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**Date**: 07/20/2022

# 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.

## Variables: Pet Type, pet Name, pet Age, pet Spaces (Cat or Dog), Days of stay, amount due.

## Get user inputs for variables

## Assign variables with user inputs

## 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.

Current Dog Space = New Dog Space

Is new dog space <=30?

New dog space = Current Dog Space+1

Dog

Is Dog?

(Pet Type)

Start

Set input dog the current dog space number

Yes

No

End

No

No

No

Is stay >= 2 days?

Set input dog the input Days

Yes

Groom the pet

End

End

Yes

Get Days of stay

Set input dog the input weight

Get Weight

Set input dog to be groomed

Check-in

Start

Check-out

Pet Got Grooming?

Get Weight, days of stay, and grooming

Enter Boarding space #

No

If weight is under 20 pounds $19.95 + the fee of staying $24 \* the length of time of stay.

If weight is under 20 pounds $24 \* the length of time of stay.

Yes

If weight is 20 – 30 pounds.  
$24.95 + the fee of staying $29 \* the length of time of stay.

If weight is 20 – 30 pounds.  
$29 \* the length of time of stay.

Else weight is >= 30 pounds.  
$34 \* the length of time of stay.

## 

Else weight is >= 30 pounds.  
$29.95 + the fee of staying $34 \* the length of time of stay.

Once the transaction has been completed subtract 1 from the current spaces for Dogs and remove the number assigned to the dog boarding space from that particular pet and their name.

## 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.

With the OOP Principles I have been able to reduce redundant code which will be more apparent in my final project for this when we combine cat and dog. With inheritance I don’t have to make individual variables for both cat and dog type, instead things like name, age, days stay, amount due and spaces available for each pet type, instead we can assign public variables for all of them and let cat and dog use them how they wish. With encapsulation we can make a more straightforward and overall more easy to read code especially with two separate pet types to define and assign their variables. When it comes to abstraction our pet type will be an abstract variable that way we don’t have to define everything that could go into that type of variable. Polymorphism also allows our code to have a more versatile set of a variables in order to make it easier to read and also simplier to code.