Project Report

Only for Course Teacher						
		Needs Improvement	**Developing**	**Sufficient**	**Above Average**	**Total Marks**
Allocate Marks & Percentage		**25%**	**50%**	**75%**	**100%**	**25**
Problem understanding & Analysis	**7**					
Implementation	**8**					
Report Writing	**10**					
					Total obtained marks	
Comments						

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Semester : Spring 2025

Course Code : SE231

Course Name: System Analysis & Design Capstone Project

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Designation : Lecturer

Submission Date : 11/02/2025

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Introduction

Theatre Management System is a web-based platform designed to simplify and digitize theatre operations, including online ticket booking, show scheduling, seating management, and revenue tracking. The system aims to provide a seamless experience for both customers and theatre administrators by eliminating manual booking inefficiencies and ensuring a smooth digital transition.

Objective

The primary goal of this Theatre Management System is to create an intuitive, web-based application that enhances theatre operations by facilitating hassle-free online ticket reservations, automated scheduling of shows, flexible seat allocation, and precise financial tracking. This system is designed to improve the customer experience while optimizing backend processes for theatre administrators, minimizing manual errors, and ensuring smoother, more efficient management of day-to-day activities.

Key Features

For Customers :

- User Registration – Create an account with email/username.
- User Login/Logout – Secure login and logout functionality.
- Browse Shows – View show timings and seat availability.
- Book Tickets – Book tickets online for selected shows.
- Modify/Cancellation – Modify or cancel bookings before showtime.
- Payment Processing – Complete secure online payments.
- Booking Confirmation – Receive booking confirmation via email/SMS.
- Booking History – View past tickets and transactions.
- Rate & Review – Provide feedback on shows.
- Notifications – Receive show updates and reminders.

For Theatre Staff:

- Show Scheduling – Set and update event timings.
- Manage Pricing – Set ticket prices for different shows.
- Ticket Sales Tracking – Track ticket sales and generate revenue reports.
- Ticket Issuance – Issue both digital and physical tickets.
- Customer Assistance – Assist customers with ticket issues and refunds.

For Administrators:

- User Management – Create, modify, or remove accounts.
- Role-Based Access – Assign roles and permissions (customer, staff, admin).
- System Monitoring – Monitor real-time performance and health.
- Reporting – Generate sales and user activity reports.
- Backup & Recovery – Ensure data backup and recovery capabilities.

The Theatre Management System aspires to revolutionize theatre operations by incorporating advanced features, enhancing user experience, and ensuring robust security throughout the platform.

Scenario Writing

Scenario writing involves detailing specific situations or use cases that demonstrate how a system or software application will be utilized by its users. These scenarios provide clarity on the system's features, user interactions, and expected outcomes. In the context of the **Theatre Management System**, let's create scenarios to illustrate typical user experiences and interactions with the platform.

Scenario 1: Create User Profile
Scenario Description:

- Request to create a user profile
- Provide necessary details (name, email, contact info)
- Fill in all required fields
- Submit the profile creation form
- Profile successfully created

Scenario 2: Book a Movie Ticket
Scenario Description:

- Request to book a movie ticket
- Select movie and showtime
- Check available seats
- Choose seats and proceed to payment
- Confirm booking and receive e-ticket

Scenario 3: Cancel a Ticket
Scenario Description:

- Request to cancel a booked ticket
- Select the specific ticket from booking history
- Confirm cancellation details
- Process refund (if applicable)
- Receive ticket cancellation confirmation

Scenario 4: Generate Revenue Report
Scenario Description:

- Request to generate a revenue report
- Select date range and specific shows

- Include ticket sales, service charges, and additional revenue
- Generate and review the report
- Report successfully created

Scenario 5: Make a Payment
Scenario Description:

- Request to make a payment for tickets
- Provide booking ID
- Select preferred payment method (credit card, mobile banking, etc.)
- Complete the payment process
- Payment successful confirmation received

These scenarios illustrate how users and administrators will interact with the **Theatre Management System**, providing clear steps for development, testing, and validation. Let me know if you need more scenarios or adjustments.

Stakeholders

The key stakeholders involved in the **Theatre Management System** are:

1. Theatre Owners
- Manage theatre operations and financial planning.
- Set ticket prices, schedules, and promotional strategies.

2. Theatre Managers
- Supervise daily operations and staff management.
- Ensure smooth execution of shows and events.

3. Customers (Audience)
- Browse shows, book tickets, and select seats.
- Make payments and access booking history.

4. Ticketing Staff
- Assist customers with ticket bookings and refunds.
- Validate tickets and manage seat allocations.

5. Event Organizers
- Plan and schedule special events and performances.
- Coordinate logistics and promotional activities.

6. Security Personnel
- Verify ticket authenticity and control access.
- Ensure audience safety and handle emergencies.

7. Cleaning Staff

- Maintain cleanliness in theatre halls and lobbies.
- Prepare the venue before and after shows.

8. Online Payment Providers
- Facilitate secure transactions for ticket bookings.
- Ensure fraud prevention and payment reliability.

9. IT Administrators
- Maintain system security and technical support.
- Update software and troubleshoot system issues.

User Profile

User Profile-01:Theatre Owners

User Class	Notes on Characteristic	Requirement Implied
Type of User	Theatre Owners	Verification
Age Range	30-80	Verification
Frequency of Use	Most of the time per day	Performance, Operation, Acceptance
Mandatory	Yes	
Computer Experience	Experienced	Documentation
Education	B. Sc	
Goals	Provide a best service	Resource, Performance, Security, Acceptance, Operation
Language Skills	Bangla, English	
Number of Users	1	Performance, Operation, Acceptance, Portability
Training	May accept some training, but be unwilling to repeat it	Documentation
Other System Used	Yes	
Ways of Working	Full support from the system	Acceptance, Safety, Security, Operation, Maintenance, Portability

User Profile-02: Theatre Managers

User Class	Notes on Characteristic	Requirement Implied
Type of User	Theatre Managers	Verification
Age Range	30-70	Verification

Frequency of Use	Most of the time per day	Performance, Operation, Acceptance
Mandatory	Yes	
Computer Experience	Experienced	Documentation
Education	B. Sc	
Goals	Provide a best service	Resource, Performance, Security, Acceptance, Operation
Language Skills	Bangla, English	
Number of Users	15-20	Performance, Operation, Acceptance, Portability
Training	May accept some training, but be unwilling to repeat it	Documentation
Other System Used	No	
Ways of Working	Full support from the system	Acceptance, Safety, Security, Operation, Maintenance, Portability

User Profile-03: Customers (Audience)

User Class	Notes on Characteristic	Requirement Implied
Type of User	Customer (Audience)	Verification
Age Range	25-50	Verification
Frequency of Use	When it need	Performance, Operation, Acceptance
Mandatory	No	
Computer Experience	No	
Goals	Take a good service	Resource, Performance, Security, Acceptance, Operation
Language Skills	Bangla, English	
Number of Users	20-25	Performance, Operation, Acceptance, Portability
Training	No	
Other System Used	No	
Ways of Working	Sometime	Acceptance, Safety, Security, Operation, Maintenance, Portability

User Profile-04: Ticketing Staff

User Class	Notes on Characteristic	Requirement Implied
Type of User	Ticketing Staff	Verification
Age Range	29-35	Verification
Frequency of Use	Most of the time per day	Performance, Operation, Acceptance
Mandatory	Yes	
Computer Experience	Experienced	Documentation
Education	HSC	
Goals	Make the system easy and user-friendly	Resource, Performance, Security, Acceptance, Operation
Language Skills	Bangla, English, and Computer Language	
Number of Users	10-15	Performance, Operation, Acceptance, Portability
Training	May accept some training, but be unwilling to repeat it	Documentation
Other System Used	No	
Ways of Working	Full support from the system	Acceptance, Safety, Security, Operation, Maintenance, Portability

User Profile-05: Event Organizers

User Class	Notes on Characteristic	Requirement Implied
Type of User	Event Organizers	Verification
Age Range	20-35	Verification
Frequency of Use	Most of the time per day	Performance, Operation, Acceptance
Mandatory	Yes	
Computer Experience	Experienced	Documentation
Education	SSC	
Goals	Make the system easy and user-friendly	Resource, Performance, Security, Acceptance, Operation
Language Skills	Bangla, English, and Computer Language	

Number of Users	5	Performance, Operation, Acceptance, Portability
Training	May accept some training, but be unwilling to repeat it	Documentation
Other System Used	No	
Ways of Working	Full support from the system	Acceptance, Safety, Security, Operation, Maintenance, Portability

User Profile-06: Security Personnel

User Class	Notes on Characteristic	Requirement Implied
Type of User	Security Personnel	Verification
Age Range	29-35	Verification
Frequency of Use	Most of the time per day	Performance, Operation, Acceptance
Mandatory	Yes	
Computer Experience	Experienced	Documentation
Education	M. Sc	
Goals	Make the system easy and user-friendly	Resource, Performance, Security, Acceptance, Operation
Language Skills	Bangla, English, and Computer Language	
Number of Users	1-3	Performance, Operation, Acceptance, Portability
Training	May accept some training, but be unwilling to repeat it	Documentation
Other System Used	No	
Ways of Working	Full support from the system	Acceptance, Safety, Security, Operation, Maintenance, Portability

