Assignment: Pseudo code and Flowchart IT-145 JAVA PROGRAMMING requirements and rubric.Overview Pseudocode is “language agnostic,” meaning that you can create pseudocode with little to no experience in a specific programming language. Pseudocode helps you plan out your code in a logical manner. Flowcharts are a powerful way to graphically represent logic, decisions, and branching. This activity will help you develop the skills necessary to plan and organize your code, which is an important skill for programmers at all experience levels. In this activity, you will write pseudocode and create a flowchart for a basic computational task. The purpose of this assignment is to prepare for your Project One submission in Module Three. Remember to revisit the pseudocode and flowchart you create in this module and implement any feedback from your instructor before you submit your pseudocode and flowchart in Project One. Prompt Your client, Pet BAG, has provided you with a specification document detailing its software needs. To begin, review the Pet BAG Specification Document. Select either the Pet Check-In or Pet Check-Out method, which are detailed in the Functionality section. You will design a solution using pseudocode and a flowchart for the method you select. You do not need to write pseudocode for both methods. As you read through the descriptions for each method, ask yourself the following: How would I break down these steps in a way that a computer can understand? What information would I need from the user at each point? When would it be a good idea to use “IF” and “IF ELSE” statements? After reading through the specification document and selecting your method, follow these steps to complete this assignment: Based on the method you chose, write pseudocode that lays out a plan for the method. Start by breaking down the description of the method into a series of ordered steps. As you write and review each step, consider the following: What input does the computer need to complete the task? Be sure to prompt the user for the appropriate input. When might you need to use decision branching and use a different set of steps depending on the user input? If you used decision branching, did you account for all possible input values? Based on the pseudocode you wrote, create a flowchart for the method you selected. You may draw your flowchart by hand, or you may use a flowcharting tool such as Lucidchart. Your flowchart will help your team communicate to your client how you are planning to develop the software. In your flowchart, be sure to do the following: Include start and end points. Include appropriate decision branching. Align the flowchart to the check-in/check-out process you selected. PET BAG SPECIFICATION System Specification Document Pet Boarding and Grooming (Pet BAG) is a company that provides boarding and grooming services for dogs and cats. We want to modernize our operations by introducing custom software that will help replace inefficient paper-based processes. Functionality We are seeking an app that has the following initial functionality: • Check-in pets • Check-out pets • Pet management • Reports Each of these functional areas are described below. Pet Check-In To update our current processes, we outline our current manual check-in process below, which involves multiple steps and verifications. First, we determine whether the pet is a dog or a cat. Next, we determine if boarding space is available for the pet. There are currently 30 spaces for dogs and 12 spaces for cats. We would like the ability to update these settings as needed. If boarding space is available, we identify whether the pet is a new or returning visitor. If the pet has stayed with us before, we are seeking the ability to update information as needed. If the pet is a new visitor, we would like the opportunity to collect all the appropriate information. Additionally, we would like the ability to gather information on the length of stay for each pet and if grooming services are required. Grooming services are only offered for dogs that stay at Pet BAG for two or more days. No grooming services are offered for cats. Our final step is to assign the pet to a space. Pet Check-Out To update our current processes, we outline our current manual check-out process below, which involves multiple steps. First, we identify the pet and its current boarding space within Pet BAG. If the pet is scheduled for grooming, this service is provided as part of the check-out process. We also collect information of the amount due to the customer based on the fees below: Type of Pet Cat Dog (greater than or equal to 30 lbs.) Dog (20–30 lbs.) Dog (fewer than 20 lbs.) Daily Boarding Fee $18.00 $34.00 $29.00 $24.00 Grooming Fee N/A $29.95 $24.95 $19.95 Finally, we clean the boarding space and prepare it for the next visiting pet. Pet Management We require the following to manage the pets that we have boarded: • Ability to move a pet from one boarding space to another • Ability to record morning and evening feedings • For dogs, ability to record morning, afternoon, and evening yard time • Ability to add notes on any pet • Ability to update pet data including weight, grooming requirements, and notes • Ability to denote whether a pet stay has been paid for or not • Ability to schedule a space for cleaning and alert personnel when the space is ready Reports TBD