The complexity metric

These are the parameters that where evaluated:

**- Coupling between objects (CBO)**

Two classes are coupled when methods declared in one class use methods or instance variables defined by the other class. And the reciprocal can also happen.

It is desirable to have a low value of CBO. The multiple classes of the project have an average value of 10.6 which is acceptable.

Nevertheless, there are 161 class out of 786 which have a CBO over 14, which according to Houari A. Sahraoui, Robert Godin, Thierry Miceli study, "Can Metrics Help Bridging the Gap Between the Improvement of OO Design Quality and Its Automation?", is the max acceptable value.

**- Depth of inheritance tree (DIT)**

The deeper a class is in the hierarchy, the more methods and variables it is likely to inherit, making it more complex. The deeper the tree, the more likely is to exist some problem.

According to Visual Studio .NET documentation, the recommended value is lower than 5.

In the project, the average value is 1.84 and there are only 21 out of 758 with a value greater than 5.

**- Lack of Cohesion of Methods**

**- Number of children**

**- Response for class (RFC)**

**- Weighted method complexity (WMC)**

This metric evaluates the number of methods in each class.

It is recommended not to have a large number of classes because it is found to lead to more faults.

In the project, there is an average of 13.74 methods in each class with a mode of 4.