# Exercises: Best Practices and Architecture

This document defines the **exercise assignments** for the ["Databases Advanced – Entity Framework" course @ Software University.](https://softuni.bg/trainings/1442/databases-advanced-entity-framework-october-2016)

## Photo Share System

You are given a project skeleton of a **Photo Sharing System**. Take a look at it to get more familiar with that project. The database is modeled by code first approach and the models are fine (in other words there is nothing to modify in PhotoShare.Models project).

But the other project PhotShare.Client is poorly written. Your task is to **improve the architecture of the project** and made the **code to be testable** (e.g. decouple data layer from presentation layer, implement **Repository** and/or **Unit of Work Pattern** etc). Seed some more data in the database.

Then **implement the missing commands** by the hints given in each command class and **fix any bugs** in the already implemented code.

Finally **write unit tests** to check if commands AddTag, AddTagTo, RegisterUser, MakeFriends and UploadProfilePicture work as expected.

## \*Extend Photo Share System

Extend the **Photo Share System** by implementing two more commands:

* **Login <username> <password> -** log a user into the system and keep a reference to it until the Logout command is called
* **Logout –** log out a user of the system

**Modify all commands accordingly**. For example, the user can modify his profile information or add new friends only when he/she is logged in and so on.