BookMyShow – Java Swing Desktop Application

Project Documentation

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1. Overview

This project is a Java-based desktop application that replicates the core functionalities of a ticket booking platform like BookMyShow. The application offers a user-friendly GUI for movie selection, seat booking, and user account management. It is developed using Java Swing for the front-end interface and MySQL Workbench as the backend database. Secure email authentication is integrated to validate new user registrations.

2. Technology Stack

Frontend: Java Swing (JDK 8.0.2)
Backend: Java, JDBC (Java Database Connectivity)
Database: MySQL Workbench 8.x
Email Service: JavaMail API
IDE: NetBeans IDE
OS Compatibility: Windows

3. Features & Modules

• User Registration and Login with Email Verification

• Movie Listing and Selection

• Seat Availability and Real-Time Booking

• Booking Confirmation and Record Insertion

• Admin Module for Movie Management (Optional)
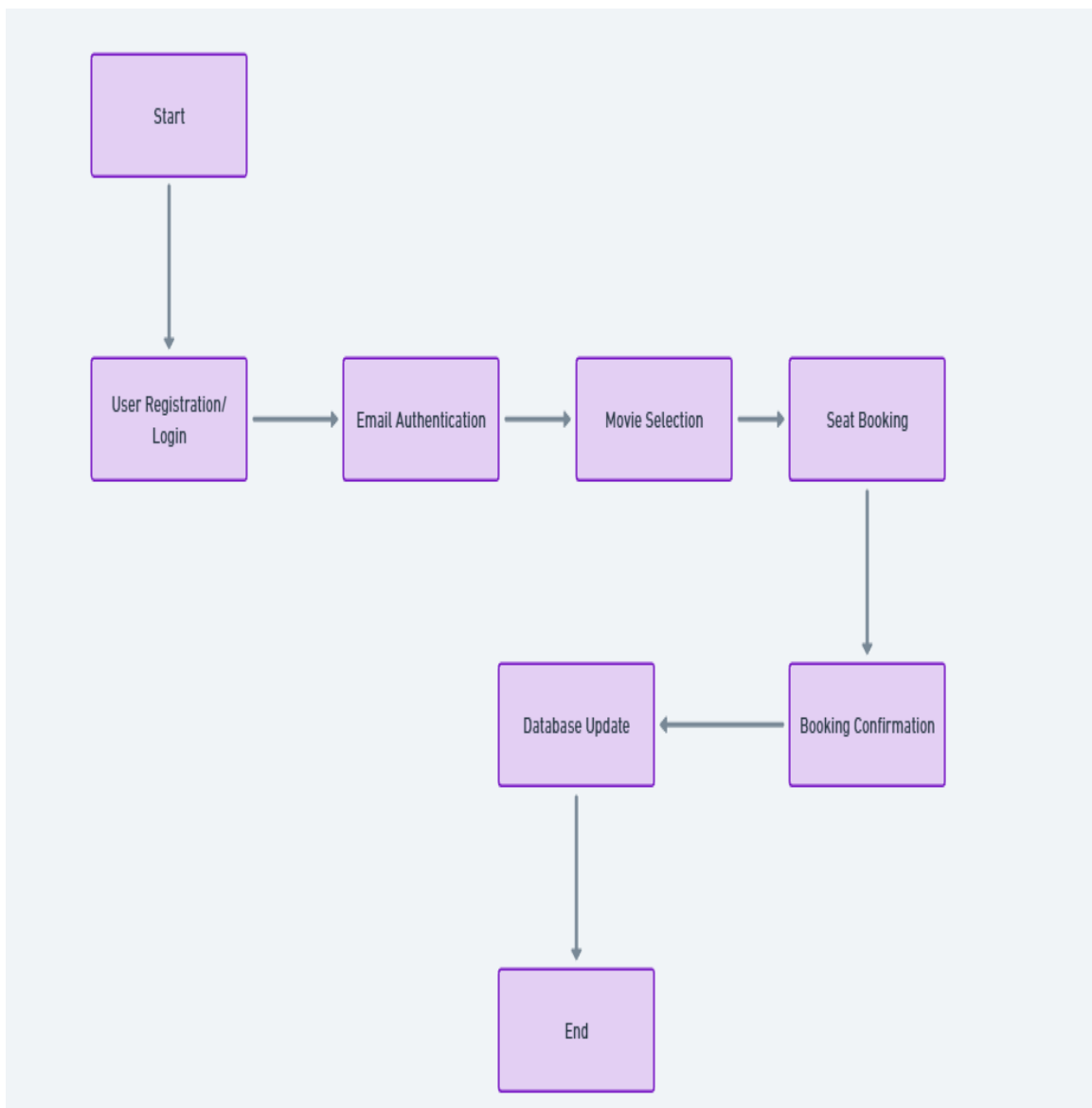
4. Database Schema

