

# CST 183 Programming Assignment 2

Fall 2019 Instructor: T. Klingler

# **Objective**

To build a complete working Java program to apply variations on the selection control structure and basic error-testing.

#### **Overview & Instructions**

The local minor league team needs to write a system to process ticket orders. Write a Java program to accomplish this given the specifications below.

The following types of tickets are available (per game):

Lawn

\$8 per game / person

Seat

\$12 per game / person

BoxSeat

\$25 per game / person

Prompt the user for the following information as input:

- Number of tickets (integer)
- Type of seats (character or String defining Lawn (L), Seat (S), or BoxSeat (B)
- Yes or no question whether order is for season tickets (char or boolean)
  - If YES, set season ticket cost per ticket (see below)
  - o If NO,
    - Prompt for number of games (integer)
    - Calculate total cost by ticket type, number of games, and number of tickets
- Yes or no question whether the tickets are to be mailed or picked up at ballpark

# Season ticket prices will be:

Lawn

\$800 / person

Seat

\$1500 / person

BoxSeat

\$3500 / person

Volume discounts are offered for the following options:

- Purchasing 3-9 tickets, deduct 5% from the cost
- Purchasing 10 or more tickets at once, deduct 10% from cost

Delivery charges are \$3 for ticket orders to be mailed and zero if picked up at the ballpark will call

Your program should include the following error-checking features:

- Number of tickets must be zero-or-above Zero.
- Number of games must be one or greater, but less than 100
- Ticket types must be an L, S, or B

Your output should be a clear, organized summary that includes the number of tickets purchased, the number of games, the type of ticket, the mailing charges, and the total cost. Include an explicit message highlighting if the tickets are to be picked up at the ballpark will call, or if they will be mailed.

Be sure to format your report using two-decimal dollar amounts as well as labels and headings, as appropriate.

Finally, a programming note for String usage:

- Instead of if (aString == "B") use if (aString.equals("B"))
- To convert a String to a char, use: aChar = aString.charAt(0);

## **Deliverables**

<u>Deliver</u> the following to the online course management system **dropbox** as your final product:

• Upload your source code (.java) file

## **Notice**

This is an individual assignment. You must complete this assignment on your own. You may not discuss your work in detail with anyone except the instructor. You may not acquire, from any source (e.g., another student or an internet site), a partial or complete solution to a problem or project that has been assigned. You may not show another student your solution to an assignment. You may not have another person (current student, former student, tutor, friend, anyone) "walk you through" how to solve the assignment.