**Unit 5 Chapter 6 Worksheet: Algorithm Workbench Challenge 1**

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CSCI 421: Java Programming Principles I

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**Design a class named Pet.**

1. **Draw a UML diagram of the class. Be sure to include notation showing each field and method’s access specification and data type. Also include notation showing any method parameters and their data types.**
2. **Write the Java code for the Pet class.**
3. **UML diagram:**

|  |
| --- |
| **Pet** |
| **- name : String**  **- animal : String**  **- age : int** |
| **+ setName (n : String) : void**  **+ setAnimal (a : String) : void**  **+ setAge (a : int) : void**  **+ getName() : String**  **+ getAnimal() : String**  **+ getAge() : int** |

1. **Class code:**

public class Pet  
{  
 private String name; // Holds the name of the pet  
 private String animal; // Hold the type of animal that a pet is  
 private int age; // Holds the pet's age  
  
 */\*\*  
 \* setName method  
 \** ***@param*** *n The pet's name  
 \*/* public void setName(String n)  
 {  
 name = n;  
 }  
  
 */\*\*  
 \* setAnimal method  
 \** ***@param*** *a The animal's type  
 \*/* public void setAnimal(String a)  
 {  
 animal = a;  
 }  
  
 */\*\*  
 \* setAge method  
 \** ***@param*** *a The pet's age  
 \*/* public void setAge(int a)  
 {  
 age = a;  
 }  
  
 */\*\*  
 \* getName method  
 \** ***@return*** *The pet's name  
 \*/* public String getName()  
 {  
 return name;  
 }  
  
 */\*\*  
 \* getAnimal method  
 \** ***@return*** *The animal's type  
 \*/* public String getAnimal()  
 {  
 return animal;  
 }  
  
 */\*\*  
 \* getAge method  
 \** ***@return*** *The pet's age  
 \*/* public int getAge()  
 {  
 return age;  
 }  
}