Users Table:
- user_id (INT, PK)
- name (VARCHAR)
- email (VARCHAR)
- password (VARCHAR)

5. Tools Used

• JavaMail API

• JDBC API

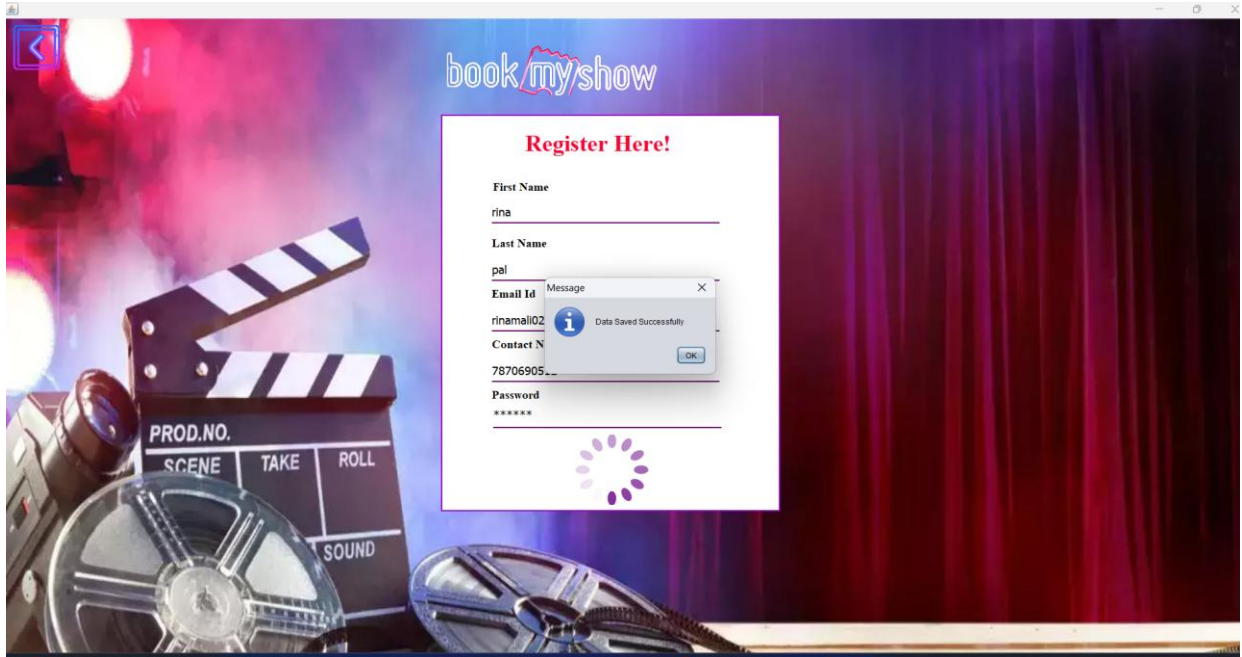• Java Swing Components (JLabel, JButton, JPanel, etc.)

