# Exercises: Code Documentation and Comments

This document defines the **in-class exercises** assignments for the ["High-Quality Code" course @ Software University](https://softuni.bg/courses/high-quality-code).

## Document an Exam Problem

Open one of your exam problem solutions from the **C# Basics** or **Advanced C#** exams.

1. Add comments where needed in order to make the code easier to understand and maintain.
2. Make the code as self-documenting as possible.  
   **Hint:** Use the self-documenting code checklist in the lecture
3. Add full XML documentation: file header, all classes, methods, etc.
4. (Optional) Run StyleCop (with all inspection settings turned on) and make sure the code does not violate any of its conventions

## Comments in the .NET Framework Source Code

Choose two types in the .NET Framework reference source (<http://referencesource.microsoft.com/>): **a class / structure**, and **a public interface**.

Look at all code comments and documentation. Write your comments about the code. Is the code easy to read and understand? Are there any useless / meaningless comments? Is the code self-documenting? **Self-documenting code doesn't mean there are no comments in the code.**

In big companies, **documenting public interfaces is required**. Interfaces provide options for other developers to extend and use the current code. Sometimes, the whole purpose and intention of an interface could not be made clear using only the names of the members inside it. That's when documentation helps a lot.

## \* Sandcastle Documentation

Download and install the **Sandcastle** documentation generator: <https://github.com/EWSoftware/SHFB/>. Play with the interface and learn how to make documentation pages. Generate a **.chm** file using the XML documentation you wrote for Problem 1.