# First assignment

# 1. Get and install:

- Java: <a href="http://www.oracle.com/technetwork/java/javaee/downloads/index.html">http://www.oracle.com/technetwork/java/javaee/downloads/index.html</a>
- Eclipse: <a href="https://www.eclipse.org/downloads/eclipse-packages/">https://www.eclipse.org/downloads/eclipse-packages/</a> (pick the one for Java EE)
- 2. Install GIT Plugin (EGit @ Eclipse Marketplace)
- 3. Create a GITHub account if you don't have one
- 4. Watch Lynda.com Git Essential Training tutorial
- 5. Create the structure displayed on the next slide in Java (each box is a class, Animal is the superclass for the others, only use the fields and methods displayed)

## **Animal**

- age:String
- color:String
- type:String
- weight:int
- minimumWeight;
- animal(age, color, type, weight, minimumWeight)
- eat()
- getWeight()
- setWeight()
- output()

#### Fish

- Fish(age, color, weight, minimumWeight)
- swim()

#### **Mammal**

- Mammal(age, color, weight, minimumWeight)
- run()

## **Bird**

- Bird(age, color, weight, minimumWeight)
- fly()

# 6. Program the following functionality:

Create a main class that creates some mammal, bird and fish objects each with a different initial weight. Store those objects in a Vector of animals. Let each of the animals eat (weight + 1) and move (weight - 1 for fish and mammals, weight – 2 for bird). Watch out for the minimum specific weight of each object. Print the final result for all objects through the output method in the animal class.

- 7. Create a repository called *YourPittID\_HelloAnimals*
- 8. Make your project public and send me the URL or invite me to the repository as a collaborator:
  - My GitHub user name is alexandernolte
  - My GitHub email is <u>anolte@pitt.edu</u>
- 9. Upload your code to GIT Hub until January 11 @ 11:59pm