Assignment 1

Why would you want to write you’re code in a object-oriented programming language?

With OOP you can reuse classes and objects which saves effort and time. Using OOP makes the code easier to read and more structured. Using OOP allows you to break down the code from a complex system into smaller, more manageable classes or modules. OOP makes working together with different team members easier, as different team members can work more independently on different modules or classes.

What’s the difference between a class and an object?

A class is a blueprint for a object which has it’s own behaviour and data. Classes are a model for objects.

An object is an instance of a class. It’s a concrete realization of the blueprint defined by the class. Objects can perform actions using the methods which are defined in the class. Objects have their own unique data, which are defined by the attributes of the class.

Assignment 2

What is composition?

Composition is a class that references one or more objects of other classes in instance variables. that consists of other objects.

Why do we use composition?

It allows you to reuse existing code. Using composition allows stronger encapsulation and it makes your code easier to maintain.

How do we use composition in our code?