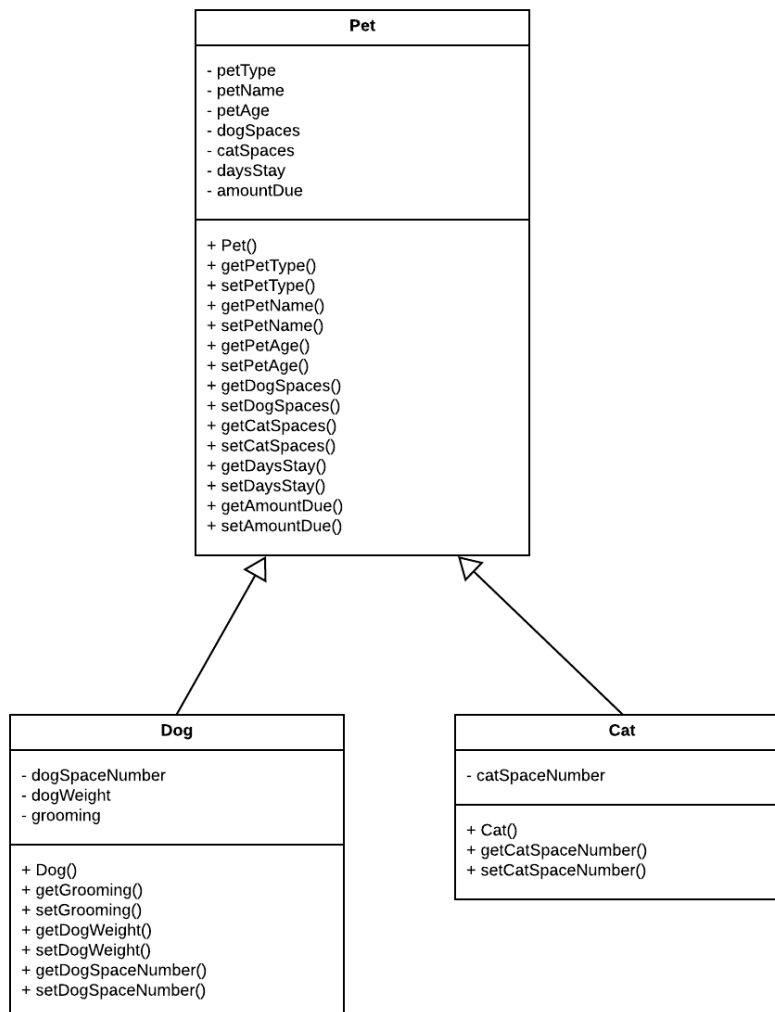# IT 145 Pet BAG Specification Document

Overview
Pet Boarding and Grooming (Pet BAG) is a company that provides boarding and grooming services for dogs and cats. They want to modernize their operations by introducing custom software that will help replace inefficient paper-based processes.

UML Class Diagram
Work on the Pet BAG application has already begun. Use this UML Class diagram, prepared by your supervisor, to understand the relationships between the Pet, Dog, and Cat classes.

```
                        Pet
 ────────────────────────────────────────────
  - petType
  - petName
  - petAge
  - dogSpaces
  - catSpaces
  - daysStay
  - amountDue
 ────────────────────────────────────────────
  + Pet()
  + getPetType()
  + setPetType()
  + getPetName()
  + setPetName()
  + getPetAge()
  + setPetAge()
  + getDogSpaces()
  + setDogSpaces()
  + getCatSpaces()
  + setCatSpaces()
  + getDaysStay()
  + setDaysStay()
  + getAmountDue()
  + setAmountDue()
```

```
              Dog                                          Cat
 ─────────────────────────────            ─────────────────────────────
  - dogSpaceNumber                          - catSpaceNumber
  - dogWeight                              ─────────────────────────────
  - grooming                                + Cat()
 ─────────────────────────────             + getCatSpaceNumber()
  + Dog()                                   + setCatSpaceNumber()
  + getGrooming()
  + setGrooming()
  + getDogWeight()
  + setDogWeight()
  + getDogSpaceNumber()
  + setDogSpaceNumber()
```

Functionality

Pet BAG is seeking an application that has the following initial functionality:

- Ability to check in pets
- Ability to check out pets

Each of these functional areas is described in more detail below.

Pet Check In

The method for the pet check in process should meet the following criteria:

- Determine if the pet is a dog or a cat and check for boarding space.
- There are 30 spaces for dogs and 12 for cats. Pet BAG will need to be able to adjust these counts as the shop grows.
- If there is space for a new pet, collect the appropriate information. For returning pets, update the information as needed.
- Gather information on the length of the stay.
- Determine if the pet owner would like the pet to be groomed. Only dogs can be groomed and only if they stay two or more days.
- Assign the pet to a space.

Pet Check Out

The method for the pet check out process should meet the following criteria:

- Identify the pet and its boarding space.
- Determine if the pet had a grooming fee. Only dogs can be groomed and only if they stay two or more days.
- Use the following table to calculate the total fees.
- Mark the boarding space as vacant.

Type of Pet	Daily Boarding Fee	Grooming Fee
Dog (greater than or equal to 30 lbs.)	$34.00	$29.95
Dog (20–30 lbs.)	$29.00	$24.95
Dog (fewer than 20 lbs.)	$24.00	$19.95
Cat	$18.00	N/A