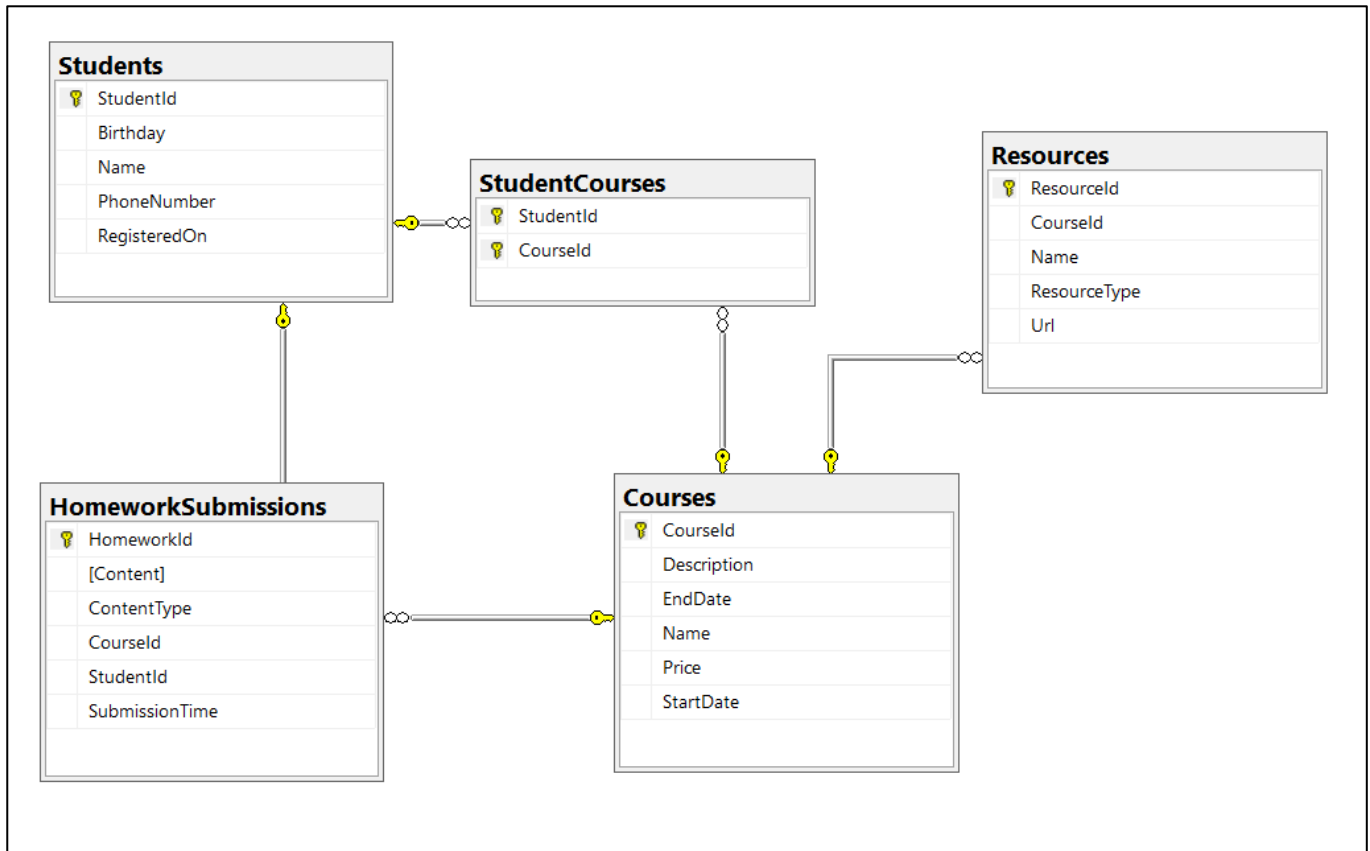# Exercises: Entity Framework Core

This document defines the **exercise assignments** for the entity framework core 02.

1. Student System

Your task is to create a database for the **Student System**, using the **EF Core Code First** approach. It should look like this:

Constraints

Your **namespaces** should be:

- **P01_StudentSystem** – Project Name
- **P01_ StudentSystem.Data** – (New folder named Data) for your DbContext
- **P01_ StudentSystem.Models** – (New folder named 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 (DateTime)
    - 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**

2. Seed Some Data in the Database

Write a **seed method** that fills the database with sample data.
Fill a few **students**, **courses**, **resources** and **homework submissions**.

3. Migration

Add new migration. The migration should be named: **"InitialCreate" and run** the project.

Bonus

Create a console application that reads information about **courses** and **students** and store it.