GLOBALRAIN

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IT 145 Global Rain Summary Report Template

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 Pseudocode:

INPUT pet type, dog or cat

IF pet is dog

      IF dog spaces available is less than 30

            CHECK IN dog

            INCREMENT dog count by 1

            CHECK if pet is new customer or existing customer

                  IF new customer

                        INPUT new information

                  ELSE existing customer

                        UPDATE information as needed

      INPUT length of stay

      SET length of stay

            IF dog is staying greater than or equal to two days THEN

                  CHECK for grooming

                        IF yes

INPUT grooming

ELSE

no grooming

ELSE dog is staying less than two days

OUTPUT grooming not offered

ASSIGN dog to space

ELSE

OUPUT dog spaces full, no room for boarding

ELSE pet is cat

IF space available is less than 12

CHECK IN cat

INCREMENT   cat count by 1

IF pet is new customer

INPUT new information

ELSE existing customer

UPDATE information as needed

INPUT length of stay

ASSIGN cat to space
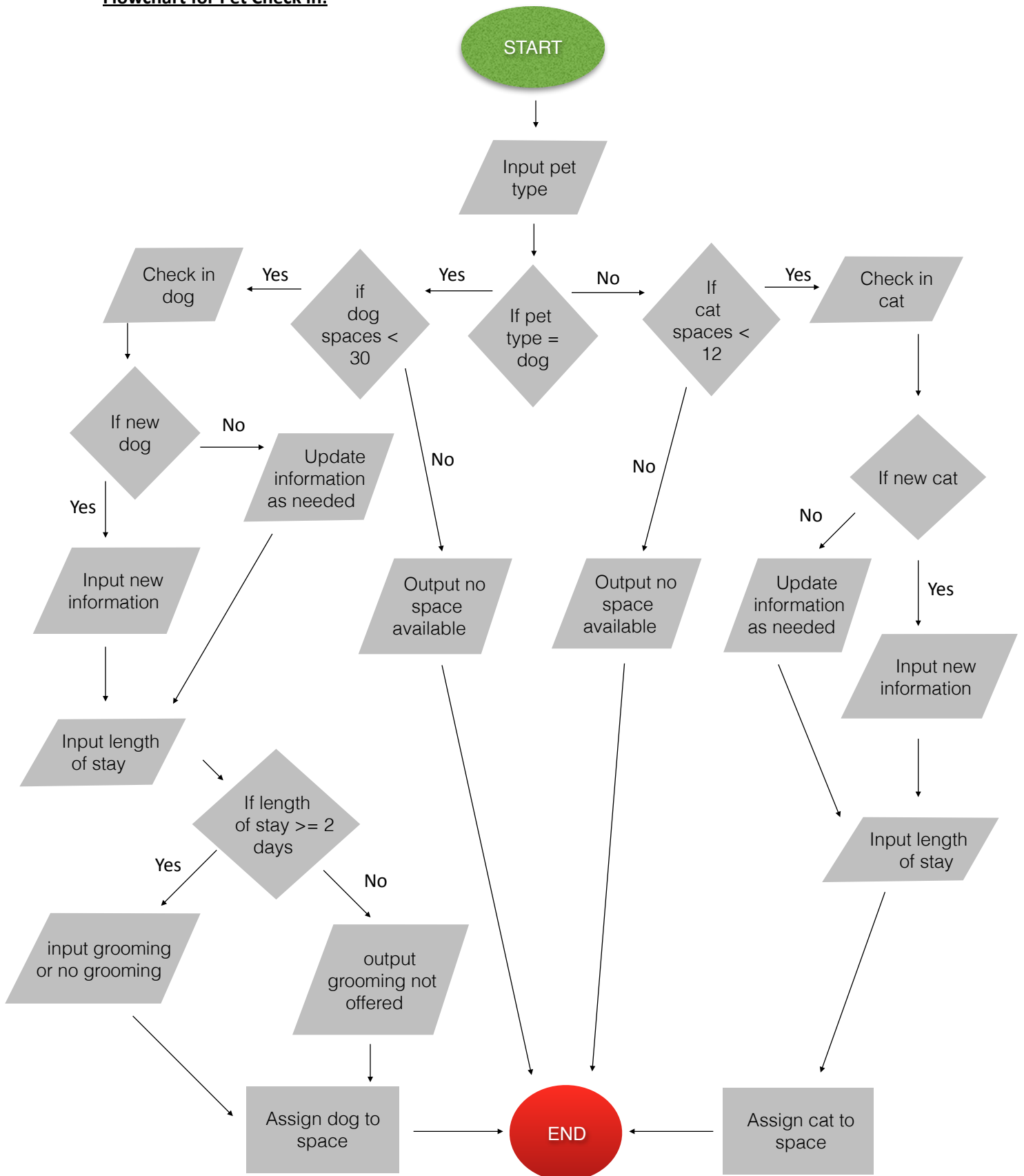
ELSE

OUPUT cat spaces full, no room for boarding

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.

please find flowchart on following page

Flowchart for Pet Check in:

START

Input pet type

If pet type = dog

if dog spaces < 30 ← Yes

No → If cat spaces < 12

Check in dog ← Yes

Yes → Check in cat

No → Update information as needed

If new dog

If new cat

Yes → Input new information

No → Update information as needed

Yes → Input new information

No → Output no space available

No → Output no space available

Input length of stay

If length of stay >= 2 days

Input length of stay

Yes → input grooming or no grooming

No → output grooming not offered

Assign dog to space

END

Assign cat to space

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.

The four object-oriented principles have been applied in multiple ways throughout my software development journey so far. I have used encapsulation to restrict access to the public methods in the Pet class. Inheritance and Polymorphism were used while using the different classes of Pet, Dog, and Cat. Inheritance allows the Dog and Cat classes to reuse the code of the super class, Pet. Polymorphism allows us to write code that works on the super class but can also work with the sub classes (Dog and Cat) as well. Using abstraction allowed the classes to work with each other without having to know the inner minute details of each of them. Overall, the object-oriented principles allow us to produce maintainable code and understand it easier.