

Lab: Entity Relations

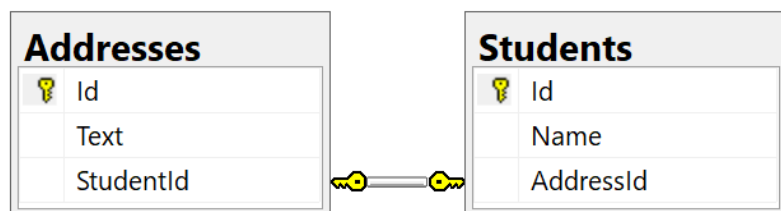
You can check your solutions here: <https://judge.softuni.bg/Contests/3202/Additional-Exercises>.

9. One to Zero or One

Create database with two tables: **Students** and **Addresses**. The relationship of these tables should be one to one.

Use attributes wherever you can.

It should look like this:



Constraints

Your **namespaces** should be:

- **P01_StudentSystem** – for your Startup class, if you have one
- **P01_StudentSystem.Data** – for your DbContext
- **P01_StudentSystem.Data.Models** – for your models

Your **models** should be:

- **StudentSystemContext** – your DbContext
- **Student:**
 - **StudentId**
 - **Name** (up to 100 characters, unicode)
 - **PhoneNumber** (exactly 10 characters, not unicode, not required)
 - **RegisteredOn**
 - **Birthday** (not required)
- **Course:**
 - **CourseId**
 - **Name** (up to 80 characters, unicode)
 - **Description** (unicode, not required)
 - **StartDate**
 - **EndDate**
 - **Price**
- **Resource:**
 - **ResourceId**
 - **Name** (up to 50 characters, unicode)
 - **Url** (not unicode)
 - **ResourceType** (enum – can be Video, Presentation, Document or Other)
 - **CourseId**
- **Homework:**
 - **HomeworkId**
 - **Content** (string, linking to a file, not unicode)

- ContentType (enum – can be Application, Pdf or Zip)
- SubmissionTime
- StudentId
- CourseId

- **StudentCourse** – mapping class between **Students** and **Courses**

Table relations:

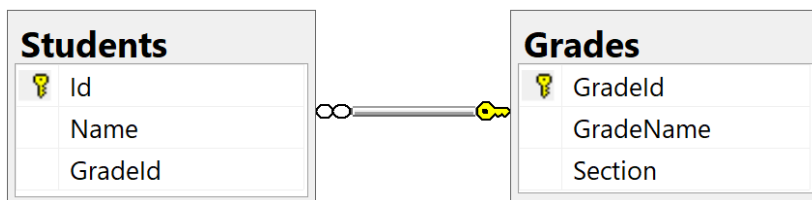
- **One student** can have **many CourseEnrollments**
- **One student** can have **many HomeworkSubmissions**
- **One course** can have **many StudentsEnrolled**
- **One course** can have **many Resources**
- **One course** can have **many HomeworkSubmissions**

You will need a constructor, accepting **DbContextOptions** to test your solution in **Judge!**

10. One to Many

Create database with two tables: **Students** and **Grades**. The relationship of these tables should be one to many.

It should look like this:



11. Many To-Many

Create database with two three: **Students**, **StudentsCourses** and **Courses**. The relationship of these tables should be many to many.

It should look like this:

