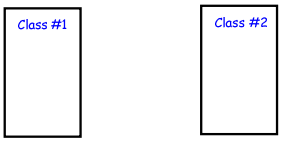
1. Log in
2. Today We Begin Unit 5
   - Inheritance (superclass & sublass)
   - Polymorphism
   - Abstract Classes
   - Interfaces

Oct 16-7:52 AM

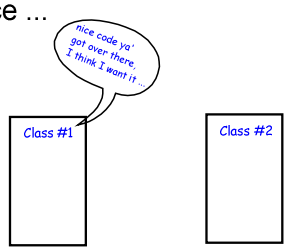
Inheritance ...



*** Once upon a time, there were two classes... ***

Nov 4-7:21 AM

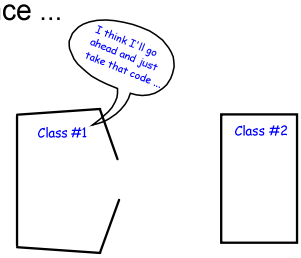
Inheritance ...



*** Class #1 become jealous of Class #2's code ***

Nov 4-7:21 AM

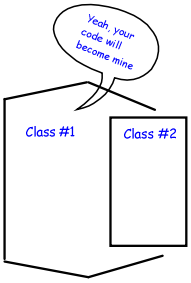
Inheritance ...



*** Let the "inheritance" begin ***

Nov 4-7:21 AM

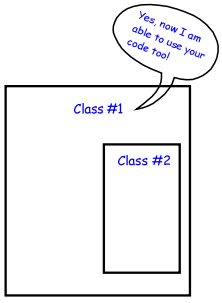
Inheritance ...



*** Class #1 is about to inherit Class #2's code ***

Nov 4-7:21 AM

Inheritance ...

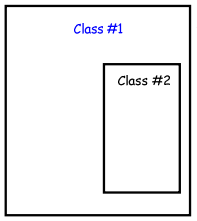


Class #1 just inherited Class #2 Qualities!

*** Class #1 still has its old code but now can also use Class #2's code ***

Nov 4-7:21 AM

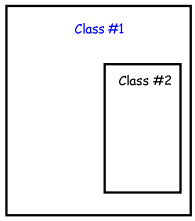
Parts to Inheritance ...



Class #1 is called a **subclass**

Nov 4-7:21 AM

Parts to Inheritance ...

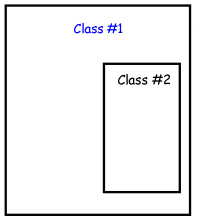


Class #1 is called a **subclass**

Subclass - The class that will contain "more" code as it inherits code from a smaller class. A subclass "eats" a superclass and uses/morphs it.

Nov 4-7:21 AM

Parts to Inheritance ...



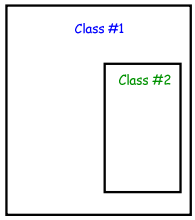
Class #1 is called a **subclass**

Subclass - The class that will contain "more" code as it inherits code from a smaller class. A subclass "eats" a superclass and uses/morphs it.

WARNING: A subclass is "bigger" than a superclass!

Nov 4-7:21 AM

Parts to Inheritance ...

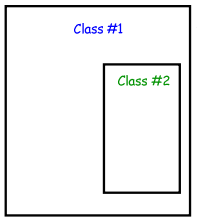


Class #1 is called a **subclass**

Class #2 is called a **superclass**

Nov 4-7:21 AM

Parts to Inheritance ...



Class #1 is called a **subclass**

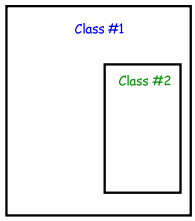
Class #2 is called a **superclass**

Superclass- The superclass is the class that gets "absorbed" by the subclass. It is "super" since it holds the powers that the subclass wants (I guess).

WARNING: A superclass is "smaller" than a subclass!

Nov 4-7:21 AM

Parts to Inheritance ...



Class #1 is called a **subclass**

Class #2 is called a **superclass**

☆ I subclass inherits the qualities of a superclass

Nov 4-7:21 AM

Inheritance - A new class ("subclass") is created from an already existing class ("superclass").

Subclass - BIGGER! It takes on the superclass and adds even more to it!

Subclass - Inherits everything from the superclass.

* Important note: A super class is actually smaller ... contains less information!

* This should make more sense at the end of today's lesson ... we will return.

