Entity Framework

Your assignment is to create an application (Console or MVC, as you choose) that connects to a database through Entity Framework. The application in this case is a school app – tracking teachers, students and courses, as well as assignments.

Required Features:

- Should be able to add students, teachers, courses and assignments through the console.
- Should be able to assign students to courses, teachers and assignments to courses.
- Students should be given all assignments in a course when they are assigned to it.
- Should be able to print a course and see which assignments are tied to it, who the teacher is, and who the students are.
- Data should be persistent between executions of the program.

Code Requirements:

- A database must be created through Entity Framework, and connected to corresponding models in the C# code.
- Sending data to and from the database should be done through an Entity Framework database context.
- One-to-Many relationships need to be mutual relationships – an object reference on one side, and a list object on the other side.
- Many-to-Many relationships need to be mutual in the C# code in the same way and be implemented in the database through association tables.

Resources:

- http://www.pluralsight.com/courses/entity-framework-6-getting-started
- http://www.entityframeworktutorial.net
- https://msdn.microsoft.com/en-us/library/bb397933.aspx

Subjects Covered: Entity Framework, Code First