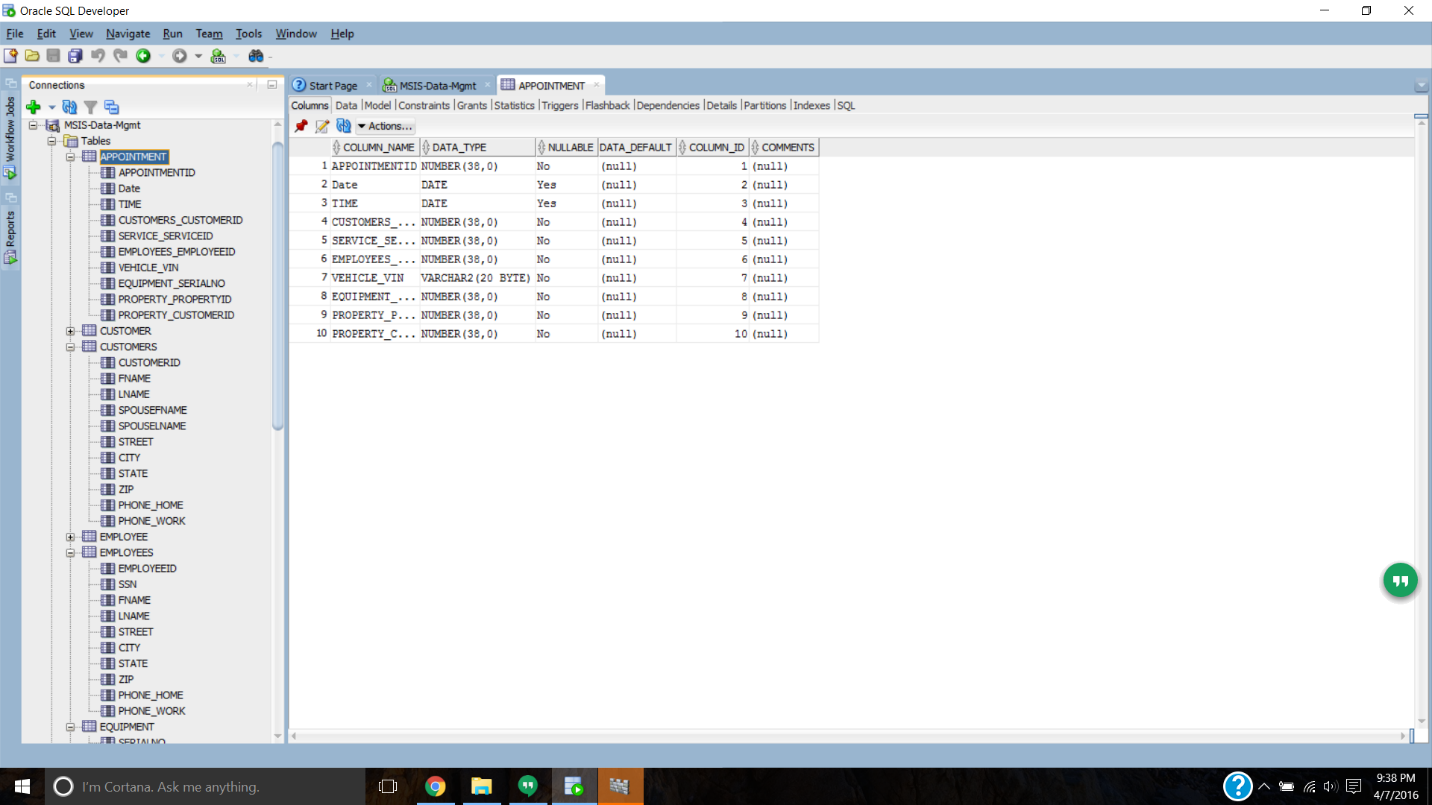
ALTER TABLE Appointment ADD CONSTRAINT Appointment\_Service\_FK FOREIGN KEY ( Service\_ServiceId ) REFERENCES Service ( ServiceId ) ;

