# Assignment 3 – Table Creation

In this assignment, we will start actually writing some SQL. We will write this as a script to create a new database and create our tables. In the process of creating our tables, we will also script our primary keys.

Using your ERD as a blueprint, construct a script that:

1. Creates a new database. Ensure that you name your database something that makes sense for the project.
2. Create each table. Ensure that you have a good primary key. Pay careful attention to data types and nullability.
3. Create foreign keys in your tables so that they refer to each other to model the relationships in the ERD. Note that this can cause a dependency in the order that you create the tables. If you can’t change the table creation order, you can create a foreign key manually (see below).

When this is completed, run your script in SSMS and confirm that the database and the tables exist.

A few things that you might need to know:

Creating a database:

CREATE DATABASE name

go

Dropping (deleting) a database:

DROP DATABASE name

go

Creating a foreign key outside of table creation:

ALTER TABLE tableName ADD CONSTRAINT FK\_tableName\_otherTableName

FOREIGN KEY (columnInThisTable) REFERENCES otherTableName(otherTablePK)

go

**Your script must have a .sql extension and must be uploaded to blackboard. A script that doesn’t run is an automatic 0.**

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| Rubric | Poor | OK | Good | Great |
| Create Database | Doesn’t exist (0) |  | Exists, poor name (3) | Exists, good name (5) |
| Tables | No Tables (0) | Some tables created (4) | Most tables created (7) | All tables from ERD created (10) |
| Attributes | No attributes (0) | Some attributes created (4) | Most attributes created (7) | All attributes created (10) |
| Data Types | Most datatypes wrong (0) | Some datatypes correct (7) | Most datatypes correct (14) | All datatypes reasonably correct (20) |
| Nullability | Nullability missing or always same (0) | Some nullability correct (7) | Most nullability correct (14) | All nullability correct (20) |
| Primary Keys | No PKs (0) | Some good PKs (7) | Mostly good PKs (14) | All correct PKs (20) |
| Naming | Naming inconsistent or awful (0) | Naming follows some standard (2) | Naming consistent, not to slides standard (4) | Naming follows slides (5) |
| Foreign Keys | Missing (0) | Some exist (4) | Most exist (7) | All exist (10) |