Inheritance is the ability for one class to obtain the attributes and methods of another class directly, without having to type them. The benefit of inheritance is the ability of reuse in code, so the programmer doesn’t have to write the same thing over and over again, it can be inherited or taken from the parent or base class.

It is a lot like when a child inherits traits from their parents, the same goes for inheritance in programing. It is useful to use when a programmer wants to build a flexible system where base functionality can evolve independently or when multiple classes share common behavior or data. A problem that programmers face is code duplication, if a shared behavior changes, every duplicated version must be updated manually. Inheritance solves this problem by letting other classes automatically inherit the fields while only changing the base class not all of the other classes.

In the mindful activity program I used an Activity base class for my child classes which are the Listing, Breathing, and Reflecitng classes. In my base class I have attributes named \_name, \_duration, and \_description. I also have methods like the Spinner(), GetRandomPrompt(), StartMessage(), or GetDuration(). For me to use those methods in the child classes, I had to write “base.StartMessage”.

Inheritance is a powerful tool that allows one class to access the attributes and methods of another class without duplication. It promotes reuse, simplicity, and organization by using inheritance.