Default method accessibility modifier is private.

Best practice to add xml comments.

Use a descriptive verb as the name. Avoid conjunctions (and, or).

Define most restrictive accessor. Define least amount of arguments.

Method body should begin by validating incoming params. If bad, throw an exception. Never let something bad happen. Guard clauses.

Easiest way to return multiple values is to return an object.

Nameof – C# 6 toString().

Unit tests allow to test for expected exceptions thrown by a test. To do this add an attribute to the unit test:

[ExpectedException(typeof(ArgumentNullException))]

Property or method? Is it data? Is it a process? If vague, properties are supposed to return quickly. Properties shouldn’t change an object. Properties don’t need params.

Method overloading – different signatures. Same name. Diff return type doesn’t count.

Make a param value nullable (?) to make it optional.

Method chaining – technique where a method overload calls another method overload to reduce repeated code.

Method overriding – allows us to replace a method defined higher in the class hierarchy. Use the override keyword.

Do override ToString of each entity class.

Expression bodied methods – syntax shortcut for single statement methods making use of lambda operator. Cut down the code for simple methods. Avoid if they need guard clauses.

FAQ

1. What’s the purpose of a method?

The method is where the logic code is written and performs some processing. It provides specific behaviour for a class.

1. What is the diff between a param and an arg?

A param is part of the method signature. An arg is part of the method call.

1. What is method overloading?

Creating a method with the same signature apart from the number of params. They should have similar purpose.

1. What is method chaining?

Overloads call other overloads because the bulk processing will exist in only one of the overloasds. This saves on code repeat.

1. When is it best to use overloading over overriding?

When the functionality of both methods is still required, use overloading. When you want new behaviour use overriding. Override only works with inheritance.

1. What is an expression-bodied method?

A simple method defined in a single line using a lambda operator. They return a value.