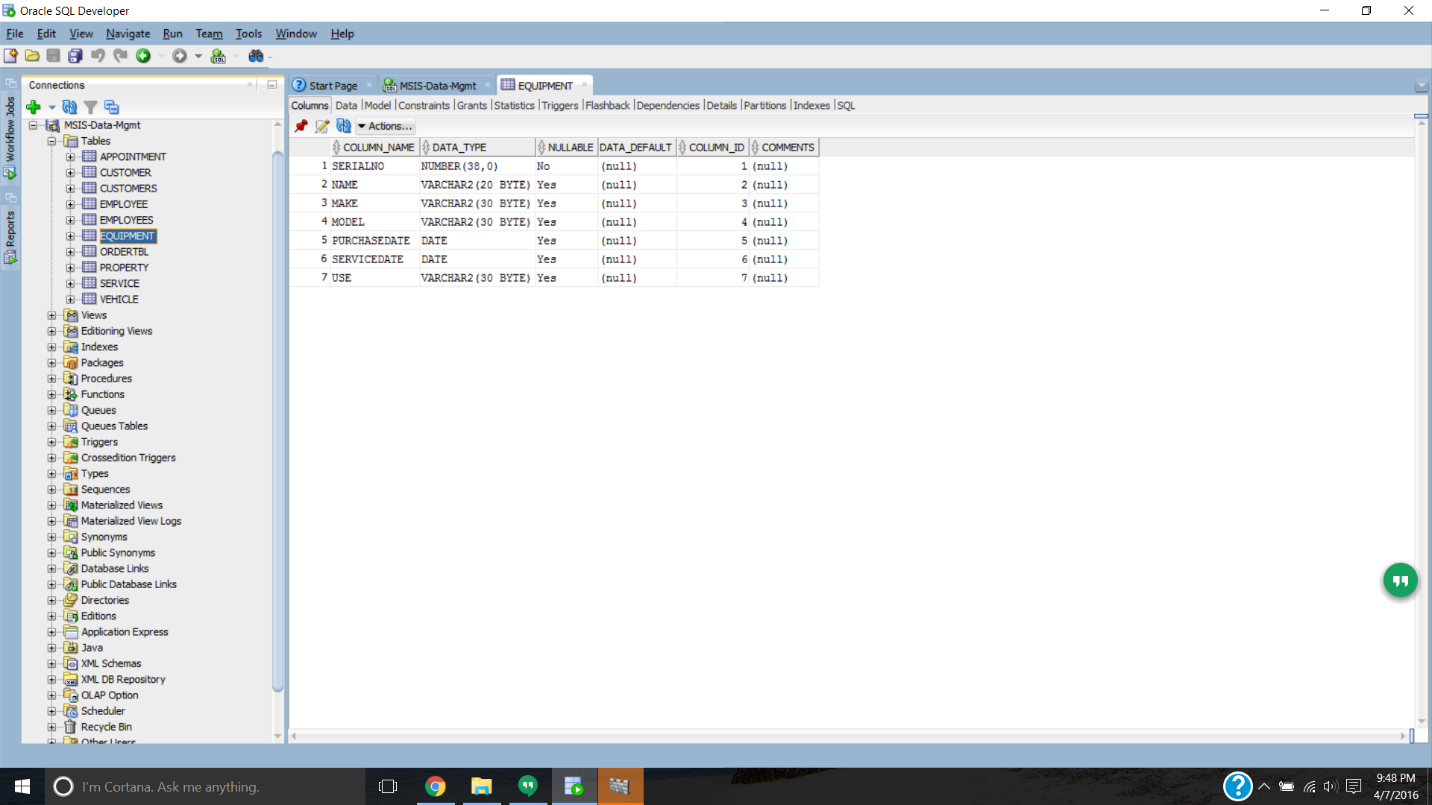
ALTER TABLE Appointment ADD CONSTRAINT Appointment\_Vehicle\_FK FOREIGN KEY ( Vehicle\_VIN ) REFERENCES Vehicle ( VIN ) ;

ALTER TABLE Property ADD CONSTRAINT Property\_Customers\_FK FOREIGN KEY ( CustomerId ) REFERENCES Customers ( CustomerId ) ;

