The University of Texas at El Paso Department of Computer Science CS 3331 – Advanced Object-Oriented Programming Instructor: Daniel Mejia Fall 2023 Programming Assignment 0

Academic Integrity Statement:

This work is to be done individually. It is not permitted to share, reproduce, or alter any part of this assignment for any purpose. Students are not permitted from sharing code, uploading this assignment online in any form, or viewing/receiving/modifying code written from anyone else. This assignment is part of an academic course at The University of Texas at El Paso and a grade will be assigned for the work produced individually by the student.

Instructions:

Your code must be written in Java. You must submit your assignment through GitHub Classroom. In the comment heading of your source code, you should write your name, date, course, instructor, programming assignment 0, lab description, and honesty statement. The honesty statement must state that you completed this work entirely on your own without any outside sources including peers, experts, online sources, or the like. Only assistance from the instructor, TA, or IA will be permitted.

Scenario:

You have recently been hired to work for *TicketMiner*, a company that sells tickets for sporting events, concerts, special events, etc. You have a few customers that are interested in creating their events using your system.

- 1. Create a class called "Sport" which is representative of a sport that can be held in a single location
- 2. Create methods that will change the name, date, time, VIP price, gold price, silver price, bronze price, and general admission price of a sporting event
- 3. Create methods that will show the name, date, time, VIP price, gold price, silver price, bronze price, and general admission price of a sporting event
- 4. Create a method called "printInfo" that will print all the information of the Sporting event
 - a. Event ID
 - b. Name
 - c. Date

- d. Time
- e. VIP Price
- f. Gold Price
- g. Bronze Price
- h. General Admission Price
- 5. Read a CSV file with event information
 - a. Do not use a library for this part; instead, you should write the code from scratch. You may use Scanner, Buffered Reader, or File Reader
- 6. Using the data from the CSV file of Sporting events, create "Sport" objects and store them inside an appropriate data structure
- 7. Create a terminal based interface that will do the following:
 - a. Receive input from the user to search for a specific event by Event ID
 - b. Create a small menu that will call the functions that were created as part of the "Sport" class
 - i. Please make this intuitive and user friendly
- 8. Log each action that is taken and write it to a text file
 - a. For example:
 - i. "Event ID XX updated name to UTEP Football 1"
 - ii. "Event ID XX updated the time to 6:30 PM"
 - b. This file can be produced upon successful termination of the program
- 9. Handle exceptions gracefully
- 10. Verify that your code is well documented
- 11. Write a lab report describing your work (template provided)
 - a. Any assumptions made should be precisely commented in the source code and described in the lab report
 - b. Lab report should contain sample screenshots of the program being run in different circumstances including successful and failing changes
- 12. Complete an individual code review on your code (template provided)
- 13. Randomly selected students will receive information to demo with the TA/IA by email
- 14. **If submission is past the deadline** Your report must have an additional section entitled "Why I submitted late". In that section, explain the reason why your submission was late. (Note: you will still be penalized the typical late penalty)

Deadline (GitHub Classroom) September 7, 2023, by 11:59pm:

- 1. Source code (.java files)
- 2. Lab report (.pdf file)
- 3. Log (.txt)