

MSDA 607 - Project 1 - Shazia Khan

1. The Purpose of the Database:

This is a school management system. A family moves into the school area and goes to school to register their students. Information for both parents and students are entered into the system. The students are assigned to classroom. The classroom has a teacher which teaches a subject to the students.

2. Tables are create in the database, and populated using sql statements:

Please see [Project 1 - School Registration.sql](#) file

-----To receive 85%-----

1. You need to have at least 3 rows in each table.



2. You must use at least four tables, and have at least one one-to-many and one many-to-many relationship.



3. Your tables (in total) must use at least 3 different data types.



4. You must include at least one column (in one table) that allows NULL values, and there should be at least one row in that table where the value for that column is NULL.



5. You must include at least one JOIN statement that correctly reports on data in the table with the NULL column, and that gracefully handles the NULL value.



6. I should be able to run your script twice in succession, and get the same results as if I ran it once. You are encouraged to tackle as many of the following items as you want.



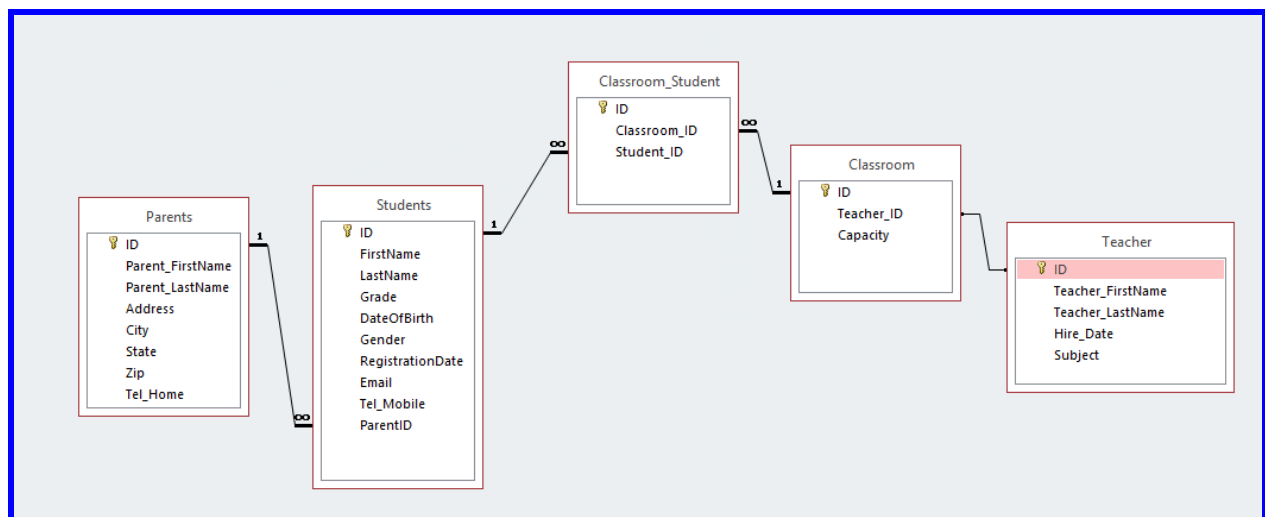
You'll receive up to 5% additional credit for each of the following items that you successfully complete.

1. Create a design for a user interface for all or part of the database. [A "wireframe" done by hand or with open source software is all I'm looking for here.]

ID		Address	256 Ferndale Lane
Parent_FirstName	John	City	Downingtown
Parent_LastName	Johnson	State	PA
Tel_Home	610-518-2589	Zip	19335

ID	1	ParentID	1	RegistrationDate	6/20/2013
Student_FirstName	Alicia	Gender	F	Grade	11
Student_LastName	Johnson	DateOfBirth	9/27/1998	Tel_Mobile	1234567890
Email	aj@gmail.com				

2. Create an entity-relationship diagram for your database. [Neatly by hand is acceptable]



3. Implement some kind of referential integrity, such as cascading deletes, or foreign key relationships.



4. Make a 3 to 5 minute presentation of your work in our meetup on Tuesday March 3rd. (You need to commit to making this presentation when you submit your assignment).



5. Identify at least one source of publicly available data and load it a table (or tables) in your database.

6. Write a short requirement for how to extend your database's functionality going forward.

This is a simple database. There are a lot of different things that can be added.

1. Fee payment record
2. Exams record
3. Attendance record
4. Class times
5. Courses offered by Grade level