User Profile-07: Cleaning Staff

User Class	Notes on Characteristic	Requirement Implied
Type of User	Cleaning Staff	Verification
Age Range	15-40	Verification
Frequency of Use	Most of the time per day	Performance, Operation, Acceptance

Mandatory	Yes	
Computer Experience	Experienced	Documentation
Education	JSC	
Goals	Make the system easy and user-friendly	Resource, Performance, Security, Acceptance, Operation
Language Skills	Bangla, English, and Computer Language	
Number of Users	5-12	Performance, Operation, Acceptance, Portability
Training	May accept some training, but be unwilling to repeat it	Documentation
Other System Used	No	
Ways of Working	Full support from the system	Acceptance, Safety, Security, Operation, Maintenance, Portability

User Profile-08: Online Payment Providers

User Class	Notes on Characteristic	Requirement Implied
Type of User	Online Payment Providers	Verification
Age Range	25-80	Verification
Frequency of Use	Most of the time per day	Performance, Operation, Acceptance
Mandatory	Yes	
Computer Experience	Experienced	Documentation
Education	SSC	
Goals	Make the system easy and user-friendly	Resource, Performance, Security, Acceptance, Operation
Language Skills	Bangla, English, and Computer Language	
Number of Users	Many	Performance, Operation, Acceptance, Portability
Training	May accept some training, but be unwilling to repeat it	Documentation
Other System Used	No	
Ways of Working	Full support from the system	Acceptance, Safety, Security, Operation, Maintenance, Portability

User Profile-09: IT Administrators

User Class	Notes on Characteristic	Requirement Implied
Type of User	IT Administrators	Verification
Age Range	40-55	Verification
Frequency of Use	Most of the time per day	Performance, Operation, Acceptance
Mandatory	Yes	
Computer Experience	Experienced	Documentation
Education	M. Sc	
Goals	Make the system easy and user-friendly	Resource, Performance, Security, Acceptance, Operation
Language Skills	Bangla, English, and Computer Language	
Number of Users	1-2	Performance, Operation, Acceptance, Portability
Training	May accept some training, but be unwilling to repeat it	Documentation
Other System Used	No	
Ways of Working	Full support from the system	Acceptance, Safety, Security, Operation, Maintenance, Portability

SRS for Theatre Management System

1. Functional Requirements (FR)

These define specific behavior or functions of the system. Each FR corresponds to a feature the system must have.

- FR01 – User Registration: Users can create an account using email, phone, or social media.
- FR02 – Login: Users can log in securely using their credentials.
- FR03 – Browse Movies: Users can view available movies, including details like trailers, genres, and reviews.
- FR04 – Book Tickets: Users can select movie timings, seats, and book tickets.
- FR05 – Payment for Tickets: Secure payment options like credit cards, mobile wallets, etc.
- FR06 – Seat Management: Users can view and choose available seats in real time.
- FR07 – Show Scheduling: Admin can add, edit, or delete movie schedules.
- FR08 – Refund Processing: Users can request and process refunds based on cancellation policies.
- FR09 – Notification System: Users receive updates via SMS, email, or in-app notifications.
- FR10 – Admin Dashboard: Centralized control for managing movies, users, reports, etc.

- FR11 – QR Code Ticketing: Generate QR codes for entry, reducing paper tickets.
- FR12 – System Audit Logs: Track and log all system activities for security.
- FR13 – User Role Management: Define roles like admin, user, or staff with different permissions.
- FR14 – Generate Sales Reports: Automated generation of sales and performance reports.
- FR15 – Theatre Location Mapping: Map view integration to locate theaters.
- FR16 – Advanced Search & Filters: Enhanced search for movies by genre, time, rating.
- FR17 – Promotional Codes & Discounts: Apply discount codes during checkout.
- FR18 – Mobile Compatibility: Responsive design for mobile devices.
- FR19 – Security Features: Include encryption, secure login, and other protection mechanisms.
- FR20 – Third-Party Payment Gateway Integration: Integration with services like PayPal, Stripe.
- FR21 – System Backup and Recovery: Automatic backups and recovery in case of data loss.
- FR22 – Real-Time Updates: Live updates for seat availability and booking status.
- FR23 – Data Privacy Compliance: Ensure compliance with GDPR or other privacy regulations.
- FR24 – Customizable Notifications: Users can manage notification preferences.
- FR25 – System Downtime Alerts: Notify users and admins of scheduled or unexpected downtimes.
- FR26 – Feedback Collection: Collect user feedback on movies and app performance.
- FR27 – Loyalty Program: Reward repeat users with points or discounts.
- FR28 – Gift Card Integration: Allow gift card purchases and usage.
- FR29 – Subscription Plans: Monthly/annual subscription options for discounts or exclusive content.
- FR30 – Bulk Booking for Groups: Allow booking for large groups with potential discounts.

2. Performance Requirements

Define how the system performs under specific conditions.

- High Response Time: Pages should load in under 2 seconds even during peak hours.
- Scalability: The system should handle 10,000+ concurrent users without lag.
- Real-Time Processing: Booking and seat selection must update in real time to avoid conflicts.

3. Capacity Requirements

Define how much data the system can handle.

- User Load: Support for up to 1 million registered users.
- Data Storage: The system must store up to 5 years of transaction data.
- Concurrent Bookings: Handle 5,000 ticket bookings simultaneously without failure.

4. Dependability Requirements

Ensure the system is reliable and available when needed.

- System Uptime: 99.9% uptime guarantee.
- Failover Systems: Automatic switchover to backup servers in case of failure.

- Error Logging: Comprehensive error reporting and logging mechanisms.

5. Robustness and Fault Tolerance Requirements

System behavior under unexpected conditions.

- Graceful Failure Handling: If a payment fails, the booking should not proceed but allow retry.
- Data Integrity During Crashes: Ensure no data loss in the event of a crash.
- Automatic Recovery: System recovers automatically from minor errors without admin intervention.

6. Maintenance Requirements

Ease of maintaining and updating the system.

- Modular Architecture: System should allow easy updates without downtime.
- Scheduled Maintenance Alerts: Notify users in advance about system maintenance.

7. Supportability Requirements

Ability to support the system post-deployment.

- Technical Documentation: Provide thorough developer and admin documentation.
- Customer Support Integration: In-app customer support chat or ticketing system.

8. Adaptability Requirements

The system's ability to evolve with changing conditions.

- Multi-language Support: Ability to add new languages easily.
- Platform Flexibility: Compatible with web, Android, and iOS.

9. Security Requirements

Protect the system from threats and unauthorized access.

- Data Encryption: All sensitive data must be encrypted.
- Two-Factor Authentication (2FA): Optional for user accounts.
- Secure Payment Processing: PCI-DSS compliance for payment handling.

10. Access Requirements

Who can access what parts of the system?

- Role-Based Access Control (RBAC): Different permissions for admins, staff, and users.
- Admin Restrictions: Critical system settings should only be accessible by super admins.

11. Integrity Requirements

Ensure data is accurate and consistent.

- Transaction Consistency: Ensure that all ticket bookings are either fully completed or rolled back.
- Data Validation: Validate user inputs to prevent erroneous data entries.

12. Privacy Requirements

Protect users' personal information.

- Data Anonymization: Option to anonymize user data for analytics.
- User Consent Management: Explicit consent before collecting personal data.

13. Usability and Human Integrity Requirements

Ensure the system is user-friendly and respects user needs.

- Simple UI: Clean, easy-to-navigate interface.
- Error Feedback: Clear, non-technical error messages for users.

14. Ease of Use Requirements

Make the system intuitive.

- One-Click Booking: Simplify the booking process as much as possible.
- Accessible Design: Follow design standards like WCAG for accessibility.

15. Understandability and Politeness Requirements

Make sure users understand the system and feel respected.

- Clear Instructions: Provide tooltips and guides where necessary.
- Polite Notifications: Use friendly, non-intrusive language in alerts.

