

Day 6

The one link you need to recall

<https://ddls.to/20483>

Ready?

Do this every day BEFORE the class starts (takes about 15 minutes)
(<http://ddls.to/everyday>)

1. Launch Lab01.
2. Login to Lab01 as **Admin**.
3. While in the Lab01 environment,
 - i. run **cmd.exe** from the Windows Start button.
 - ii. Run the command **git clone --depth 1 <https://github.com/Mark-AI/CT/CAD-2.git> C:\Users\Admin\Desktop\MarksFiles**
 - iii. Navigate to **C:\Users\Admin\Desktop\MarksFiles\setups**, then right-mouse click **bootstrap.cmd** and run as administrator
 - iv. While it's running, Sign in to Visual Studio on the Lab Environment. You can use any Microsoft account.
 - v. When the script end it reboots the Virtual Machine. That's necessary.
 - vi. Save the lab. (the save link is at the top right of the screen in the dropdown menu)

Course Outline

- Module 1: Review of Visual C# Syntax
- Module 2: Creating Methods, Handling Exceptions, and Monitoring Applications
- Module 3: Developing the Code for a Graphical Application
- Module 4: Creating Classes and Implementing Type-Safe Collections
- Module 5: Creating a Class Hierarchy by Using Inheritance
- **Module 6: Reading and Writing Local Data**
- Module 7: Accessing a Database

Module 3 Key Concepts

- What is an **enum**?

Module 3 Key Concepts

- What is a **struct**?

Module 3 Key Concepts

- What is a **constructor**?

Module 3 Key Concepts

- What is a **property**?

Module 3 Key Concepts

- What is an **indexer**?

Module 3 Key Concepts

- What is **linq**?

Module 3 Key Concepts

- What is a **delegate**?

Module 4 Key Concepts

- What is *object-oriented*?
- What is the benefit?

Module 4 Key Concepts

- What is a *class*?
- What is an *object*?

Module 4 Key Concepts

- What does this do?

```
var b = new BankAccount(){number=222};
```

Module 4 Key Concepts

- What does this do?

```
var b = new BankAccount(100){number=222};
```

Module 4 Key Concepts

- What do these mean?
 - *Public*
 - *Private*
 - *Internal*

Module 4 Key Concepts

- What is the difference between a *reference type* and a *value type*?

Module 4 Key Concepts

- What is *static*?

Module 4 Key Concepts

- What is an *interface*?

Module 4 Key Concepts

- What is a *generic*?

Module 5 Key Concepts

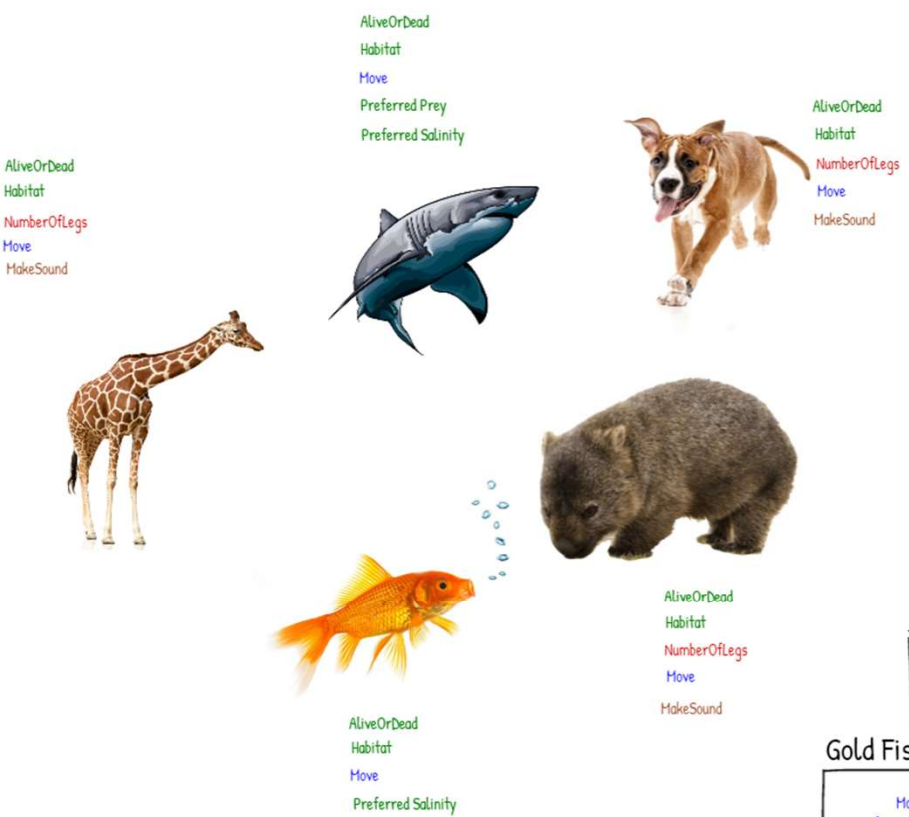
- What in OO is *inheritance*?
- What is the benefit?

