

Submission: See course shell for how and when to submit

You will practice working with properties and using List.

Creating a Pet class

Create the following class

Pet Class		
Properties		
+	«property setter absent» Name	: string
+	«property setter private» Owner	: string
+	«property setter absent» Age	: int
+	«property setter absent» Description	: string
+	«property setter private» IsHouseTrained	: bool
Methods		
+	«constructor» Pet(name : string , age : int , description : string)	
+	ToString()	: string
+	Train()	: void
+	SetOwner(newOwner : string)	: void

Description of members:

Fields:

There are no fields.

Properties:

1. The properties are self-explanatory. The getter is public and the setter is mostly absent.

Constructor:

1. **public Pet(string name, int age, string description)** – This constructor takes three arguments and assigns them to the appropriate properties. It also initializes the fields owner to “no one” and **isHousedTrained** to **false**

Methods:

1. **public override string ToString()** – This method returns a string fully describing this object.

Remember the ToString() method is needed to produce a sensible output on the screen

2. `public void SetOwner(string owner)` – This method simply assigns the argument to the appropriate field.
3. `public void Train()` – This method sets the property `IsHouseTrained` to `true`.

Test Harness

In your main method write the code to do the following:

1. Create four objects. You decide on the arguments
2. Create a List to store all the above objects.
3. Use some of the methods on some of the objects.
4. Using a suitable looping statement, display all the objects in the collection.
5. Prompt the user for an owner's name and then display only the pets belonging to a particular person.