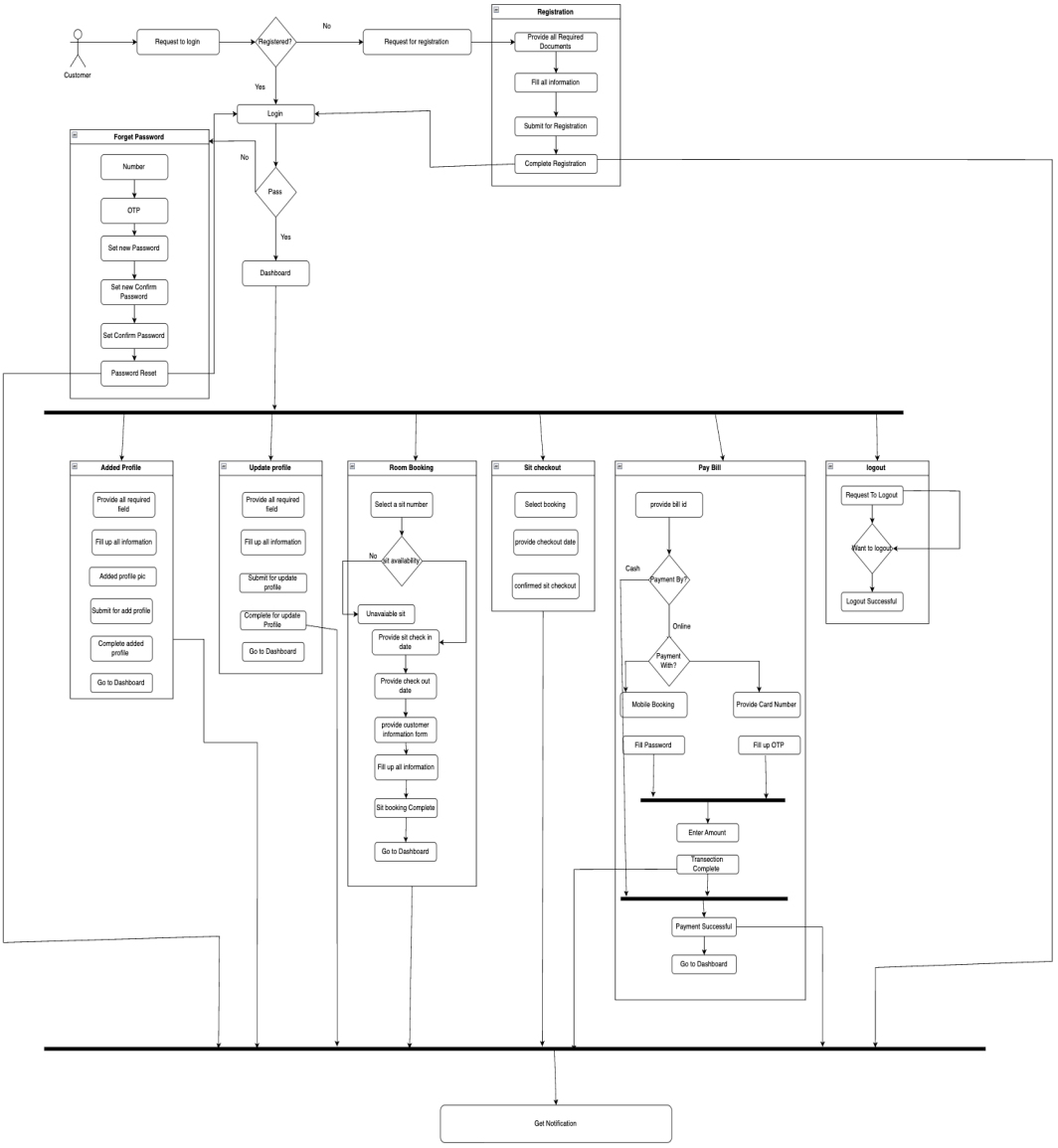
16. Accessibility Requirements

Ensure the system is usable by people with disabilities.

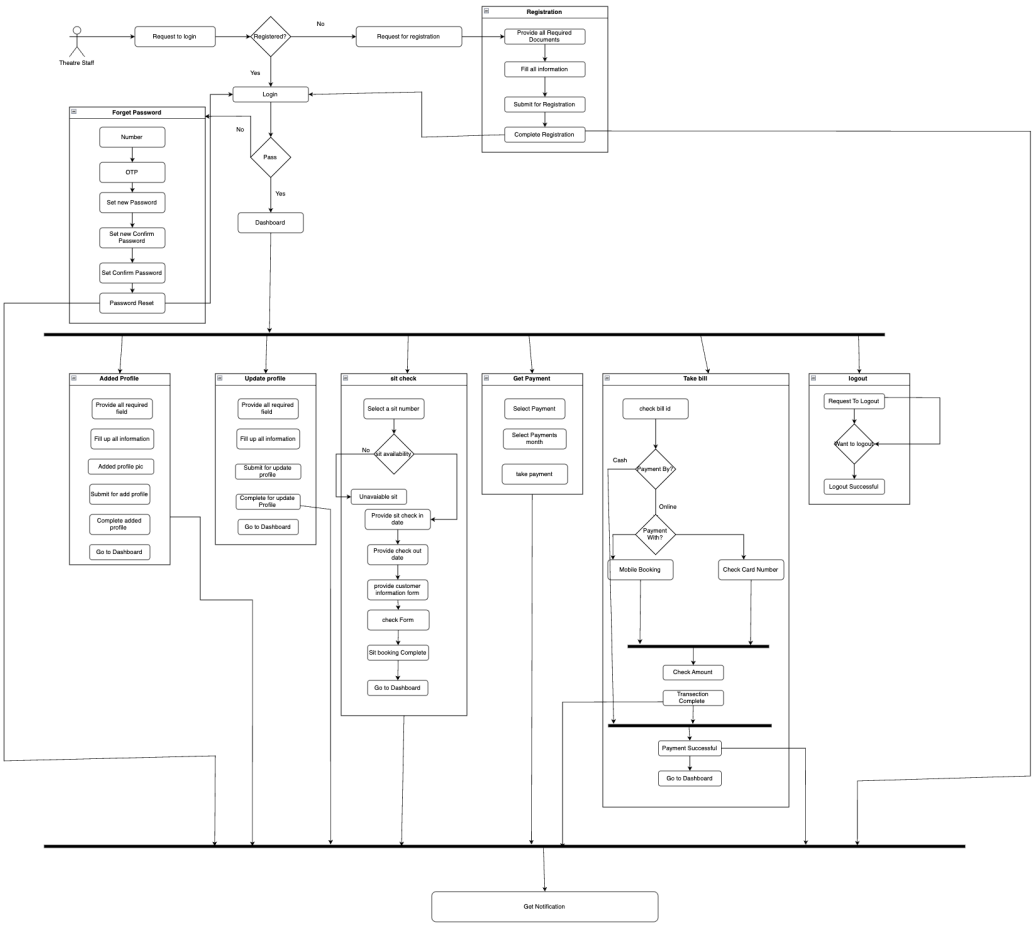
- Screen Reader Compatibility: Ensure the system works with screen readers.
- Keyboard Navigation: Full support for keyboard-based navigation.

Project Block Diagram

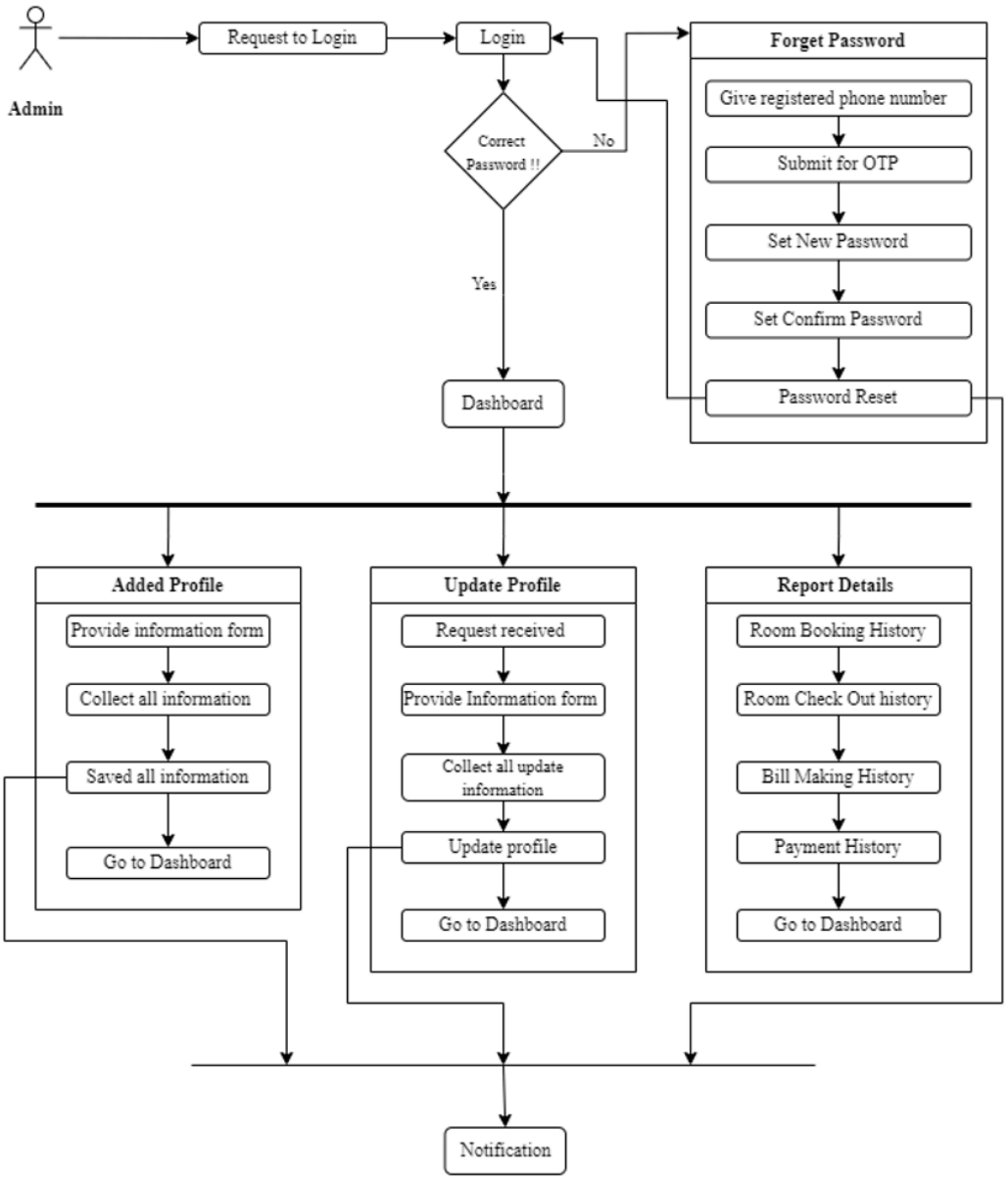
Block Diagram-1 : Customer



Block Diagram-2 : Theatre Staff



Block Diagram-3 : Admin



Software Requirement Specification (SRS)

