Entity Framework

Your assignment is to create an MVC application 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 website

• Should be able to assign students to courses, teachers and assignments to courses.

• 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:

• https://app.pluralsight.com/library/courses/getting-started-entity-framework-core/table-of-contents

• https://www.entityframeworktutorial.net/efcore/entity-framework-core.aspx

• https://docs.microsoft.com/en-us/dotnet/csharp/tutorials/working-with-linq

Subjects Covered: Entity Framework, Code First