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

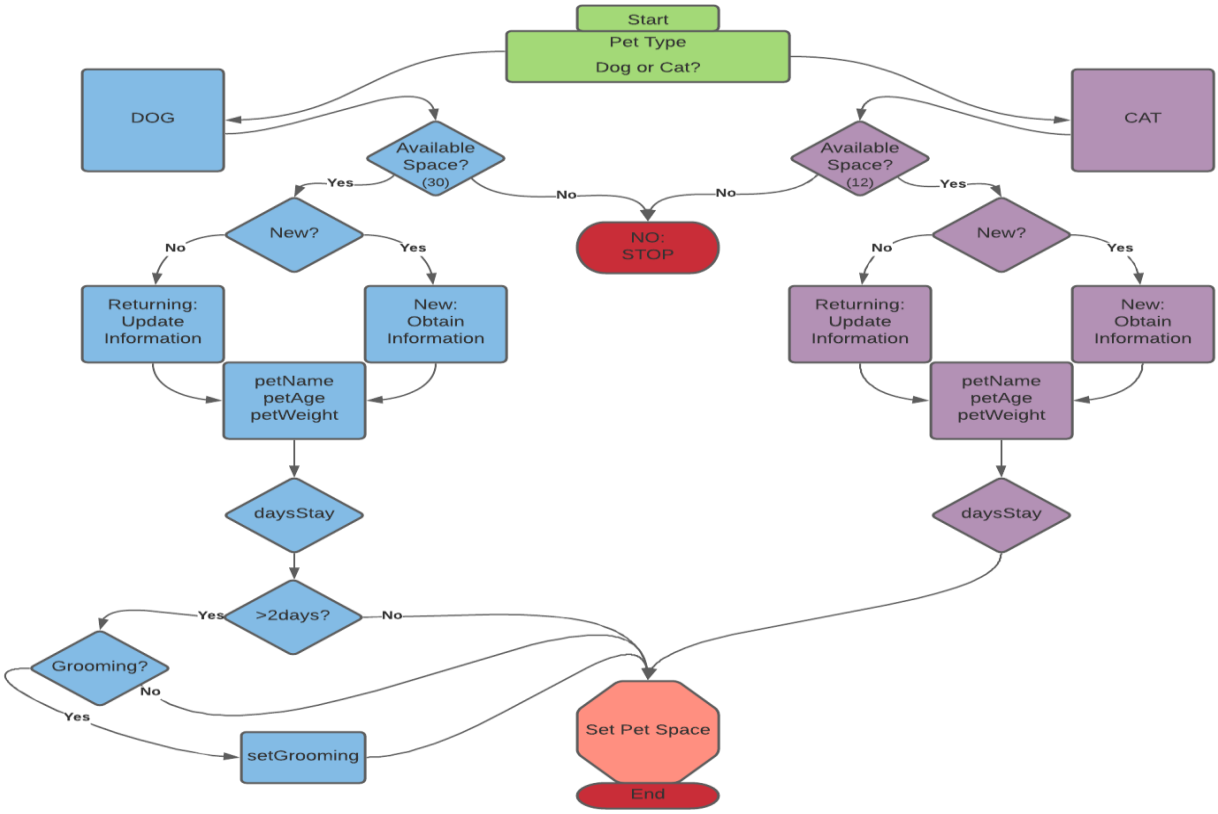
OBTAIN pet type: DOG or CAT

- IF dog THEN
  - GET dogSpace(30)
    - IF no space:
      - STOP;
    - ELSE IF space available
      - OBTAIN new or returning
        - IF new SET
          - petName
          - petAge
          - PetWeight
        - ELSE IF returning UPDATE
          - petName
          - petAge
          - PetWeight
  - OBTAIN daysStay
  - SET daysStay
    - IF daysStay >= 2
      - CHECK grooming
        - IF grooming == T
          - SET grooming
          - SET space number
        - ELSE IF
          - SET space number
- IF cat THEN
  - GET catSpace(12)
    - IF no space:

- STOP
- ELSE IF space available
  - OBTAIN new or returning
    - IF new SET
      - petName
      - PetAge
      - PetWeight
    - ELSE IF returning UPDATE
      - petName
      - PetAge
      - PetWeight
- OBTAIN daysStay
- SET daysStay
- SET space number

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.



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.

By setting the class variables on the Pet class as private and providing access to them via public methods, Encapsulation was used to help keep data within the class protected. Polymorphism is used by providing a default constructor for Pet that can be either a Dog or a Cat, this decreased the amount of code needed within the software. Inheritance has not yet been implemented in the code, however, when the software is fully developed the Dog and Cat classes will both extend the Pet class to avoid duplication of code and build on the code that has already been created. Abstraction will be used when implementing the boarding and grooming fees based on the pet's weight, the clerk will not need to know how the cost is calculated based on the weight, only that when they enter the dogs weight, they will be provided with the correct amount to charge the customer for boarding and grooming fees.