FR01	User Registration
Description	Customers and theatre managers must register before accessing the theatre management system.
Stakeholder	Customer, Theatre Manager

FR02	Login
Description	Customers, theatre managers, and admins must log in to use the system features
Stakeholder	Customer, Theatre Manager, Admin

FR03	Browse Movies
Description	Customers can browse currently running and upcoming movies, including showtimes and details
Stakeholder	Customer

FR04	Book Tickets

Description	Customers can select movies, choose showtimes, pick seats, and book tickets online.
Stakeholder	Customer

FR05	Payment for Tickets
Description	Customers can pay for booked tickets using multiple payment options (credit card, online wallets, etc.).
Stakeholder	Customer

FR06	Seat Management
Description	The system displays real-time seat availability for each show.
Stakeholder	Customer, Theatre Manager

FR07	Show Scheduling
Description	Theatre managers can add, update, or delete movie schedules.
Stakeholder	Theatre Manager

FR08	Refund Processing
Description	If a booking is canceled, the system processes refunds based on the theatre's policy.
Stakeholder	Customer, Theatre Manager

FR09	Notification System
Description	Users receive email/SMS notifications for booking confirmations, cancellations, and reminders.
Stakeholder	Customer, Theatre Manager

FR010	Admin Dashboard
Description	Admins have access to system-wide settings, user management, and monitoring tools.
Stakeholder	Admin

FR011	QR Code Ticketing

Description	Customers receive QR codes for tickets that can be scanned at the theatre entrance.
Stakeholder	Customer, Theatre Manager

FR012	System Audit Logs
Description	All user activities are logged for auditing and security purposes.
Stakeholder	Admin

FR013	User Role Management
Description	Admins can assign and manage roles (Customer, Manager, Admin).
Stakeholder	Admin

FR014	Generate Sales Reports
Description	Managers can generate revenue and ticket sales reports for specific timeframes.
Stakeholder	Theatre Manager

FR015	Theatre Location Mapping
Description	Customers can view the theatre's location and directions via integrated maps.
Stakeholder	Customer

FR016	Advanced Search & Filters
Description	Customers can filter movies by genre, rating, language, or showtime.
Stakeholder	Customer

FR017	Promotional Codes & Discounts
Description	Customers can apply discount codes during ticket booking.
Stakeholder	Customer, Theatre Manager

FR018	Mobile Compatibility
Description	The system is optimized for mobile and tablet devices.

Stakeholder	Customer, Theatre Manager

FR019	Security Features
Description	The system includes two-factor authentication and secure data encryption.
Stakeholder	Customer, Admin

FR020	Third-Party Payment Gateway Integration
Description	The system supports multiple payment gateways for flexibility.
Stakeholder	Customer

FR021	System Backup and Recovery
Description	Regular backups are taken to prevent data loss in case of failures.
Stakeholder	Admin

FR022	Real-Time Updates

Description	The system updates seating and showtimes in real-time.
Stakeholder	Customer, Theatre Manager

FR023	Data Privacy Compliance
Description	The system complies with data privacy regulations like GDPR.
Stakeholder	Admin, Customer

FR024	Customizable Notifications
Description	Users can choose how they receive notifications (email, SMS, app)
Stakeholder	Customer

FR025	System Downtime Alerts
Description	Notifications are sent to admins during system downtimes or failures.
Stakeholder	Admin

FR026	Feedback Collection
Description	After a show, customers are prompted to provide feedback on their experience.
Stakeholder	Customer

FR027	Loyalty Program
Description	Customers earn points for every purchase, which can be redeemed for discounts.
Stakeholder	Customer

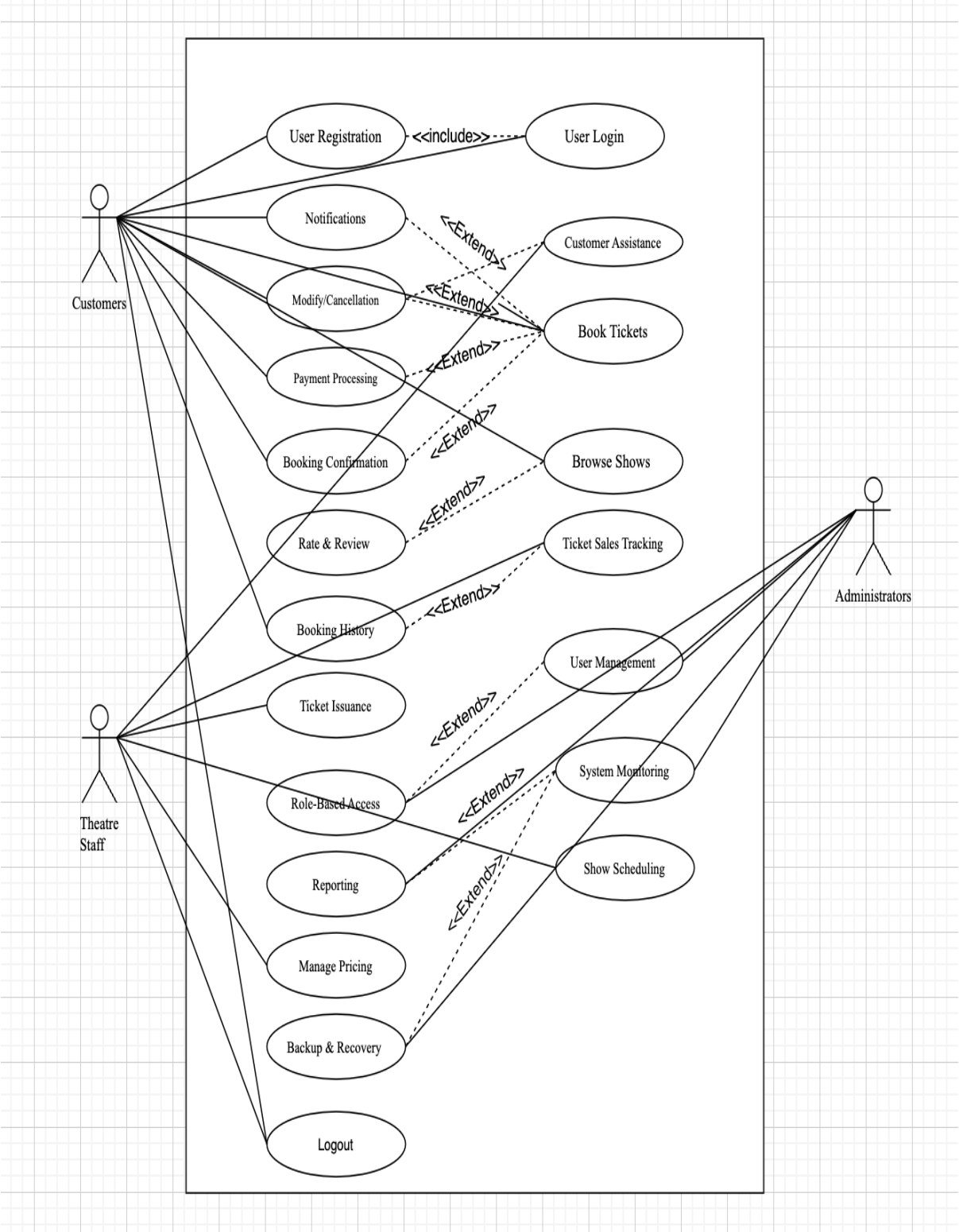
FR028	Gift Card Integration
Description	Customers can purchase and redeem gift cards for ticket payments.
B b Stakeholder	Customer, Theatre Manager

FR029	Subscription Plans
Description	The system offers subscription models for frequent moviegoers.

