Week 10 Articulate

Polymorphism is programing that works with inheritance, and allows a parent class to be implemented by multiple different classes, in multiple different ways. This allows the code to need less of specific sets of codes and just combine it into one set of code, which simplifies having to change code as well. You can apply this to just about any topic that has multiple types or variations such as, Vehicles(cars, vans, trucks, busses), Shapes(square, triangle, circle), or clothes(shirt, pants, socks, hats). A part of my code that fits this was (look below) and used the different classes to make different decisions.

static void CreateGoal()

    {

        Console.WriteLine("--------------------------------------------------");

        Console.WriteLine("Create a new goal");

        Console.WriteLine("--------------------------------------------------");

        Console.WriteLine("Goal types:");

        Console.WriteLine("1. Simple goal");

        Console.WriteLine("2. Eternal goal");

        Console.WriteLine("3. Checklist goal");

        Console.WriteLine("--------------------------------------------------");

        Console.Write("Enter the goal type (1-3): ");

        string input = Console.ReadLine();

        Console.Write("Enter the goal title: ");

        string title = Console.ReadLine();

        Console.Write("Enter the points for completing the goal: ");

        int points = int.Parse(Console.ReadLine());

        switch (input)

        {

            case "1":

                goals.Add(new SimpleTask(title, points));

                break;

            case "2":

                goals.Add(new EternalGoal(title, points));

                break;

            case "3":

                Console.Write("Enter the target count for the checklist goal: ");

                int targetCount = int.Parse(Console.ReadLine());

                goals.Add(new ChecklistGoal(title, points, targetCount));

                break;

            default:

                Console.WriteLine("Invalid goal type. Please try again.");

                break;

        }

    }