



PROJECT 2 WRITEUP

Program Design & Construction, S2 2023

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The GitHub repository that highlights commits, branches and collaboration can be viewed at github.com/RafiGYH/PDC_A2/

Group 60 have developed a cinema booking system that makes it easy to reserve tickets to one of the three new movies in our three theatres, one of which even has premium seating! The system's main class, BookingSystem, controls the interaction between interfaces, abstract classes and concrete implementation. Below, I will summarise the project setup and critical contributions we made.

Note, listed below are some of the classes from Project1, which have now been modified or created for Project 2

Project Setup:

The BookingSystem class manages the entire booking process; it is effectively the brains of our system. It functions as a hub for our class's. It establishes connections to other crucial classes like Movie, Show and our other critical class, BookingCalculator, which handles the numbers and calculations of the system. The BookingSystemGUI class is an important addition to Project 2 as it handles the operations of input and output from the user and works closely with the other classes.

Team Contributions:

Thomas made significant contributions to several core classes in this cinema booking system and the setup of the embedded Derby database. The development of the Movie, Show, Promo codes (including PromoCode, InvalidPromoCode, FixedDiscountPromo and PercentageDiscountPromo) BookingCalculator, and Cinema, including PremiumCinema and StandardCinema, in addition to the exception classes, BookingException and RuntimeException. These classes ensure the system correctly accounts for variables like ticket types, movie preferences, and discount codes when calculating the final cost depending on users' input, with solid error handling and input validation in addition to supporting the GUI development. This ensures a pleasant user experience despite unexpected input and shows Thomas's attention to detail.

Rafi was equally pivotal in determining the outcome of the success of this project. He actively contributed to important classes, including the primary GUI experience, Booking and PromoCode, including FixedDiscountPromo and PercentageDiscountPromo and took the lead on the BookingSystemGUI. The user's interaction with our cinema booking system was made more user-friendly that's for Rafis amazing GUI. Rafi's movie class ensured friendly prompts and stored them as variables for use throughout the program. Additionally, Rafi was essential in enabling data durability and allowing users to access their booking information across several sessions easily.

Although specific creators were initially assigned to certain classes, our collaboration was marked by continuous idea-sharing, joint problem-solving, and contributions across most classes. We maintained a collaborative decision-making process throughout development, ensuring the effort was spread relatively, as highlighted in the GitHub commits.

In conclusion, Rafi's and I's working relationship produced our cinema booking system, with us both contributing significantly to creating the application's essential building blocks. The accomplishment of this project demonstrates our joint dedication to delivering a top-notch, user-friendly solution.