# A Day in the Dog Park

# <u>Outline</u>

You are a dog who is out at the dog park, having a grand old time when suddenly, you realize you can no longer see your owner! You must go on a quest to find your owner, on the way defeating enemies, including

- A ball (while you are still at the dog park)
- A squirrel
- A bird
- A cat
- The final boss: a dog catcher!

The "fighting" will consist of bite, charm, bark, and pounce. The effectiveness of each of the moves will be determined by the type of dog one chooses at the beginning of the game; there will be a few different dog breeds with different agility, loudness, power, and cuteness levels. The enemy can also scare the dog and if the dog gets scared enough it loses the fight.

# **Implementation**

This will be written in processing so that we can have the graphics of the dog and enemies. We hope to be able to draw them outside then import the images of each character.

### Goals

MVP:

Working battle simulation Dog selection

#### Reach:

Story w/ graphics

Map w/ correct and incorrect paths; incorrect paths can lead to changed stats Ex. An incorrect path may lead into a muddy field, lowering cuteness

### **UML**

### Class DogPark

- + Stack<Enemy> Enemies
- + Dog player
- + Int gameStatus //0 if not started, 1 if started, 2 if over
- displayStats() //will be updated with draw()
- defeatedBoss() //will pop the top boss off, moving on to next
- enemyAttack()

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# Abstract Class Enemy

- + Int HP
- + Final Int BASEHP
- + Final Int BASECUTE
- -Int withstoodCuteness
- + String name
- + Boolean isDefeated()
- + Abstract ModifyHP(int damage)
- + Abstract modifyCute(int charmed)
- + returnHP()
- + returnCute()
- + abstract attack()
- + Abstract winMessage()
- + Abstract loseMessage()

# Class Ball

- + ModifyHP(int damage)
- + modifyCute(int charmed)
- + attack()
- + winMessage()
- + loseMessage()

### Class Bird

- + ModifyHP(int damage)
- + modifyCute(int charmed)
- + attack()
- + winMessage()
- + loseMessage()

# Class Squirrel

- + ModifyHP(int damage)
- + modifyCute(int charmed)
- + attack()
- + winMessage()
- + loseMessage()

### Class Cat

- + ModifyHP(int damage)
- + modifyCute(int charmed)
- + attack()
- + winMessage()
- + loseMessage()

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Class DogCatcher
+ ModifyHP(int damage) + modifyCute(int charmed) + attack() + winMessage() + loseMessage()
Abstract Class Dog
+ Int cuteness + Int agility + Int loudness + Int power + Int scared + String name
+ Boolean isDefeated + ModifyCuteness() + modifyAgility() + modifyLoudness() + modifyPower() + modifyScared() + bite() + bark() + charm() + pounce() + Abstract scaredMessage()
Class GoldenRetriver
+ scaredMessage()
Class Pomeranian
+ scaredMessage()
Class ChocolateLab
scaredMessage()
Class Samoyed
scaredMessage()

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Alternate projects: 2D racing game 2 player chess game Checkers, Chinese checkers, and Othello arcade