Stakeholder	Customer, Theatre Manager

FR030	Bulk Booking for Groups
Description	Customers can make bulk bookings for groups with applicable discounts.
Stakeholder	Customer

User Case Diagram



User Case Description

Case Description-: User Registration

<table>
<tr><td>Use Case</td><td>User Registration</td></tr>
<tr><td>Goal</td><td>Users can register to sign in to the system.</td></tr>
<tr><td>Precondition</td><td>Users must install the Theatre Management app for registration.</td></tr>
<tr><td>Success End Condition</td><td>Notification: !!!Successfully Registered!!!</td></tr>
<tr><td>Failed End Condition</td><td>Notification: “Submission Not Submitted”</td></tr>
<tr><td>Primary Actors:

Secondary Actors:</td><td>Customer</td></tr>
<tr><td>Trigger</td><td>User will request a registration form to fill up</td></tr>
<tr><td>Description / Main Success Scenario</td><td>
<table>
<tr><td>1.</td><td>Press “Registration” Button</td></tr>
<tr><td>2.</td><td>Provide registration form</td></tr>
<tr><td>3.</td><td>Enter Information</td></tr>
<tr><td>4.</td><td>Press “Submit” Button.</td></tr>
<tr><td>5.</td><td>Information saved</td></tr>
<tr><td>6.</td><td>The system saves the details and shows them !!!Successfully Registered!!! Notify</td></tr>
</table>
</td></tr>
<tr><td>Alternative Flows</td><td>
<table>
<tr><td>1.1</td><td>System Error</td></tr>
<tr><td></td><td>1.1.a. Try Again!!</td></tr>
<tr><td>2.1</td><td>System Doesn't work.</td></tr>
<tr><td></td><td>2.1.a. Try Again Later!</td></tr>
<tr><td>4.1</td><td>The user Did not fill up the details!</td></tr>
<tr><td></td><td>4.1.a. Checked By the system & Notify by “Please! Fill Up the Box”.</td></tr>
<tr><td>5.1</td><td>The system did not respond</td></tr>
<tr><td></td><td>5.1.a. Show Error Message.</td></tr>
<tr><td>6.1</td><td>The system Doesn’t save the details.</td></tr>
<tr><td></td><td>6.1.a. Notification: “Details did not Save”</td></tr>
</table>
</td></tr>
</table>

Quality Requirements	The user Will fill up all the details in 30 minutes.

Case Description-: Login

Use Case	Login
Goal	Users can enter the system by the login.
Precondition	Users must have to be registered First.
Success End Condition	Notification: “Login Successful”
Failed End Condition	Notification: “Login Failed!!”
Primary Actors: Secondary Actors:	Customer, Manager Admin
Trigger	The user will request a login to enter the system
Description / Main Success Scenario	1. Press “Login” Button 2. Provide login interface 3. Enter user id and password. 4. User provide the “Login” button 5. Verified and login 6. Notification: “Login Successful”

Alternative Flows	<table><tr><td>1.1</td><td>System Error</td></tr><tr><td></td><td>1.1.a. Try again</td></tr><tr><td>2.1</td><td>Server Not Found</td></tr><tr><td></td><td>2.1.a. Try Again Later!</td></tr><tr><td>4.1</td><td>The system Did not respond.</td></tr><tr><td></td><td>4.1.a. Show error message.</td></tr><tr><td>5.1</td><td>Information Error!!</td></tr><tr><td></td><td>5.1.a. Notification: “Enter the right User ID and Password.”</td></tr></table>
Quality Requirements	Users fill up the login info within 10 minutes.

Case Description-: Logout

Use Case	Logout
Goal	Users can Log Out from the system.
Precondition	The user must log in to the system.
Success End Condition	Notification: “Logout Successful”.
Failed End Condition	Notification: “System Error”.
Primary Actors: Secondary Actors:	Customer, Manager Admin
Trigger	The user will request a Logout
Description / Main Success Scenario	<table><tr><td>1.</td><td>Log in to the system.</td></tr><tr><td>2.</td><td>Select the “Logout” Option.</td></tr><tr><td>3.</td><td>Press the “Logout” Button.</td></tr><tr><td>4.</td><td>Logout successful</td></tr></table>

Alternative Flows	<table><tr><td>1.1</td><td>Server down</td></tr><tr><td></td><td>1.1.a try again</td></tr><tr><td>2.1</td><td>Not Responding</td></tr><tr><td></td><td>2.1.a Try again</td></tr><tr><td>3.1</td><td>Not Responding</td></tr><tr><td></td><td>3.1.a Reload</td></tr></table>
Quality Requirements	The user will Immediately Logout After hitting the Logout Button.

Case Description : Book Tickets

Use Case	Book Tickets	
Goal	Users can book tickets for a show.	
Precondition	The user must be logged in, and tickets must be available.	
Success End Condition	Notification: "Ticket Booking Successful"	
Failed End Condition	Notification: "Booking Failed!"	
Primary Actors: Secondary Actors:	Customer, Manager Admin	
Trigger	The user requests to book tickets for a show.	
Description / Main Success Scenario	1	User selects a show and clicks "Book Tickets"
	2	Enter the number of tickets required
	3	Select seating (if applicable)
	4	Confirm the booking
	5	Payment is processed (if applicable)
	6	Notification: "Ticket Booking Successful"

<table>
<tr><td>Alternative Flows</td><td><table>
<tr><td>1.1</td><td>Server down</td></tr>
<tr><td></td><td>1.1.a try again</td></tr>
<tr><td>2.1</td><td>Tickets Sold Out</td></tr>
<tr><td></td><td>2.1. Notification: "Tickets Sold Out"</td></tr>
</table></td></tr>
<tr><td>Quality Requirements</td><td>Booking process should complete within 3 minutes.</td></tr>
</table>

Case Description-: Modify/Cancellation

<table>
<tr><td>Use Case</td><td>Modify/Cancellation</td></tr>
<tr><td>Goal</td><td>Users can modify or cancel their booking.</td></tr>
<tr><td>Precondition</td><td>The booking must exist and be eligible for modification/cancellation.</td></tr>
<tr><td>Success End Condition</td><td>Notification: "Modification/Cancellation Successful"</td></tr>
<tr><td>Failed End Condition</td><td>Notification: "Modification/Cancellation Failed!"</td></tr>
<tr><td>Primary Actors:

Secondary Actors:</td><td>Customer, Manager

Admin</td></tr>
<tr><td>Trigger</td><td>The user requests to modify or cancel their booking.</td></tr>
<tr><td>Description / Main Success Scenario</td><td><table>
<tr><td>1.</td><td>User selects a booking to modify/cancel</td></tr>
<tr><td>2.</td><td>Make necessary changes or confirm cancellation</td></tr>
<tr><td>3.</td><td>System processes the request</td></tr>
<tr><td>4.</td><td>Notification: "Modification/Cancellation Successful"</td></tr>
</table></td></tr>
</table>

<table>
<tr><td>Alternative Flows</td><td><table>
<tr><td>1.1</td><td>System Error</td></tr>
<tr><td></td><td>. Try again</td></tr>
<tr><td>2.1</td><td>Not Eligible for Modification</td></tr>
<tr><td></td><td>Notification: "Not Eligible for Modification"</td></tr>
</table></td></tr>
<tr><td>Quality Requirements</td><td>Modification/Cancellation should complete within 2 minutes.</td></tr>
</table>

Case Description-: Payment Processing

<table>
<tr><td>Use Case</td><td>Payment Processing</td></tr>
<tr><td>Goal</td><td>Users can pay for their tickets.</td></tr>
<tr><td>Precondition</td><td>The user must have selected tickets for purchase.</td></tr>
<tr><td>Success End Condition</td><td>Notification: "Payment Successful"</td></tr>
<tr><td>Failed End Condition</td><td>Notification: "Payment Failed!"</td></tr>
<tr><td>Primary Actors:

Secondary Actors:</td><td>Customer, Manager

Admin</td></tr>
<tr><td>Trigger</td><td>The user initiates the payment process.</td></tr>
<tr><td>Description / Main Success Scenario</td><td><table>
<tr><td>1.</td><td>User selects a payment method</td></tr>
<tr><td>2.</td><td>Enter payment details</td></tr>
<tr><td>3.</td><td>System processes the payment</td></tr>
<tr><td>4.</td><td>Notification: "Payment Successful"</td></tr>
</table></td></tr>
</table>

Alternative Flows	<table><tr><td>1.1</td><td>System Error</td></tr><tr><td></td><td>. Try again</td></tr><tr><td>2.1</td><td>Payment Failed</td></tr><tr><td></td><td>Notification: "Payment Failed!"</td></tr></table>
Quality Requirements	Payments should be processed within 1 minute.

Case Description-: Booking Confirmation

Use Case	Booking Confirmation
Goal	Users can receive confirmation for their bookings.
Precondition	The booking must be successful
Success End Condition	Notification: "Booking Confirmed"
Failed End Condition	Notification: "Booking Not Confirmed!"
Primary Actors: Secondary Actors:	Customer, Manager Admin
Trigger	The user successfully completes a booking.
Description / Main Success Scenario	<table><tr><td>1.</td><td>Booking is completed</td></tr><tr><td>2.</td><td>System sends confirmation notification (email/SMS)</td></tr><tr><td>3.</td><td>Notification: "Booking Confirmed"</td></tr></table>

Alternative Flows	<table><tr><td>1.1</td><td>System Error</td></tr><tr><td></td><td>. Try again</td></tr><tr><td>2.1</td><td>Confirmation Email/SMS Not Sent</td></tr><tr><td></td><td>Resend Confirmation</td></tr></table>
Quality Requirements	Confirmation notification should be sent within 1 minute of successful booking.

