**Lab: Best Practices and Architecture**

This document defines the **exercise assignments** for the "[Entity Framework HYPERLINK "https://softuni.bg/trainings/2843/entity-framework-core-june-2020" Core HYPERLINK "https://softuni.bg/trainings/2843/entity-framework-core-june-2020"" course @ Software University](https://softuni.bg/trainings/2843/entity-framework-core-june-2020).

**Real Estate Property Ads**

Create a database to hold real estate property ads using Entity Framework Core code-first approach.

The database should follow all good practices including the data normalization.

An ad should contain the following properties:

* **Size** (in square meters)
* **Floor** in which the property is located
* Total number of **floors** in the building
* **District** name
* Building **year**
* **Type** of the property (1-room apartment, 2-rooms apartment, studio, etc.)
* Type of the **building** (brick, panel, etc.)
* **Price** (in EUR)
* **Tags** for each property (e.g. OldProperty, HugeApartment, HighFloor, etc.)

Add some console UI for listing and filtering the ads.

Implement some tagging logic for each ad.

Import the sample data given on this link: <https://github.com/NikolayIT/ArtificialIntelligencePlayground/blob/7d25fea4da89c90b3d2c69f047a6f21636dbef4b/ML.NET/Regression/SofiaPropertiesPricePrediction/imot.bg-raw-data-2020-07-23.json>

Create five projects:

**RealEstates.Data**

In this project you have to create your DbContext and migrations.

**RealEstates.Models**

In this project you have to implement all of you models.

**RealEstates.Services**

In this project you will hold your business logic.

**RealEstates.Importer**

In this project add a code to import the data from the given link. Also add some appropriate tags to each property.

**RealEstates.ConsoleApplication**

In this project add some UI logic for listing and filtering the data.