

Inheritance_Lab3

May 12, 2020

0.1 Exercise

In the code below, the Dog class inherits from both Animal and Pet. Once you have examined the code below, add a Cat class that also inherits from Animal and Pet.

The Cat class should have the attribute string color. Design the Cat class to pass the tests in the main() function.

```
In [ ]: #include <iostream>
        #include <string>
        #include <assert.h>
        using std::string;

        class Animal {
        public:
            double age;
        };

        class Pet {
        public:
            string name;
        };

        // Dog derives from *both* Animal and Pet
        class Dog : public Animal, public Pet {
        public:
            string breed;
        };

        class Cat : public Animal, public Pet {
        public:
            string color;
        };

        int main(){
            Cat cat;
            cat.color = "black";
            cat.age = 10;
            cat.name = "Max";
```

```
    assert(cat.color == "black");  
    assert(cat.age == 10);  
    assert(cat.name == "Max");  
}
```

Compile & Execute

Explain

Loading terminal (id_ay2gcn0), please wait...