

I. What is the difference between class and struct in C#?

Both of them are used to write properties, functions, and other objects in C#. The differences can be set as follow:

Class:

It's a reference type variable.

It is stored in heap.

It can be inherited by other classes (single inheritance).

It has an automatic parameterless constructor that is removed when declaring a user defined constructor.

Struct:

It's a value type variable.

It's stored in stack.

It can't be inherited by other structs.

It hasn't an automatic parameterless constructor.

II. If inheritance is relation between classes clarify other relations between classes.

- Association:

It's a relation between two classes where the two classes don't inherit from each other but they interact with each other. It can be defined as (has a) relation.

- Aggregation:

It's a special kind of association relation between two classes where class is independent of the other.

- Composition:

It's a special kind of association relation between two classes where class is consisted of the other class.

- Dependency:

It's a relation between two classes where one class needs another one to work well. It can be defined as (use a) relation.