Case Description-:Booking History

Use Case	Booking History
Goal	Users can view their booking history.
Precondition	The user must have previous bookings.
Success End Condition	Display booking history
Failed End Condition	Notification: "No Booking History Found"
Primary Actors: Secondary Actors:	Customer, Manager Admin
Trigger	The user requests to view their booking history.
Description / Main Success Scenario	<table><tr><td>1.</td><td>User selects "Booking History" option</td></tr><tr><td>2.</td><td>Display a list of previous bookings</td></tr><tr><td>3.</td><td>User can select a booking to view details</td></tr><tr><td>4.</td><td>Show details of the selected booking</td></tr></table>

Alternative Flows	<table><tr><td>1.1</td><td>System Error</td></tr><tr><td></td><td>. Try again</td></tr><tr><td>2.1</td><td>No Bookings Found</td></tr><tr><td></td><td>Notification: "No Booking History Found"</td></tr></table>
Quality Requirements	Booking history should load within 5 seconds.

Case Description-: Rate & Review

Use Case	Rate & Review
Goal	Users can rate and review a show.
Precondition	The user must have attended a show.
Success End Condition	Notification: "Review Submitted"
Failed End Condition	Notification: "Review Submission Failed!"
Primary Actors: Secondary Actors:	Customer, Manager Admin
Trigger	The user requests to submit a review
Description / Main Success Scenario	<table><tr><td>1.</td><td>User selects a show to rate and review</td></tr><tr><td>2.</td><td>Enter rating and review details</td></tr><tr><td>3.</td><td>Submit the review</td></tr><tr><td>4.</td><td>Notification: "Review Submitted"</td></tr></table>

Alternative Flows	1.1 System Error . Try again 2.1 Incomplete Review Form Notification: "Complete the Review Form"
Quality Requirements	Review should be submitted within 1 minute.

Case Description: Notifications

Use Case	Notifications
Goal	Users can receive notifications about their bookings or upcoming shows.
Precondition	the user must have active bookings or signed up for notifications.
Success End Condition	Notification is received
Failed End Condition	Notification is not received
Primary Actors: Secondary Actors:	Customer, Manager Admin
Trigger	System sends notifications based on events
Description / Main Success Scenario	1. User subscribes to notifications 2. System generates notification based on an event (booking, show update, etc.) 3. Notification is sent to the user
Alternative Flows	1.1 Notification Failed Resend Notification
Quality Requirements	Notifications should be sent within 5 minutes of the trigger event.

Theatre Staff Functions

Case Description: Show Scheduling

<table>
<tr><td>Use Case</td><td>Show Scheduling</td></tr>
<tr><td>Goal</td><td>Theatre staff can schedule shows.</td></tr>
<tr><td>Precondition</td><td>The system must have available time slots for scheduling.</td></tr>
<tr><td>Success End Condition</td><td>Notification: "Show Scheduled Successfully"</td></tr>
<tr><td>Failed End Condition</td><td>Notification: "Show Scheduling Failed"</td></tr>
<tr><td>Primary Actors:

Secondary Actors:</td><td>Customer, Manager

Admin</td></tr>
<tr><td>Trigger</td><td>Theatre staff schedules a new show.</td></tr>
<tr><td>Description / Main Success Scenario</td><td><table>
<tr><td>1.</td><td>Theatre staff selects "Schedule Show" option</td></tr>
<tr><td>2.</td><td>Enter show details (name, time, date)</td></tr>
<tr><td>3.</td><td>Confirm and save the show schedule</td></tr>
<tr><td>4.</td><td>Notification: "Show Scheduled Successfully"</td></tr>
</table></td></tr>
<tr><td>Alternative Flows</td><td><table>
<tr><td>1.1</td><td>System Error</td></tr>
<tr><td></td><td>Try again</td></tr>
<tr><td>2.1</td><td>Time Slot Not Available</td></tr>
<tr><td></td><td>Notification: "Time Slot Not Available"</td></tr>
</table></td></tr>
<tr><td>Quality Requirements</td><td>Shows should be scheduled within 3 minutes.</td></tr>
</table>

Case Description: Manage Pricing

<table>
<tr><td>Use Case</td><td>Manage Pricing</td></tr>
<tr><td>Goal</td><td>Theatre staff can manage the pricing for shows.</td></tr>
<tr><td>Precondition</td><td>The show must be scheduled.</td></tr>
<tr><td>Success End Condition</td><td>Notification: "Pricing Updated Successfully"</td></tr>
<tr><td>Failed End Condition</td><td>Notification: "Pricing Update Failed"</td></tr>
<tr><td>Primary Actors:

Secondary Actors:</td><td>Customer, Manager

Admin</td></tr>
<tr><td>Trigger</td><td>Theatre staff updates the pricing for a show.</td></tr>
<tr><td>Description / Main Success Scenario</td><td><table>
<tr><td>1.</td><td>Theatre staff selects a show to update pricing</td></tr>
<tr><td>2.</td><td>Enter new ticket pricing details</td></tr>
<tr><td>3.</td><td>Confirm and save the updated pricing</td></tr>
<tr><td>4.</td><td>Notification: "Pricing Updated Successfully"</td></tr>
</table></td></tr>
<tr><td>Alternative Flows</td><td><table>
<tr><td>1.1</td><td>System Error</td></tr>
<tr><td></td><td>Try again</td></tr>
<tr><td>2.1</td><td>Pricing Information Invalid</td></tr>
<tr><td></td><td>Notification: "Enter Valid Pricing Details"</td></tr>
</table></td></tr>
<tr><td>Quality Requirements</td><td>Pricing updates should take no more than 2 minutes.</td></tr>
</table>

Case Description: Ticket Sales Tracking

<table>
<tr><td>Use Case</td><td>Ticket Sales Tracking</td></tr>
<tr><td>Goal</td><td>Theatre staff can track ticket sales for shows.</td></tr>
<tr><td>Precondition</td><td>The show must be scheduled, and tickets must be on sale.</td></tr>
<tr><td>Success End Condition</td><td>Display ticket sales information</td></tr>
<tr><td>Failed End Condition</td><td>Notification: "Sales Tracking Failed"</td></tr>
<tr><td>Primary Actors:

Secondary Actors:</td><td>Theater, Manager

Admin</td></tr>
<tr><td>Trigger</td><td>Theatre staff requests to view ticket sales for a show.</td></tr>
<tr><td>Description / Main Success Scenario</td><td><table>
<tr><td>1.</td><td>Theatre staff selects a show for sales tracking</td></tr>
<tr><td>2.</td><td>System retrieves the current ticket sales data</td></tr>
<tr><td>3.</td><td>Display sales data (e.g., number of tickets sold, revenue generated)</td></tr>
</table></td></tr>
<tr><td>Alternative Flows</td><td><table>
<tr><td>1.1</td><td>System Error</td></tr>
<tr><td></td><td>Try again</td></tr>
<tr><td>2.1</td><td>Display sales data (e.g., number of tickets sold, revenue generated)</td></tr>
<tr><td></td><td>Notification: "Sales Data Unavailable"</td></tr>
</table></td></tr>
<tr><td>Quality Requirements</td><td>Sales data should be displayed within 10 seconds.</td></tr>
</table>

Case Description: Ticket Issuance

<table>
<tr><td>Use Case</td><td>Ticket Issuance</td></tr>
<tr><td>Goal</td><td>Theatre staff can issue tickets to customers.</td></tr>
<tr><td>Precondition</td><td>Tickets must be booked, and the customer should have a valid booking.</td></tr>
<tr><td>Success End Condition</td><td>Notification: "Ticket Issued Successfully</td></tr>
<tr><td>Failed End Condition</td><td>Notification: "Ticket Issuance Failed"</td></tr>
<tr><td>Primary Actors:

Secondary Actors:</td><td>Theater,Manager

Admin</td></tr>
<tr><td>Trigger</td><td>Theatre staff issues tickets based on bookings.</td></tr>
<tr><td>Description / Main Success Scenario</td><td>
<table>
<tr><td>1.</td><td>Customer provides booking confirmation (online or offline)</td></tr>
<tr><td>2.</td><td>Theatre staff verifies the booking details</td></tr>
<tr><td>3.</td><td>Issue tickets based on booking details</td></tr>
<tr><td>4.</td><td>Notification: "Ticket Issued Successfully"</td></tr>
</table>
</td></tr>
<tr><td>Alternative Flows</td><td>
<table>
<tr><td>1.1</td><td>System Error</td></tr>
<tr><td></td><td>Try again</td></tr>
<tr><td>2.1</td><td>Invalid Booking Details</td></tr>
<tr><td></td><td>Notification: "Invalid Booking Details"</td></tr>
</table>
</td></tr>
<tr><td>Quality Requirements</td><td>Ticket issuance should be completed within 5 minutes per customer.</td></tr>
</table>

Case Description: Customer Assistance

<table>
<tr><td>Use Case</td><td>Customer Assistance</td></tr>
<tr><td>Goal</td><td>Theatre staff can assist customers with issues related to bookings, tickets, or shows.</td></tr>
<tr><td>Precondition</td><td>The customer must have a valid issue or query.</td></tr>
<tr><td>Success End Condition</td><td>Customer issue is resolved, and notification is sent.</td></tr>
<tr><td>Failed End Condition</td><td>Notification: "Customer Assistance Failed"</td></tr>
<tr><td>Primary Actors:

