

Classes Objects & UML



Create a Pet class and an Owner class. Owners are allowed to own one pet per owner which is either a dog, cat or mouse. The main program is contained in the class called, PetOwnerTest. The Java source code for the main program inside PetOwnerTest has been given in figure 1.

```
public static void main(String[] args) {  
  
    //KAREN  
    Pet pet1 = new Pet("Lassie");  
    Owner person1 = new Owner("Karen", pet1);  
    System.out.println(person1 + ", " + pet1.makeSound() + ".");  
  
    //DON  
    Pet pet2 = new Pet("Garfield","cat");  
    Owner person2 = new Owner("Don", pet2);  
    System.out.println(person2 + ", " + pet2.makeSound() + ".");  
  
    //WALT  
    Pet pet3 = new Pet("Mickey","mouse");  
    Owner person3 = new Owner("Walt", pet3);  
    System.out.println(person3 + ", " + pet3.makeSound() + ".");  
  
}
```

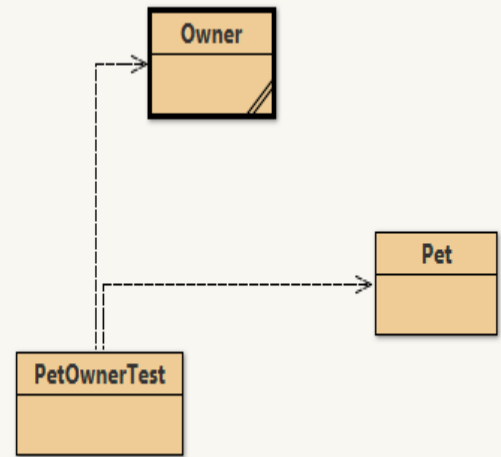


Figure 2. The BlueJ Classes

Figure 1. Java Source code for main program

Required:

- write a UML for both the Owner and Pet classes.
- Each pet is assigned a tag id upon instantiation.
- code the Owner and Pet classes in java so that the PetOwnerTest works **EXACTLY** as written.

Karen owns a dog named Lassie, Woof.
Don owns a cat named Garfield, Meow.
Walt owns a mouse named Mickey, Squeak.

Tag Ids

[1000] Lassie

[1001] Garfield

[1002] Mickey

Figure 3. The output from PetOwnerTest

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