6. Application Flow

Start → User Registration/Login → Email Authentication → Movie Selection → Seat Booking → Booking Confirmation → Database Update → End

7. Security Features

• Password hashing (e.g., SHA or bcrypt – optional)

• Email verification

• PreparedStatement to avoid SQL Injection

8. Future Enhancements

• Payment Gateway Integration

• Mobile Version

• QR Code Ticket Generation
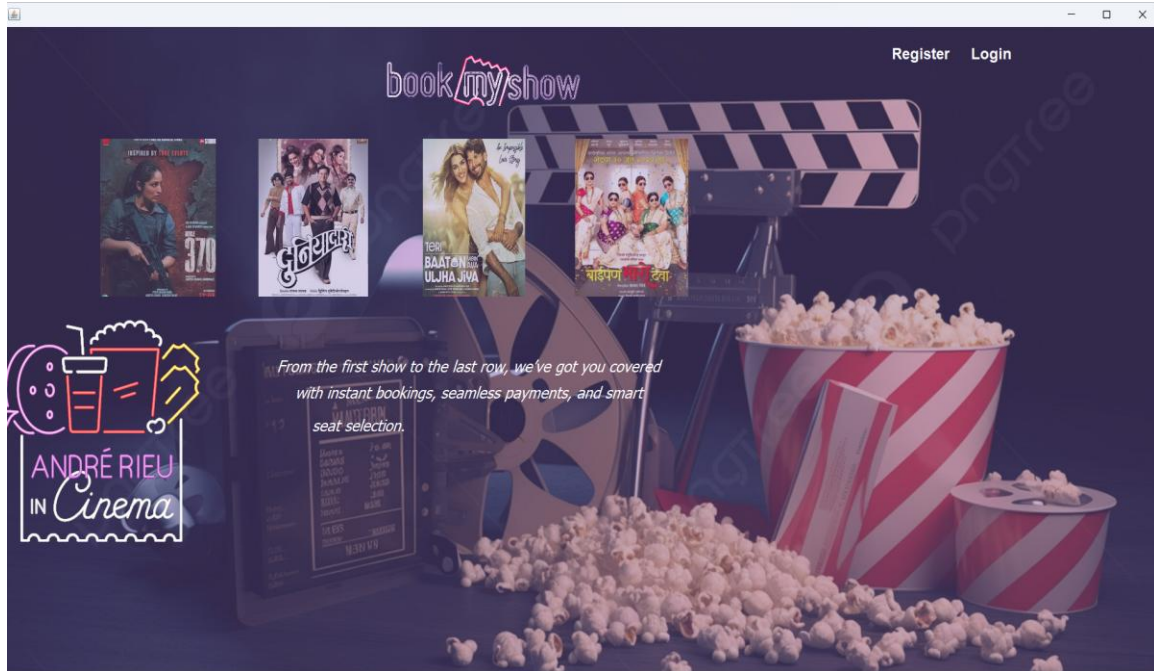
• Admin Analytics Dashboard
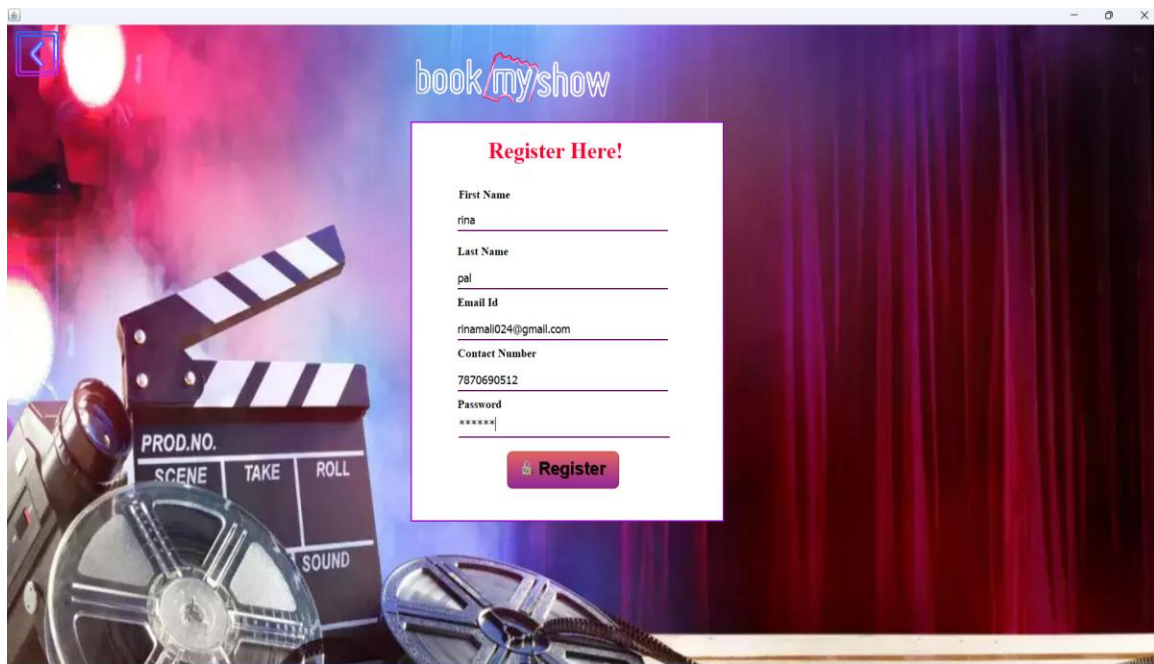
9. Screenshots
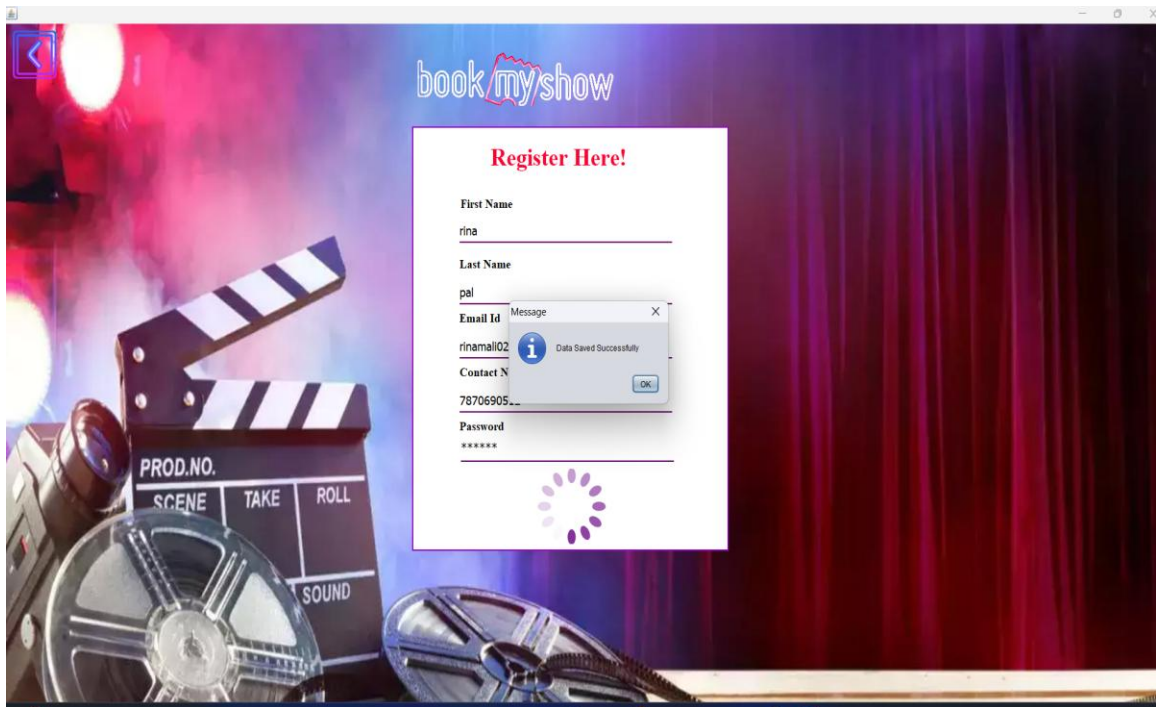

