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**Date**: [3/25/25]

# Directions IT 145 Global Rain Summary Report Template

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.

START Pet Bag Check

Get user input dog or cat

Limits: Pet Bag has 30 spaces for dogs and 12 spaces for cats

CHECK for available space

IF able with given spaces

INPUT cat

ELSE

NO space available

ELSE dog

CHECK for available space

IF able with given spaces

INPUT dog

ELSE

NO space available

Has the pet stayed with Pet Bag before

IF yes returning

UPDATE pet info

IF no, not returning

ELSE new

ADD info

Need to check for grooming status:

CHECK for grooming with pet stay

IF pet is a dog

IF dog has a stay 2 days or more

IF yes

ADD grooming to stay

ELSE no grooming added to stay

ELSE the pet stay is less than 2 days

NO grooming added to pet stay

ELSE no grooming added to pet stay

Check Is it a cat or dog

IF a cat, subtract open cat spaces and add pet

ELSE IF the pet is a dog, subtract open dog spaces and add pet

END

## 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

Space open for dog?

Space open

for cat?

NO

NO

YES

YES

New

Or

Returning pet?

New

Or

Returning pet?

New

dog

Returning

dog

User input

user input

User input

User input

Update returning

pet info

Collect new

pet info

Get pet

Length of stay

Get pet

Length of stay

Stay 2 days

Or longer

Grooming not

Available

Offer

Grooming

Add cat

To space

Grooming

Accepted

Add dog

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.

I used the principles of OOP in this project during creating the code to help with being able to reuse and maintain attributes of it. For the part encapsulation was used while I made private class attributes to the class Pet. These could be accessed through public getters and setters that were created. I tried to make sure that there wasn’t extra code or repeating code that was unneeded that would cause errors.