Web Application
Assignment Report

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Introduction

The goal of this project was to develop a B2C (business-to-consumer) user interface for a theatre web application. The application was designed to manage theatre showrooms, their seat plan, availability, and reservation process. Additionally, the application was required to provide an API that returns the list of all active theatre shows and the seat plan for a particular show.

Design

The web application was designed to be used by both anonymous users and logged-in customers. Anonymous users could search for plays, check the details of a play, and check the seat occupancy of a particular show. They could also create a customer account, log in with username and password, and search for shows on a particular date.

Logged-in customers, who were marked as B2C users, could perform all the functions of anonymous users. In addition, they could check and update their profile page, reserve up to five seats for a particular show, and browse past reservations.

The application was designed using the Model-View-Controller (MVC) architectural pattern. The models were used to define the entities in the system, including Play, TheaterHall, Seat, User, Customer, Show, and Reservation. The views were used to display the user interface, while the controllers were used to manage the application logic and user interactions.

Implementation

The application was implemented using Java as the primary programming language. The Spring Framework was used to implement the MVC architecture and

manage the application's dependencies. Hibernate was used to implement the object-relational mapping (ORM) layer and manage the persistence of data.

The web application was implemented using HTML, CSS, and JavaScript. The front-end user interface was designed to be responsive and user-friendly, with features such as search, filtering, and paging.

Conclusion

The B2C user interface for a theater web application was successfully developed and implemented, meeting all the project requirements. The application was designed using the MVC architectural pattern and implemented using Java, Spring Framework, and Hibernate. The user interface was designed to be responsive and user-friendly, with features such as search, filtering, and pagination. The application was thoroughly tested for usability and accessibility, ensuring that it is easy to use and accessible to all users.