Nov 11-7:44 AM

An Inheritance Scenario:

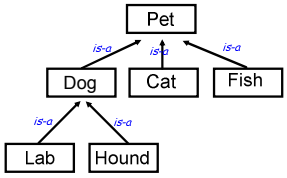
1. You have created a class that you know works, has been tested, and is "ready-to-go".
2. You decide to build a larger class (program) that will utilize the class you built previously.

Superclass = your first class (smaller)

Subclass = your new larger program that will inherit all characteristics of your old class.

Nov 11-8:50 AM

Inheritance Hierarchy "World" Example:



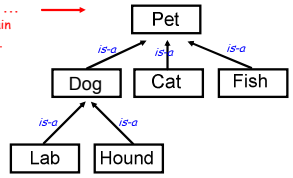
Inheritance Hierarchy

Is a flow-chart representation

Nov 11-8:51 AM

Think of it this way (thinking top down) ...

I've got a pet ... Pets have certain charactersitics.



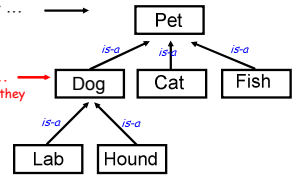
* Each class points to its superclass ...

Nov 11-8:51 AM

Think of it this way (thinking top down) ...

I've got a pet ...

I've got a dog ... Dogs are pets so they have all the pet characteristics. BUT, they also need their own dog qualities.



* Each class points to its superclass ...

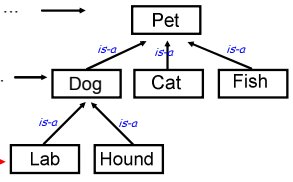
Nov 11-8:51 AM

Think of it this way (thinking top down) ...

I've got a pet ...

I've got a dog ...

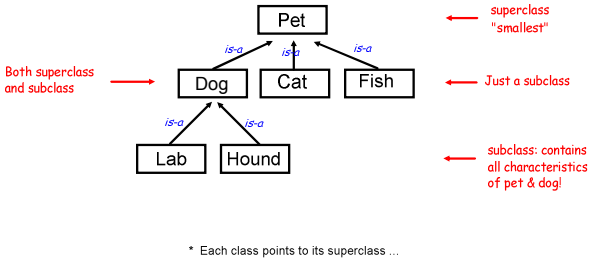
I've got a lab ... Lab takes on all of the characteristics of a pet and a dog, but also has more qualities about it.



* Each class points to its superclass ...

Nov 11-8:51 AM

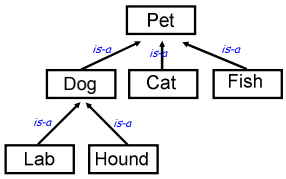
Types of classes:



* Each class points to its superclass ...

Nov 11-8:51 AM

Lets analyze this a little closer, this time as a programmer ...



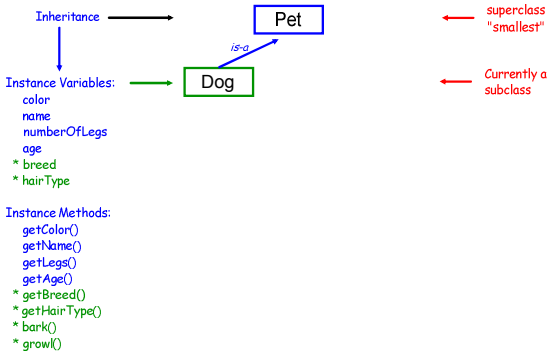
*** Note: Arrows point to the superclass ***

Nov 11-8:51 AM

Types of classes:

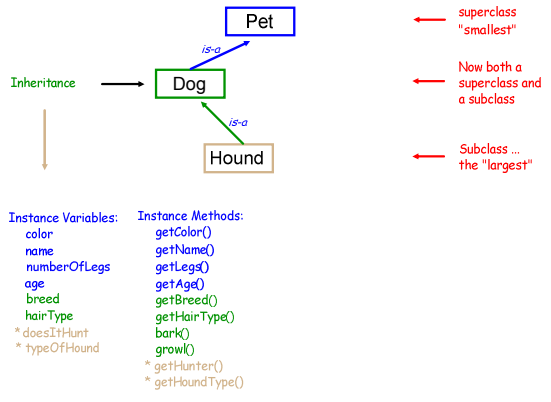
Nov 11-10:37 AM

Types of classes:



Nov 11-10:37 AM

Types of classes:



Nov 11-10:38 AM

Things to do ...

* Complete Unit 5 WS 01 Inheritance Introduction

Oct 16-9:12 AM