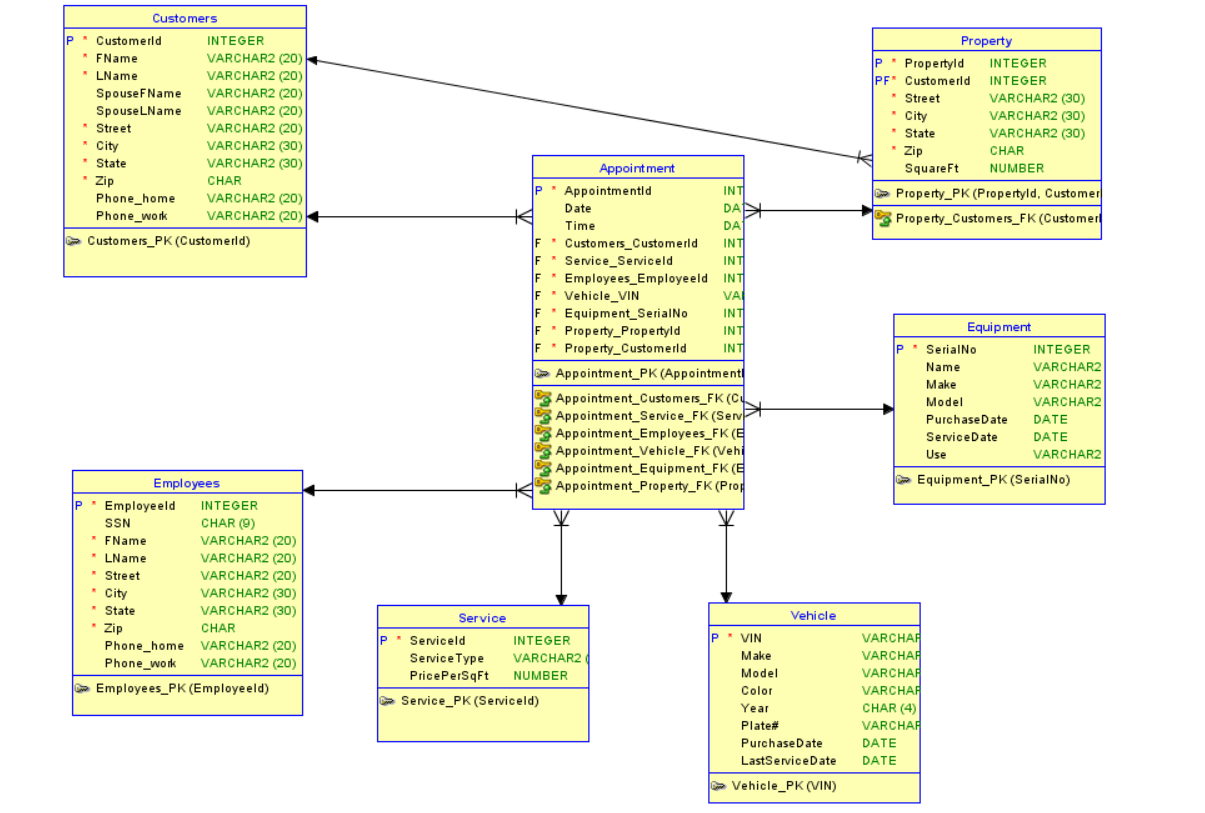
Bottom of Form

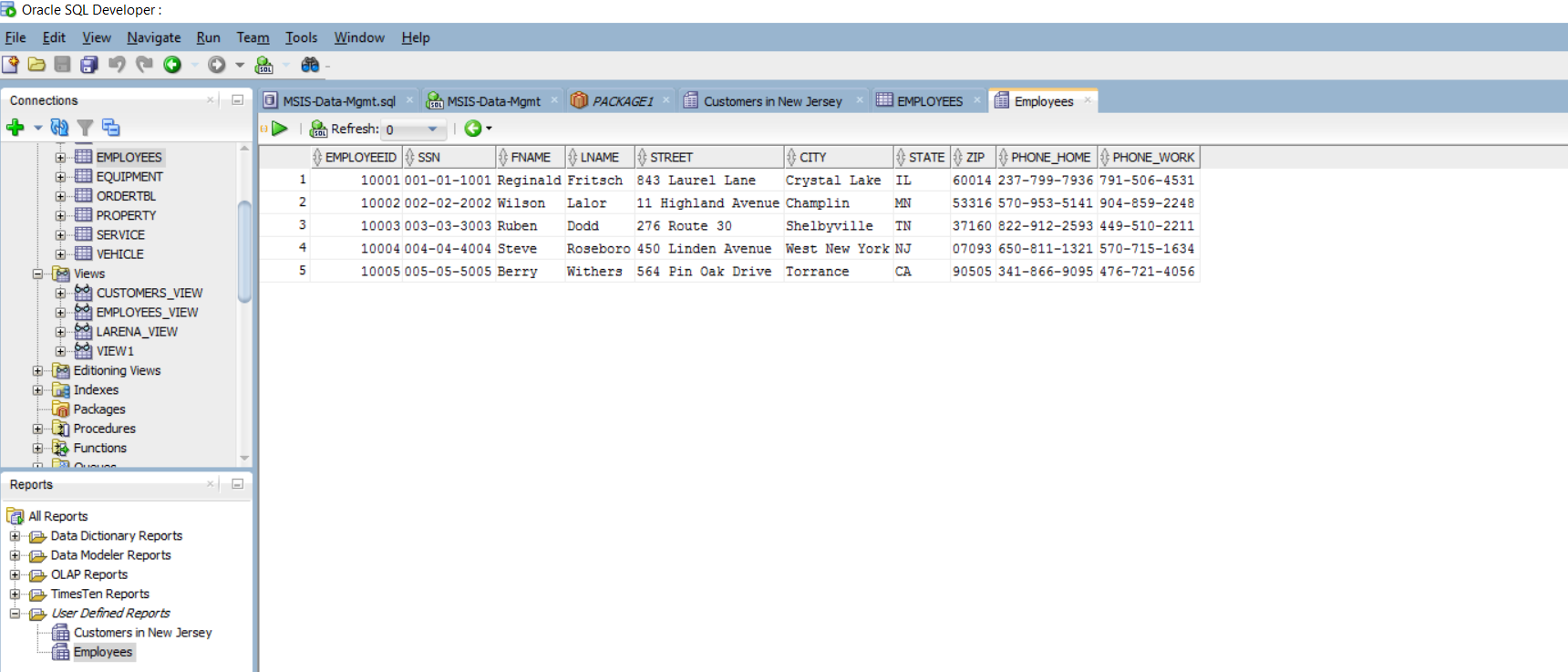
Tables





ERD



Reports

Employees

reports

Customers in NJ