Secondary Actors:</td><td>Customer, Manager

Admin</td></tr>
<tr><td>Trigger</td><td>A customer raises an issue or requests assistance.</td></tr>
<tr><td>Description / Main Success Scenario</td><td><table><tr><td>1.</td><td>Customer raises a query or issue (online/offline)</td></tr><tr><td>2.</td><td>Theatre staff listens or reads the issue details</td></tr><tr><td>3.</td><td>Staff investigates and provides assistance or resolution</td></tr><tr><td>4.</td><td>Notification: "Issue Resolved</td></tr></table></td></tr>
<tr><td>Alternative Flows</td><td><table><tr><td>1.1</td><td>System Error</td></tr><tr><td></td><td>Try again</td></tr><tr><td>2.1</td><td>Issue Not Resolvable</td></tr><tr><td></td><td>Escalate to management for resolution</td></tr></table></td></tr>
<tr><td>Quality Requirements</td><td>Customer issues should be resolved within 10 minutes, or escalated within 5 minutes if not resolvable.</td></tr>
</table>

Case Description: User Management

<table>
<tr><td>Use Case</td><td>User Management</td></tr>
<tr><td>Goal</td><td>Administrators can manage user accounts.</td></tr>
<tr><td>Precondition</td><td>Users must be registered on the platform.</td></tr>
<tr><td>Success End Condition</td><td>User account is successfully managed (created, updated, deleted).</td></tr>
<tr><td>Failed End Condition</td><td>Notification: "User Management Failed"</td></tr>
<tr><td>Primary Actors:

Secondary Actors:</td><td>Admin

System</td></tr>
<tr><td>Trigger</td><td>Admin requests to manage a user account.</td></tr>
<tr><td>Description / Main Success Scenario</td><td><table>
<tr><td>1.</td><td>Admin selects "User Management" option</td></tr>
<tr><td>2.</td><td>Admin creates, updates, or deletes a user account</td></tr>
<tr><td>3.</td><td>System processes the request</td></tr>
<tr><td>4.</td><td>Notification: "User Account Managed Successfully"</td></tr>
</table></td></tr>
<tr><td>Alternative Flows</td><td><table>
<tr><td>1.1</td><td>System Error</td></tr>
<tr><td></td><td>Try again</td></tr>
<tr><td>2.1</td><td>Invalid User Data</td></tr>
<tr><td></td><td>Notification: "Enter Valid User Data"</td></tr>
</table></td></tr>
<tr><td>Quality Requirements</td><td>User management actions should be processed within 2 minutes.</td></tr>
</table>

Case Description: Role-Based Access

<table>
<tr><td>Use Case</td><td>Role-Based Access</td></tr>
<tr><td>Goal</td><td>Administrators can manage role-based access for users.</td></tr>
<tr><td>Precondition</td><td>User roles must be defined within the system.</td></tr>
<tr><td>Success End Condition</td><td>Role access is successfully managed (assigned or updated).</td></tr>
<tr><td>Failed End Condition</td><td>Notification: "Role-Based Access Management Failed"</td></tr>
<tr><td>Primary Actors:

Secondary Actors:</td><td>Admin

System</td></tr>
<tr><td>Trigger</td><td>Admin requests to manage role-based access for a user.</td></tr>
<tr><td>Description / Main Success Scenario</td><td><table>
<tr><td>1.</td><td>Admin selects a user for role management</td></tr>
<tr><td>2.</td><td>Admin assigns or updates roles</td></tr>
<tr><td>3.</td><td>System processes the role assignment</td></tr>
<tr><td>4.</td><td>Notification: "Role Updated Successfully"</td></tr>
</table></td></tr>
<tr><td>Alternative Flows</td><td><table>
<tr><td>1.1</td><td>System Error</td></tr>
<tr><td></td><td>Try again</td></tr>
<tr><td>2.1</td><td>Role Not Available</td></tr>
<tr><td></td><td>Notification: "Role Not Available"</td></tr>
</table></td></tr>
<tr><td>Quality Requirements</td><td>Role-based access should be updated within 2 minutes.</td></tr>
</table>

Case Description: System Monitoring

<table>
<tr><td>Use Case</td><td>System Monitoring</td></tr>
<tr><td>Goal</td><td>Administrators can monitor the system’s health and performance.</td></tr>
<tr><td>Precondition</td><td>The system must be active and functional.</td></tr>
<tr><td>Success End Condition</td><td>System status and performance data are displayed.</td></tr>
<tr><td>Failed End Condition</td><td>Notification: "System Monitoring Failed"</td></tr>
<tr><td>Primary Actors:

Secondary Actors:</td><td>Admin

System</td></tr>
<tr><td>Trigger</td><td>Admin requests to view system health or performance reports.</td></tr>
<tr><td>Description / Main Success Scenario</td><td><table><tr><td>1.</td><td>Admin selects "System Monitoring" option</td></tr><tr><td>2.</td><td>System retrieves health and performance metrics</td></tr><tr><td>3.</td><td>Display the retrieved data</td></tr></table></td></tr>
<tr><td>Alternative Flows</td><td><table><tr><td>1.1</td><td>Monitoring Tools Unavailable</td></tr><tr><td></td><td>Notification: "Monitoring Tools Unavailable"</td></tr></table></td></tr>
<tr><td>Quality Requirements</td><td>System health and performance data should be retrieved within 5 seconds.</td></tr>
</table>

Case Description: Reporting

<table>
<tr><td>Use Case</td><td>Reporting</td></tr>
<tr><td>Goal</td><td>Administrators can generate various reports related to system usage, sales, etc.</td></tr>
<tr><td>Precondition</td><td>The system must have relevant data.</td></tr>
<tr><td>Success End Condition</td><td>Reports are generated and displayed.</td></tr>
<tr><td>Failed End Condition</td><td>Notification: "Report Generation Failed"</td></tr>
<tr><td>Primary Actors:

Secondary Actors:</td><td>Admin

System</td></tr>
<tr><td>Trigger</td><td>Admin requests to generate a report.</td></tr>
<tr><td>Description / Main Success Scenario</td><td><table><tr><td>1.</td><td>Admin selects the type of report to generate (e.g., sales, user activity)</td></tr><tr><td>2.</td><td>System retrieves and processes the relevant data</td></tr><tr><td>3.</td><td>The report is generated and displayed/downloaded</td></tr></table></td></tr>
<tr><td>Alternative Flows</td><td><table><tr><td>1.1</td><td>Report Generation Delayed</td></tr><tr><td></td><td></td></tr></table></td></tr>
<tr><td>Quality Requirements</td><td>Reports should be generated within 5 minutes.</td></tr>
</table>

Case Description: Backup & Recovery

Use Case	Backup & Recovery
Goal	Administrators can perform system backups and recover data.
Precondition	The system must be running, and backup functionality must be enabled.
Success End Condition	System backup or recovery is completed.
Failed End Condition	Notification: "Backup/Recovery Failed"

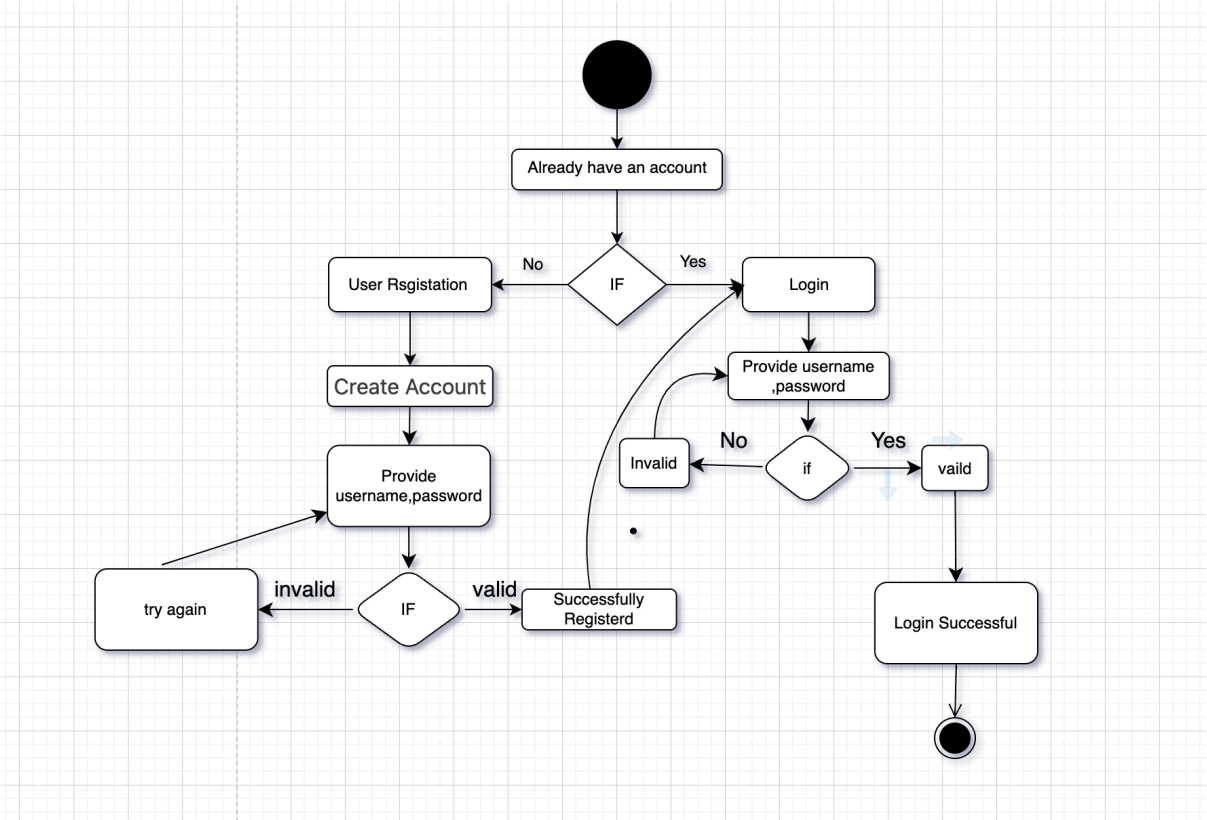
<table>
<tr><td>Primary Actors:

