Code in getters depend on protection and how it will be used. It can be used to allow access to certain types of users as an example. We can check the application state which is helpful if the property is only available under certain conditions. We can format the value. We can add logging. We can lazy load the data.

Code in setter can check user credentials, app state, validate the incoming value etc…

Auto-implemented properties – faster than propfull. Provide a more concise property decalaration. Backing fields are declared implicitly, behind the scenes. Don’t allow code in the getter or setter so best used for simpler properties. Can be initialised:

Public int Price { get; set; } = 2;

We can define a read-only version by leaving out the set; method.

Auto implemented properties allow us to define a class quickly.

Prop <tab><tab> creates an auto implemented property.

Expression-bodied properties – Can do lots of things within the body of a property. syntax for properties that immediately return a value. E.g.

public string FullName => firstName + “ “ + lastName;

Makes use of a lambda operator.

We can define different accessibility for the getter and setter.

FAQ

1. What is the primary purpose of a property?

To encapsulate a field and guard it’s access. Optionally another place for logic.

1. What are auto-implemented properties?

The fields for the property are defined implicitly. Good for defining simple data fields.