Coders in Paris

Team #3

Team Members:

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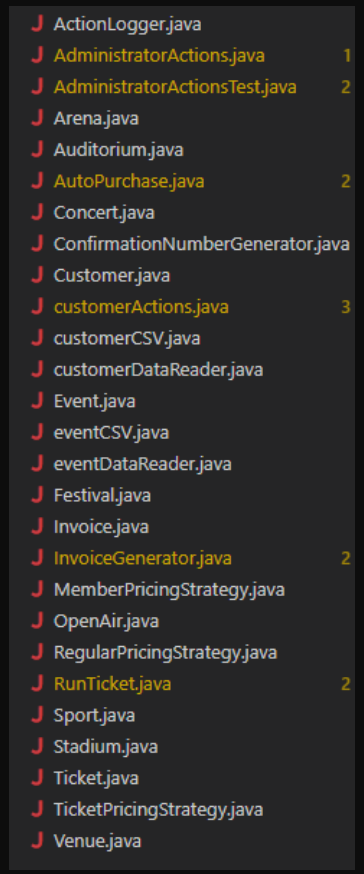
Part A — Project

How did I use Object-Oriented Programming?



- How did you utilize OO programming into your project?

  Utilizing object-oriented programming, our system models real-world elements like events, venues, customers, and tickets. This approach simulated their interactions accurately and promotes a structured, maintainable codebase. Encapsulating data and behavior within distinct objects ensures adaptability to changes while minimizing unintended side effects.

- Describe your strategy for merging code from all teammates into one

  The strategy we used was to overlook each other's code and discuss what was done well and what was done wrong. We took all the well and merged it. This was difficult as we had to adapt each classes to work with each other.

Design Pattern Overview: How did I use Design Patterns?

We used the singleton design pattern along with the strategy design pattern.

We used singleton as we had the task to write a csv file only at the termination of the program, so we wanted only to be there one instance of that writer through that whole program which was initialized at the start, and it is used only at the end of the program.

Furthermore, we used the strategy design pattern to dynamically select how to charge a customer depending whether or not they were a Ticketminer member.

Data Structures Overview: How did I apply data structures?

- Discuss with the class your approach and use of data structures

The data structures we used were array lists to store the customer data along with event data and HashMaps to find and extract the information dynamically only using the header names. The reason we used these data structures were that not only are they simple to use but they were efficient for the data size.

Part B – Course Reflection

Major Takeaways of the Course

- Describe the major takeaway of the course: Why is the course important? Why is OO programming important?

This course is important as it teaches concepts that overall make you a better programmer teaching you to make efficient sustainable code.

Object Oriented Programming is important at it allows you to model the real-world objects into programs allowing you to make useful software.

What did you learn in the course?

- What was the major things that you learned in the course? What was some of the useful things you learned in the course?

In this course we learned to make better use of classes and to make scalable code for others to add on to. Along with how to collaborate with others in programming projects. We also learned to better use data structures in a realistic scenario which gave us a better understanding of their purpose.

What would you tell future students of the class

What advice would you give students who take this course in the future? What would you tell them to look forward to?

- The advice we would give is to understand programming concepts and implement them in code to fully visualize their uses. Look forward to finishing your code as it is something to be proud of after working hard on it, and when assigned an assignment DO IT EARLY!!!

Part C – Demo