Exercise 10.3 – Requirements Narrative

The owners of YYC Pet Resort, a rapidly growing boarding facility for cats and dogs, need to design an application to organize their client and facility information.

According to the company owners:

"The pet is at the core of our business. We take special care to learn everything we can about our boarders.

"Of course, clients are important, too. We try to retain a relationship with them regardless of their situation. Even when a pet has passed away, we keep their name, phone number, and address on file. We want to be sure that if they adopt a new pet they will think of us for their boarding needs.

"We're very careful to keep a care profile for each pet, which includes feeding instructions, a medication list, and medication instructions. We make a print-out of the care instructions for all pets in our care, which are posted so that staff don't have to search for this information. We can also pull up the complete care profile on the computer."

Lalitha Chitnis, manager of the northwest Calgary store, described some of the functionality she needs to perform her duties.

"Whenever a new employee joins, I enter their name and then I have to assign them an ID number. I also assigned them a manager by inputting their supervisor's ID, and then I add the new employee's ID to the manager's list of supervised employees. Each manager can supervise a maximum of 10 employees.

Thomas Walls, head of advertising, specified additional requirements:

"The rewards profile is really important to the business. We keep the rewards number and points total. It's an important part of the client profile, but of course not every client is part of the rewards program, though we really encourage them to enroll. When they're not enrolled, I just see their reward number as 'Not enrolled'. They get 10 points just for enrolling.

"They get points for every time they board with us, and in the end that can translate to things like a complimentary grooming. Once a month, we pick a rewards profile at random and give a free day of boarding to the winner, regardless of their rewards points. This makes it worthwhile for all clients to enroll in the program, even if they don't board often enough to earn many points. When I'm looking at a client's information, I can immediately see their rewards profile and tell them how close they are to earning a reward."

Slobodan Klasinc, booking manager, provided the following information:

"When a client makes a booking for their pet, a single employee is assigned to that pet from the start to the end of its stay, because this ensures consistency of care. At the end of any booking, we produce a report card in our system, which we can also print for the client. Our employees are highly skilled, and can be assigned to several pets."

Soyoon Kim, the central administrator, told us:

"I register all the pets. We need the name, of course, plus whether it is a dog or cat, and the colour and breed, which help the staff identify it. We also keep track of whether vaccine status is up-to-date but really that's just a yes or no, and if the no isn't corrected before the next visit, the pet can't board with us anymore. There's a care profile of feeding and medical instructions for each pet, and we store an emergency vet contact for each pet. For some reason, although we have thousands of pets in our system, there are only about a hundred vets that our clients use, so right now we keep the emergency vet's name and phone number in a spreadsheet. I think the reason that there are so few vets is that a lot of our clients have multiple pets, and they usually use the same vet for each pet - although I do know one person who has one vet for their dog, and another for their cat. I really look forward to being able to see that information when I'm looking at a pet profile!"

Paul Asukwo, our lead requirements engineering analyst at OOP Software, asked you, our junior analyst, to complete the UML diagram. He wants to see the RewardsProfile class throw a custom InvalidRewardsNumException when the provided number is invalid. He also mentioned that to keep things simple, for now all member variables can be made private, and all methods can be made public.

OOP Software's lead programmer, Mehvish Jaffary, started working on the prototype, but only had the chance to determine the breakdown of class files before she was needed on another project. She left the following notes.

```
public class Pet{
}

public class Client{
}

public class RewardsProfile{
}

public class Booking{
}

public class ReportCard{
}

public class Employee{
}

public class CareProfile{
}

public class EmergVet{
}

public class InvalidRewardsNumException{
}
```