GLOBALRAIN

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Date: March 16, 2022

IT 145 Global Rain Summary Report

Directions

Place your pseudocode, flowchart, and explanation in the following sections. Before you submit your report, remove all bracketed text.

Pseudocode

When you are done implementing the Pet class, refer back to the Pet BAG Specification Document and select either the pet check in or check out method. These methods are detailed in the Functionality section of the specification document.

Write pseudocode that lays out a plan for the method you chose, ensuring that you organize each step in a logical manner. Remember, you will *not* be creating the actual code for the method. You do *not* have to write pseudocode for both methods. Your pseudocode must not exceed one page.

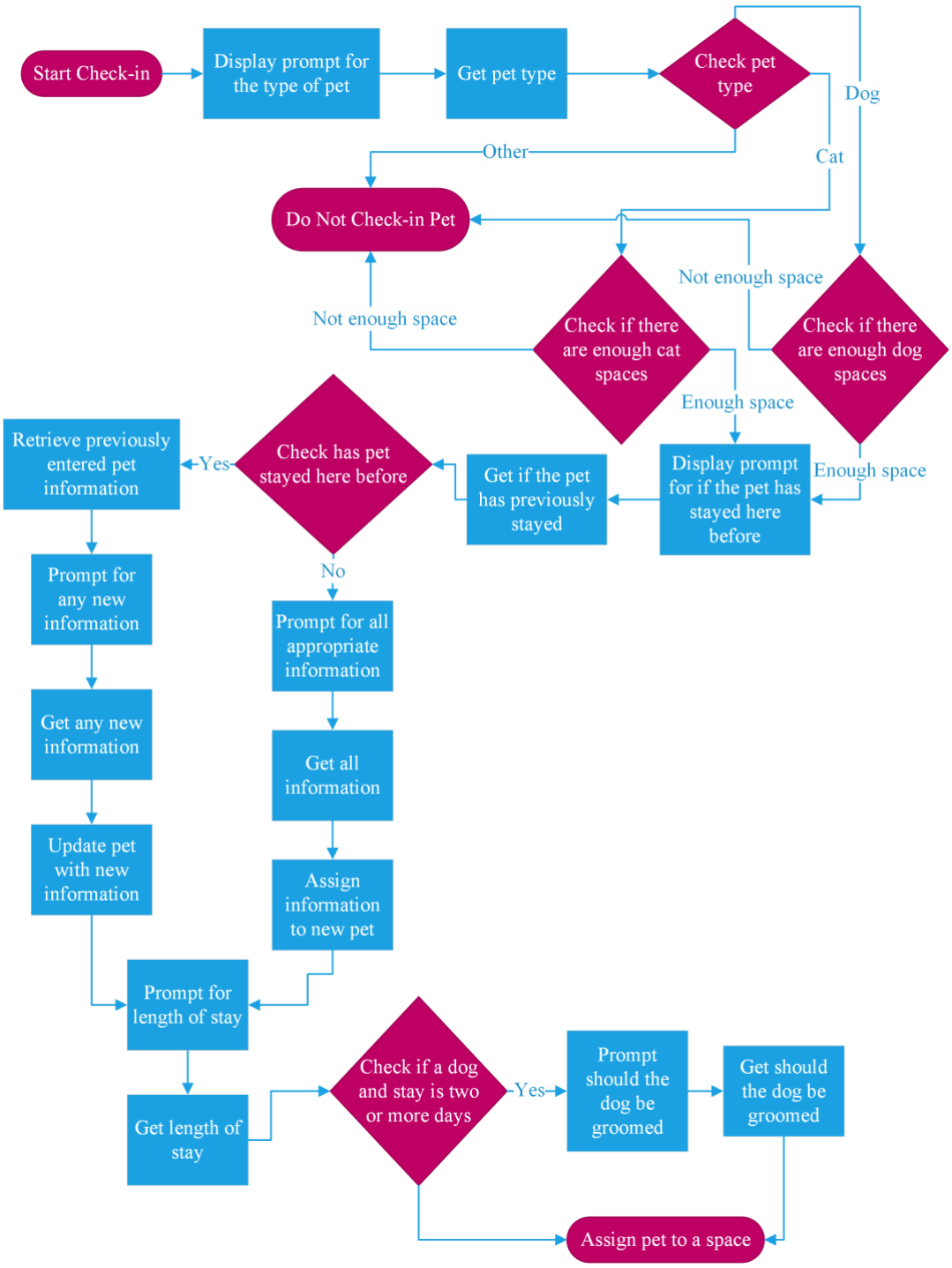
Pet Check-In:

```
PROMPT what type of animal is the pet
GET pet type
IF pet is a dog
        IF there are enough dog spaces
                THEN continue check-in
        ELSE
        DISPLAY not enough dog spaces
        Do not check in the dog
ELSE IF pet is a cat
        IF there are enough cat spaces
                THEN continue check-in
        ELSE
        DISPLAY not enough cat spaces
        Do not check in the cat
ELSE
        DISPLAY not a valid type of pet
        Do not check in the pet
PROMPT has the pet stayed here before
GET previous stay
IF pet has been checked in before
        RETRIEVE old pet information
        PROMPT for any new information
        UPDATE new information for pet
ELSE
        PROMPT for all appropriate information
        ASSIGN information to pet
PROMPT for length of stay
GET length of the stay
IF pet is a dog AND length of stay is two or more days
        PROMPT should the dog be groomed
        GET should the dog be groomed
ASSIGN pet to a space
```

Flowchart

Based on the pseudocode you wrote, create a flowchart using a tool of your choice for the method you selected. In your flowchart, be sure to include start and end points and appropriate decision branching, and align the flowchart to the check in or check out process. Your flowchart must be confined to one page.

Pet Check-In:



OOP Principles Explanation

Briefly explain how you applied object-oriented programming principles and concepts (such as encapsulation, inheritance, and so on) in your software development work thus far. Your explanation should be one paragraph, or four to six sentences.

I applied the object-oriented programming principle of encapsulation to the Pet class by making all the fields for the class private. That way, the fields can only be accessed and modified through the public methods of the class. The concept of abstraction can also be seen in the Pet class. With the getters and setters being the only part of the class that is exposed, it hides the internal workings of the class. As the user, you don't need to know how the fields in the Pet class are being retrieved or set. You only need it to get a value or to set one.