

Project 6 Deliverables

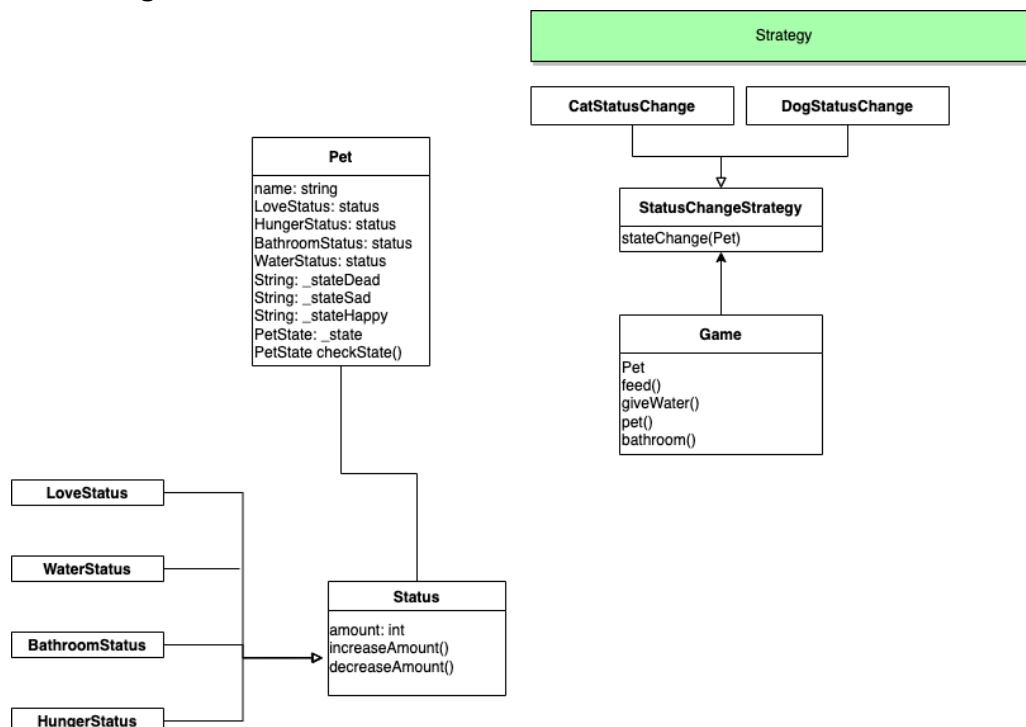
Status Summary

Amongst our team of two, Calista was in charge of setting up the project, implementing the flow of the game as well as implementing the strategy pattern. Vananh was responsible for creating the UI, including setting up the start page and the game page, and implementing the Pet class.

One change we made from the original design was the purpose of the strategy pattern. Originally, we wanted to utilize the strategy pattern to take care of the way each pet will use the bathroom, but during the implementation, it has been realized that the pattern did not play a significant role in the design. To make use of the pattern, it was decided that it would be best if the strategy pattern controlled how many times (random) the pet would need attention from the owner in each category.

In our original design, we did not specify a Dog class and a Cat class. During our implementation, we realized it was necessary to create an abstract Pet class that will be implemented by the Dog and Cat class. In addition the pet class now will store each file name for each of the three states to display on the app. The function checkState() was created in order to update the states according to the status.

Class Diagram



Patterns Implemented

- Strategy: The strategy pattern was useful for implementing how the status will change for the cat vs the dog. The cat is a little easier to take care of than the dog because status changes are less likely to happen unlike the dog which was easy to implement using a StatusChangeStrategy interface.

Plan for Next Iteration

The plan for the next iteration is to implement the observer, singleton, and command pattern in our app. We will also be implementing the last part of the UI, that is creating a start over button once the pet is dead.

To make our game a bit harder and to prevent the user from spamming the buttons, we plan to have the possibility of the pet leaving if it is given too much of one category. We also want to implement a timer for the player to keep track of their high score. The scores will be saved in the csv file.