What is Inheritance and why is It Important?

Inheritance in programming means one class can use or borrow code from another class.  
Think of it like a child learning from a parent — the child doesn’t have to start from scratch because they already know things their parent taught them.  
In the same way, when we create a *child class* (also called a derived class), it can use the code from the *parent class* (also called a base class).

This helps programmers avoid repeating the same code again and again. We can write shared parts once in the base class, and all the other classes can inherit (use) them.  
If something changes, we only fix it in one place, and all the other classes get the update too.  
This makes programs easier to maintain, shorter, and less confusing.

How I Used Inheritance in My Program

In my Mindfulness Program, I built one main class called Activity.  
This class holds things that all activities need — like starting the session, showing a spinner, counting down time, and ending the session.  
Then, I created three smaller classes — Breathing Activity, Reflecting Activity, and Listing Activity.  
Each of these classes inherits from the Activity class, so they can all use the same start and end messages without rewriting them.

Each activity then adds its own special part:

* Breathing Activity shows “Breathe in” and “Breathe out.”
* Reflecting Activity shows questions to help you think deeply.
* Listing Activity asks you to list good things in your life.

Example Code:

public class Activity

{

public void DisplayStartingMessage()

{

Console.WriteLine("Get ready to begin...");

}

public void DisplayEndingMessage()

{

Console.WriteLine("Well done! You have completed the activity.");

}

}

public class BreathingActivity : Activity

{

public void Run()

{

DisplayStartingMessage(); // from Activity class

Console.WriteLine("Breathe in...");

// wait a few seconds

Console.WriteLine("Breathe out...");

// wait a few seconds

DisplayEndingMessage(); // from Activity class

}

}

This example shows inheritance because the BreathingActivity class inherits the methods DisplayStartingMessage() and DisplayEndingMessage() from the Activity class.  
This means it doesn’t have to rewrite them — it just uses what it inherited.

In short:  
Inheritance helps me keep my program organized, clean, and easy to update. It’s one of the best ways to build big programs step by step, without repeating the same code everywhere.