Module 1 - Lecture 12

# **Polymorphism**



#### Review

- What is an example of inheritance?
- What is a superclass or base class?
- What is a subclass?

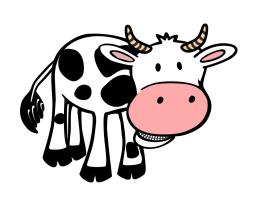


## **Polymorphism**

- "Poly" many
- "Morph" change or shape
- In Object-Oriented programming, polymorphism is the idea that something can be assigned a different meaning or usage based on context. This specifically allows objects to take on more than one form.



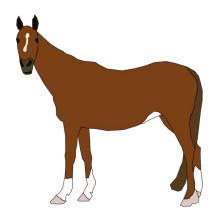
## Polymorphism through Inheritance

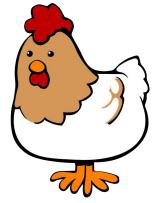














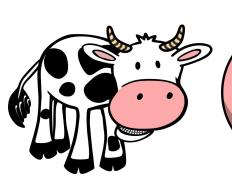
# Let's Code!

## Polymorphism through Interfaces

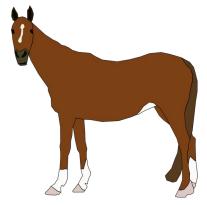






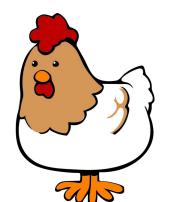












#### **Interface**

- Defines what something can do or how it can be used, but not how it does it.
- An interface is a contract that defines what methods a user of the interface can expect.
- An interface cannot be instantiated.
- Multiple interfaces are allowed for a single class.
- If class A implements interface B, then A is a B, and so are all of its children.

# Let's Code!

# Reading

- Module 1
  - Inheritance



# QUESTIONS?

