

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

**Clean-Up Programming Assignment**

**Academic Integrity Statement:**

This work is to be done in a team. 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 besides teammates. 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:**

This assignment is to be done in a team of 4 people. 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 5, lab description, and honesty statement.

**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 many customers and events that are interested in creating their events using your system.

**Part A:**

Read the requirements described in Part B to complete Part A. Part A should be completed before Part B. Update and verify the accuracy of the required diagrams to conform to the code specifications of PA5.

1. Write a refactored UML Class Diagram to structure your code using the classes, requirements, and concepts described in Part B
2. Write a level II UML Use Case Diagram based on Part B
  - a. 5 Use Cases
  - b. 2 Actors
  - c. 1 extend
  - d. 2 include

3. Write a UML State Diagram describing purchasing event ticket(s) as an individual customer
4. Write 3 Use Case Scenarios for any portion of the system

#### Part B

1. Refactor the code
  - a. The code should handle all functionality from Programming Assignment 5 (PA5)
  - b. Fix anything that should be corrected
    - i. Appropriate data structures
    - ii. Appropriate use of objects
    - iii. Relationships between objects
    - iv. Algorithms and complexity
2. Review code to validate requirements from PA 0-5
  - a. All functionality from PA 0-5 should be fully implemented
3. Test your system to verify functionality
  - a. All functionality from PA 0-5
4. Write the Javadoc for your system
5. Write electronic tickets for 8 customers (Dr. Mejia, Ali, each member of the team, and two of your favorite Disney characters on the list)
  - a. You may use the electronic tickets made from PA5 (i.e., if they are without errors, otherwise create new electronic tickets)
6. Update the lab report describing your work (template provided)
7. Create a “script” of test cases to test another team
  - a. You should have 3 parts:
    - i. Easy tests
      1. Simple inputs
    - ii. Medium Tests
      1. Common cases
    - iii. Difficult Tests
      1. Edge cases
  - b. Each section should have at least 4 different tests (i.e., 4 easy, 4 medium, 4 difficult)
8. Update the provided slides
  - a. You are free to update the theme/design as long as it remains professional and clear

#### **Deadlines:**

**November 27, 2023, at 5:00pm - GitHub Classroom (NO LATE SUBMISSIONS WILL BE ACCEPTED):**

1. UML Class Diagram (.pdf)
2. UML Use Case Diagram (.pdf)
3. UML State Diagram (.pdf)

4. UML Use Case Scenarios (.pdf)
5. Lab report (.pdf file)
6. Source code (.java files)
7. JavaDoc (entire doc folder)
8. Updated Event Sheet (.csv)
9. Updated Customer Sheet (.csv)
10. Electronic Ticket for 8 customers
11. Log (.txt)
12. Testing Script
13. Updated Slides