# Homework: Entity Framework

This document defines the homework assignments from the ["Database Applications" Course @ Software University](https://softuni.bg/trainings/21/Database-Applications-Mar-2015). Please submit as homework a single zip / rar / 7z archive holding the solutions (source code) of all below described problems.

## Create a Database for Student System using Code First

Your task is to create a database for student system, using the **EF code first** approach with the following tables:

* **Students**: id, name, phone number, registration date, birthday
* **Courses**: id, name, description, start date, end date, price
* **Resources**: id, name, type of resource (video / presentation / document / other), link
* **Homework**: id, content, content-type (e.g. application/pdf or application/zip), date and time

Additional requirements:

* Students can be in many courses
* Courses can have many students
* Courses can have many resources
* One course can have many homework submissions
* Homework submissions have a student

Add navigational properties in all models to simplify navigation. Annotate the data models with the appropriate attributes and validations and enable code first migrations.

## Seed Some Data in Database

Write a **seed method** that fills the database with sample data (randomly generated). Fill a few students, courses, resources and homework submissions. Configure the EF to run the seed method after the database is created for a first time. Run the application several times to ensure that it seeds sample data only once.

## Write a Console Application that Works with the Data

Write a console application that:

* Lists all students and their homework submissions
* List all course and their resources
* Adds a new course with some resources
* Adds a new student
* Adds a new resource