Figure 1 Home page

Figure 2 Registration Form

Figure 3 Registration Data Load Successfully
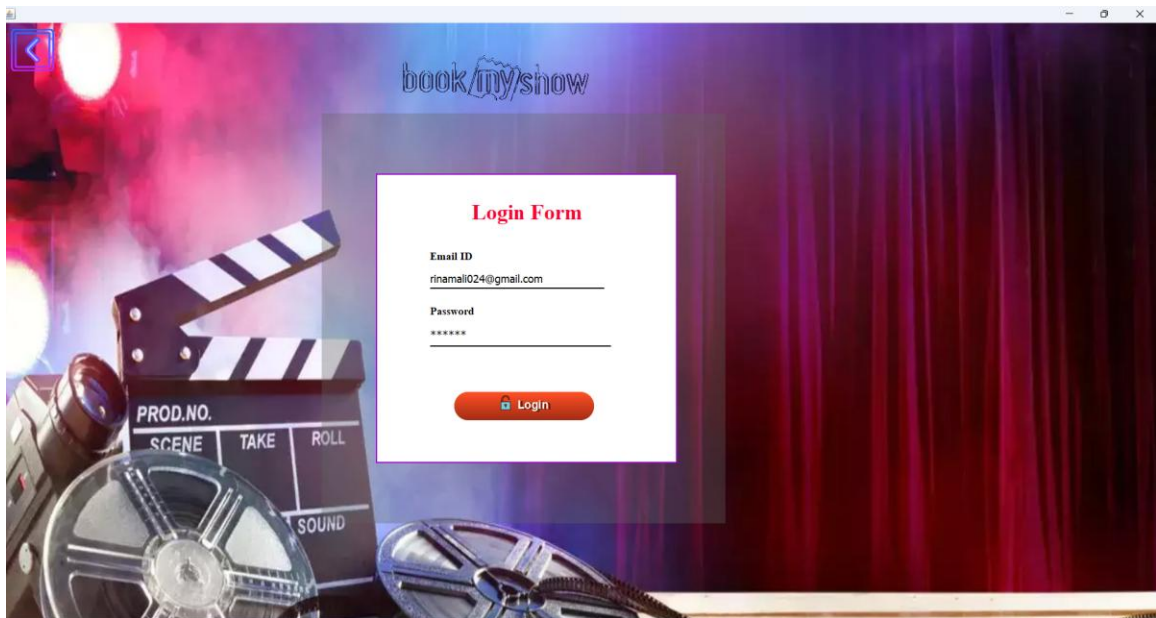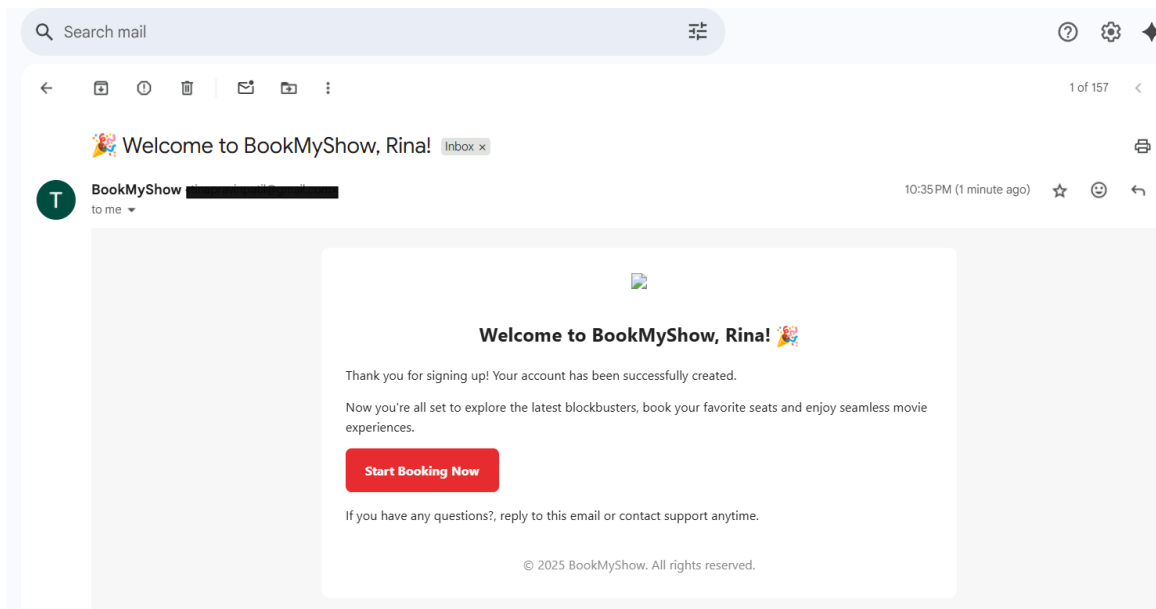