Module 5 Key Concepts


- What is a *base class*?
- What is another term for a base class?

Module 5 Key Concepts

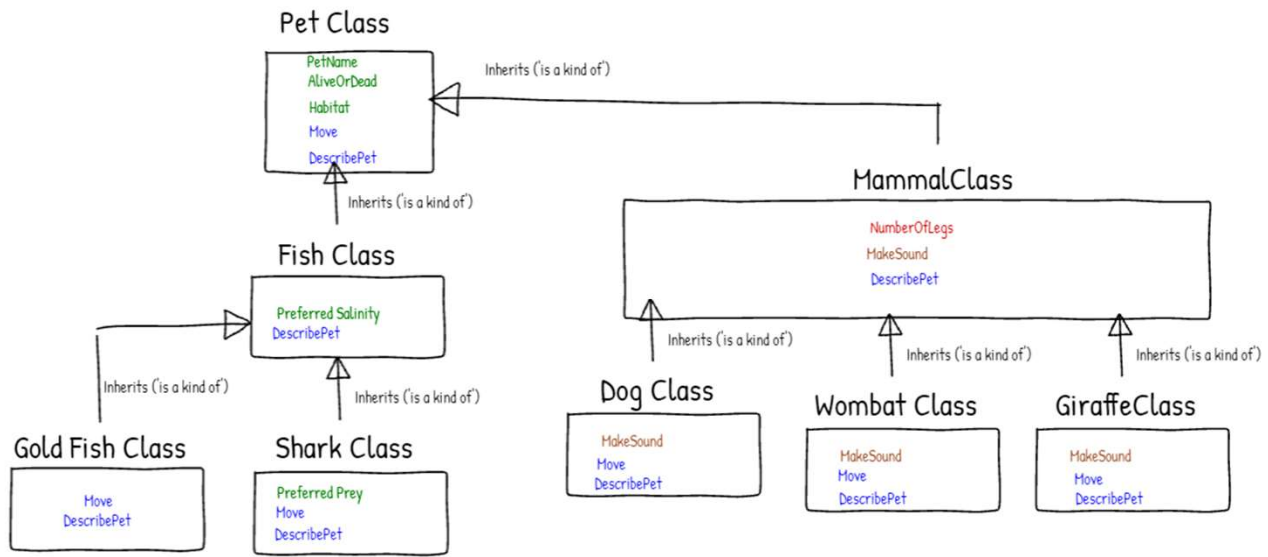
- What is a *derived class*?
- What is another term for a derived class?



These are my
Pets



- * What attributes do these have?
- * What can these pets do?
- * What do these have in common?



Module 5 Key Concepts

- What do these mean and where would I see them?
 - *abstract*
 - *sealed*
 - *virtual*
 - *protected*
 - *override*

Module 5 Key Concepts

- What is going on here?

```
public Coffee(string name, bool isFairTrade, int temp)
    : base(name, isFairTrade, servingTemp)
```

Module 5 Key Concepts

- What is going on here?

```
base.GetServingTemperature();
```

Module 5 Key Concepts

- What is an *extension method*?
- What is the benefit?

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