# Assignment 11

## Step 01 - Compile the following code (you can get the file from Blackboard)

I used the online compiler: https://www.jdoodle.com/online-java-compiler/

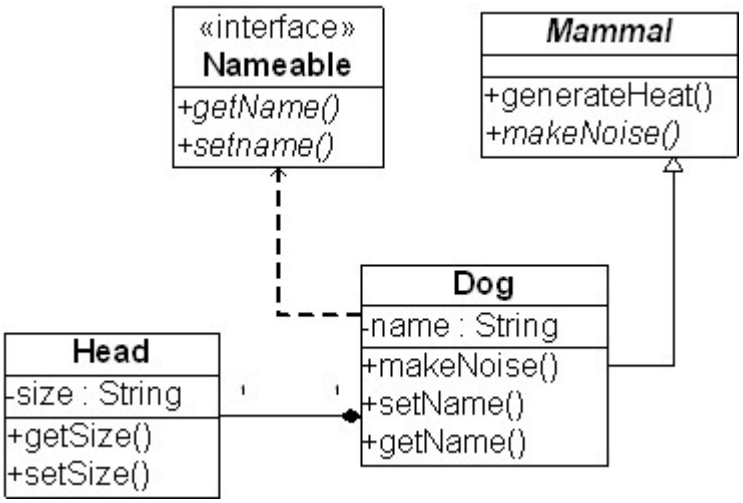
However, you can use any IDE as long as you submit code that I can compile and execute.

This assignment is actually very straightforward – if not simple. While the assignment may be straightforward, the concepts are not.

This assignment ties in most of the major concepts of building objects from other objects – using Inheritance as well as composition.

The task is not to write any new code, I simply want you to understand the concepts and *assemble* the code and get it to work.

I want you to take the following UML Object Model and create the code stubs.




By code stubs, I mean that you should create a project that includes the following Java files within the project, all with the methods and attributes specified by the various class diagrams.

Here are some major hints.

```
interface Nameable {
  public abstract String getName();
  public void setName(String n);
}
```

```
abstract class Mammal {
  public void generateHeat() {
```

```
    System.out.println("Generating Heat");
  }
}
```

```
class Dog {
  Head head;
  String name;

  public void makeNoise() {
    System.out.println("Bark");
  }

  public String getName() {
    return name;
  }

  public void setName(String n){
    name = n;
  }

}
```

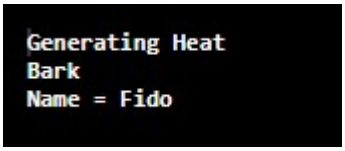
```
class Head {

  double headSize;

}
```

Finally, you will create a main application class called TestDog where you will create a single Dog called Fido

```
public class TestDog {

   public static void main(String[] args) {

          Dog fido = new Dog();

          fido.makeNoise();

          fido.setName("Fido");
          System.out.println("Name = " + fido.getName());

   }
}
```

The primary task here is to assemble everything so that it works! You don't have to write the code - just assemble it!

## Step 02 – Run the code (the output should look something like this)




## Step 05 – Submit the updated file to A11 to Blackboard.