Figure 4 Login Form

Figure 5 Email Authentication
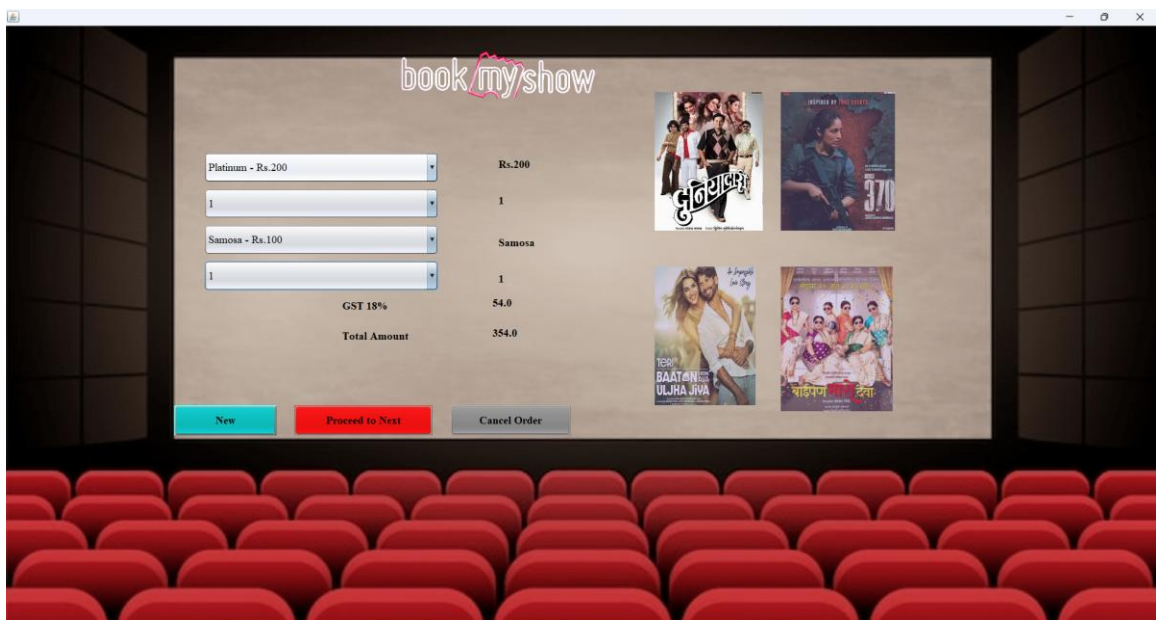
Figure 6 Select Seat Type & other information
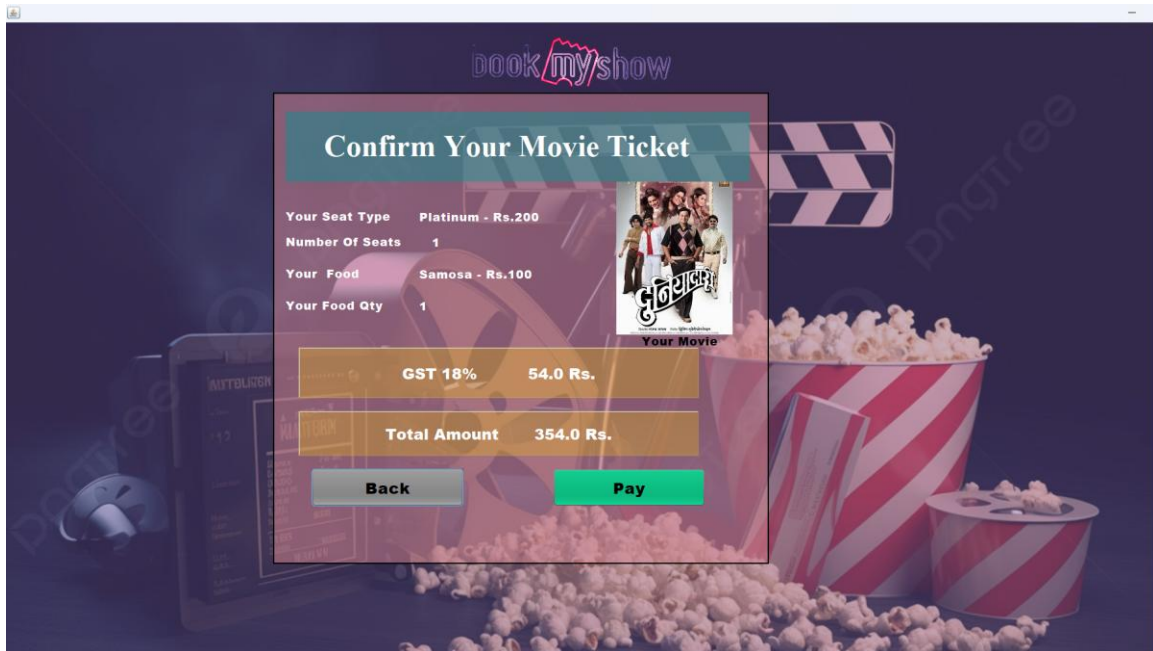
BookMyShow
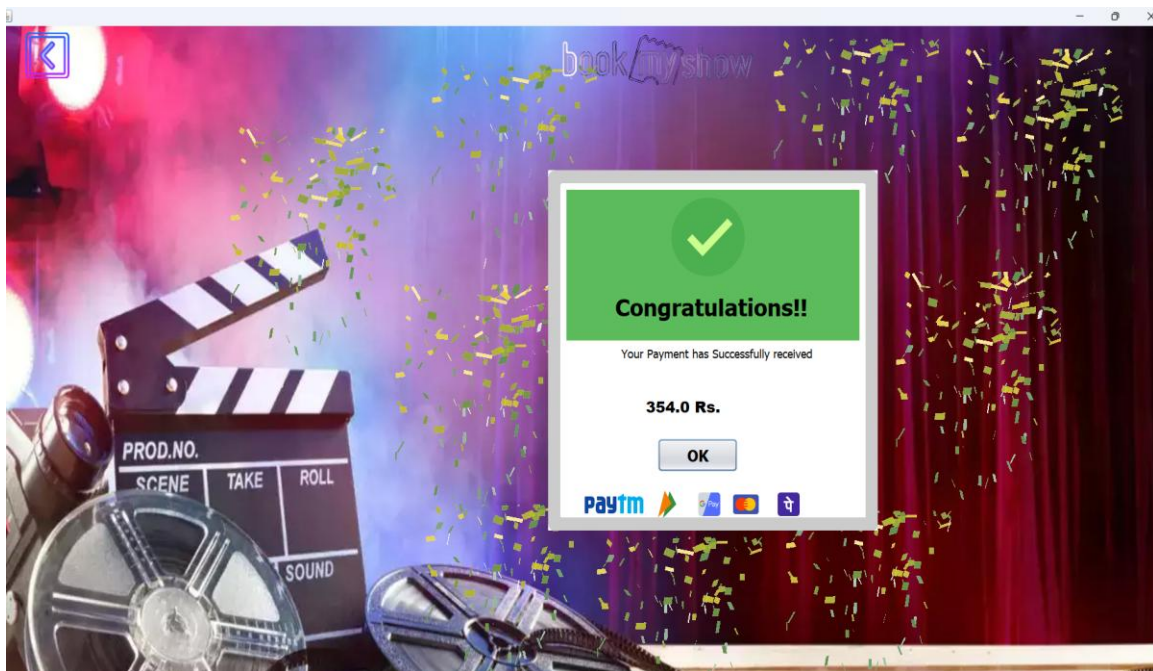
Figure 7 Seat Confirm

Figure 8 Payment Successfull

10. Conclusion

This Java Swing-based BookMyShow clone demonstrates a complete ticket booking system with real-time database integration and email authentication. It is a scalable, secure, and user-friendly application that can be further enhanced for academic or commercial use.

11. Appendix

• SQL Schema Files
• Source Code (Organized in MVC Structure)
• Email Configuration File