

Introduction to References

What do you think will be printed by this code?

```
Dissertation diss1 = new Dissertation();  
Dissertation diss2 = diss1;  
diss1.CurrentPage = 0;  
diss2.CurrentPage = 16;  
Console.WriteLine(diss1.CurrentPage);  
Console.WriteLine(diss2.CurrentPage);
```

Did you guess `0` and `16`? The answer is `16` and `16`!

To understand what's happening here, we need to understand *references*. They might not be obvious in this code, but learning how to use them unlocks a whole new set of superpowers in C#. This lesson explains:

- How references work in C#

- Why references are useful

- How to upcast a reference

- How to create a null reference

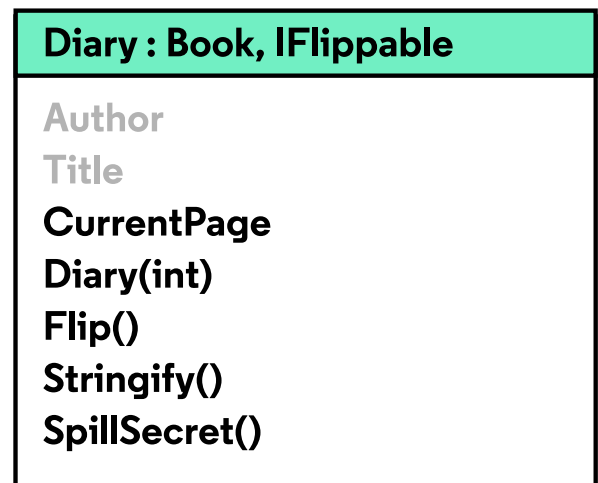
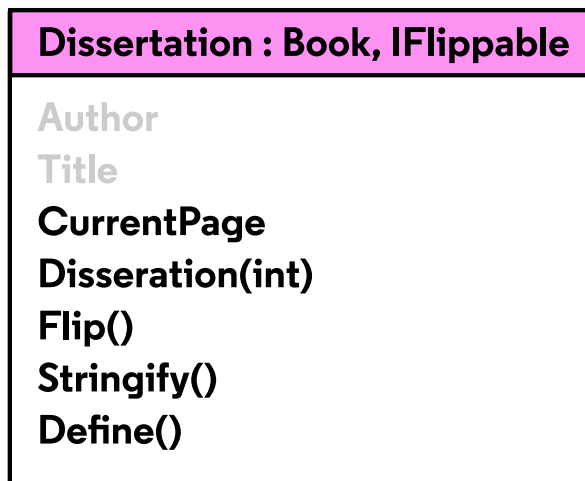
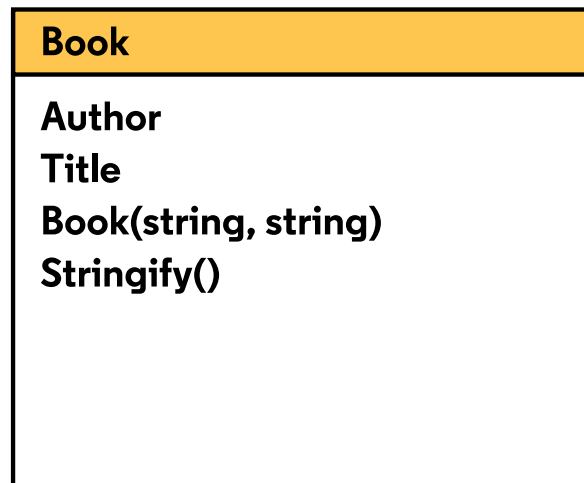
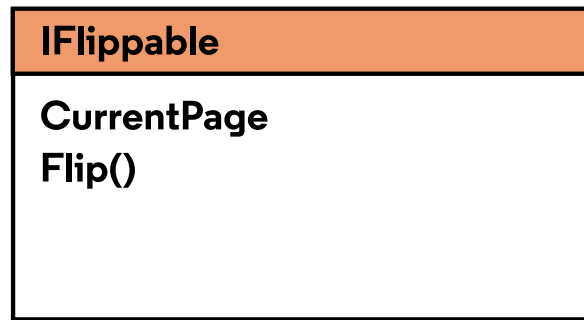
☒ Instructions

This lesson uses the `Book`, `Dissertation`, and `Diary` classes and the `IFlippable` interface. Look through each file to get acquainted.

- `IFlippable` is the interface

- `Book` is the base class

- `Dissertation` and `Diary` are classes that extend the base class and implement the interface



If you need to refresh yourself with interfaces and inheritance, take the C# [Interfaces](#) and [Inheritance](#) lessons.