

sp24-pa6-Andy2Tran/src/Pet.cpp

```
1 // Title : Pet.cpp
2 // Desc : Implementation for Pet class
3 // Name : An Tran
4
5 #include <iostream>
6     using std::getline;
7     using std::cout;
8     using std::cin;
9
10 #include <iomanip>
11     using std::setw;
12     using std::left;
13     using std::right;
14
15 #include <algorithm>
16
17 #include "Pet.h"
18
19 // constructor
20 Pet::Pet() : name(""), DOB(Date()), type(""), breed(""){};
21 Pet::Pet(const string& name, const Date& DOB, const int& typeNum, const string&
breed)
22     : DOB(DOB){
23     setName(name);
24     setType(typeNum);
25     setBreed(breed);
26 };
27
28 // getter
29 string Pet::getName(){
30     return name;
31 };
32
33 Date Pet::getDOB(){
34     return DOB;
35 };
36
37 string Pet::getType(){
38     return type;
39 };
40
41 string Pet::getBreed(){
42     return breed;
43 };
44
45 // setter
46 void Pet::setName(const string& newName) {
47     name = newName;
48     transform(name.begin(), name.end(), name.begin(), toupper);
49 }
50
51 void Pet::setDOB(const int& month, const int& day, const int& year) {
52     DOB = Date(month, day, year);
```

```
53 }
54
55 void Pet::setType(const int &typeNum) {
56     switch (typeNum) {
57         case 1:
58             type = "DOG";
59             break;
60         case 2:
61             type = "CAT";
62             break;
63         case 3:
64             type = "BIRD";
65             break;
66         case 4:
67             type = "SNAKE";
68             break;
69         default:
70             string customType;
71             cin >> customType;
72             type = customType;
73             transform(type.begin(), type.end(), type.begin(), toupper);
74             break;
75     };
76 }
77
78 void Pet::setBreed(const std::string& newBreed) {
79     breed = newBreed;
80     transform(breed.begin(), breed.end(), breed.begin(), toupper);
81 }
82
83 // other
84 std::ostream& operator<<(std::ostream& os, Pet& pet) {
85     os << left << setw(13) << "NAME" << ":" << right << setw(21) << pet.name << '\n'
86     << left << setw(13) << "DOB" << ":" << right << setw(21) <<
87     pet.DOB.dateString() << '\n'
88     << left << setw(13) << "TYPE" << ":" << right << setw(21) << pet.type << '\n'
89     << left << setw(13) << "BREED" << ":" << right << setw(21) << pet.breed << '
90     '\n';
91     return os;
92 }
93
94 std::istream& operator>>(std::istream& input, Pet& pet) {
95     getline(input, pet.name);
96     int month, day, year, typeNum;
97     input >> month >> day >> year;
98     pet.setDOB(month, day, year);
99     input >> typeNum;
100     pet.setType(typeNum);
101     input.ignore();
102     getline(input, pet.breed);
103     pet.setName(pet.name);
104     pet.setBreed(pet.breed);
105     return input;
106 }
```