Secondary Actors:</td><td>Admin

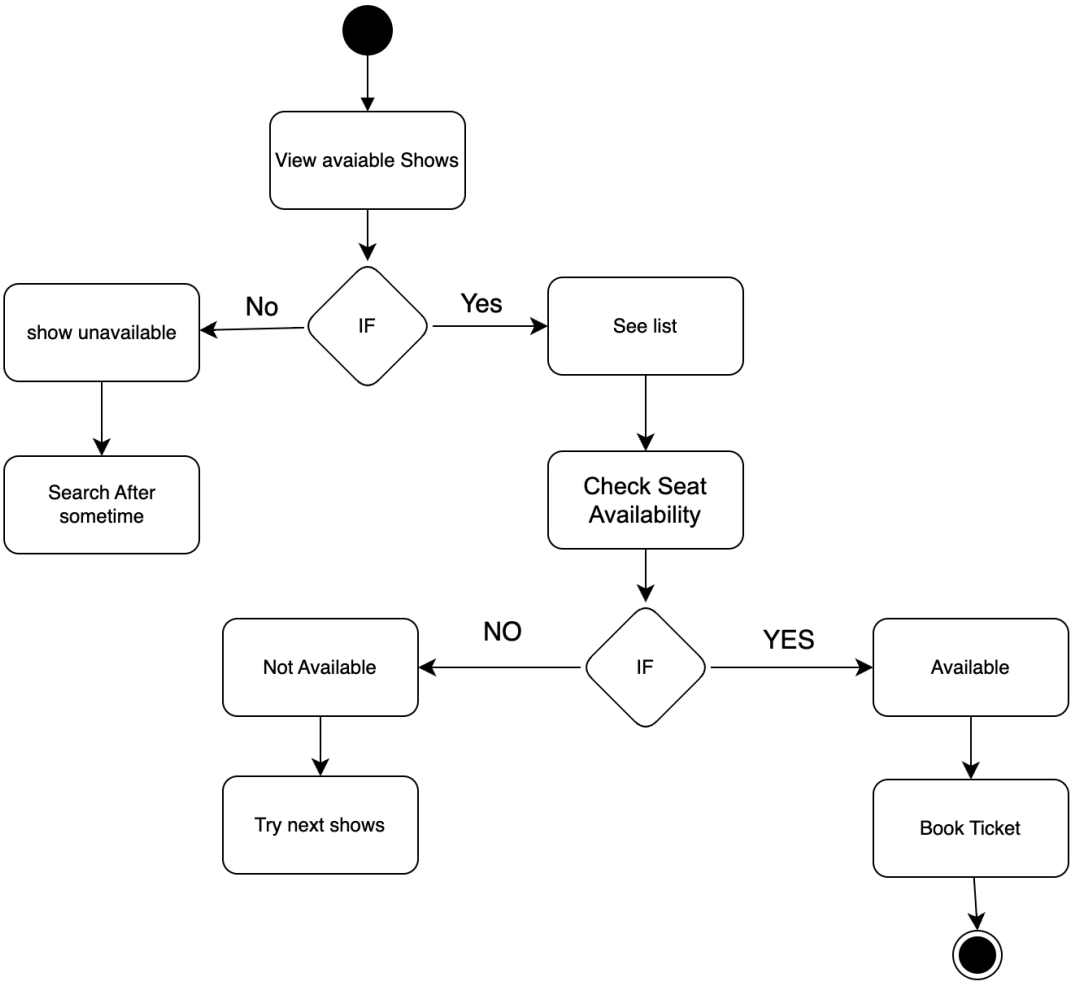
System</td></tr>
<tr><td>Trigger</td><td>Admin requests to perform a backup or recover data.</td></tr>
<tr><td>Description / Main Success Scenario</td><td>
<table>
<tr><td>1.</td><td>Admin selects "Backup" or "Recovery" option</td></tr>
<tr><td>2.</td><td>System processes the backup/recovery request</td></tr>
<tr><td>3.</td><td>Notification: "Backup/Recovery Completed Successfully"</td></tr>
</table>
</td></tr>
<tr><td>Alternative Flows</td><td>
<table>
<tr><td>1.1</td><td>System Backup Unavailable</td></tr>
<tr><td></td><td>Notification: "Backup Unavailable, Try Again"</td></tr>
</table>
</td></tr>
<tr><td>Quality Requirements</td><td>Backup and recovery processes should complete within 30 minutes.</td></tr>
</table>

Activity Diagram

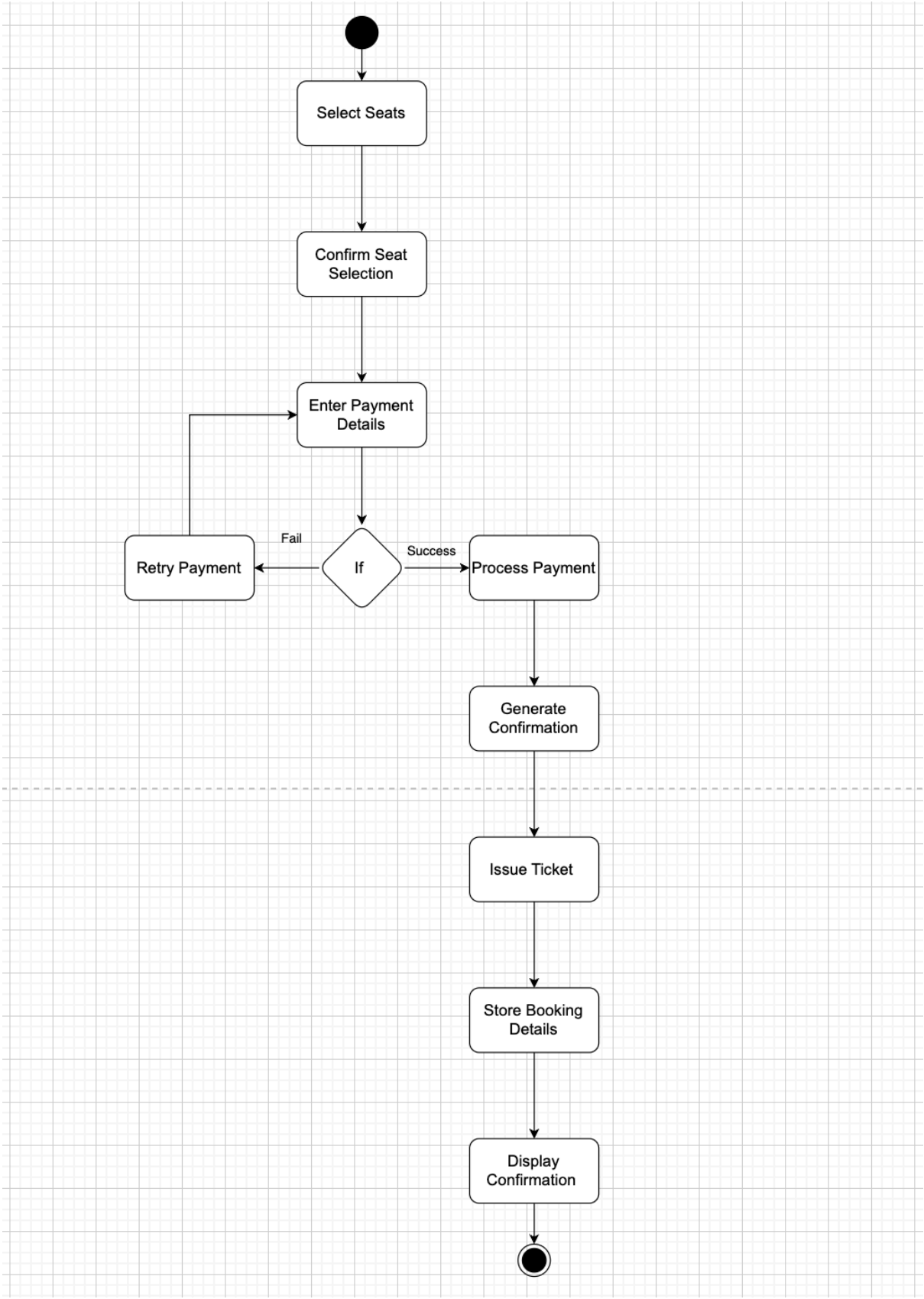
Activity Diagram-1: User Registration & Login



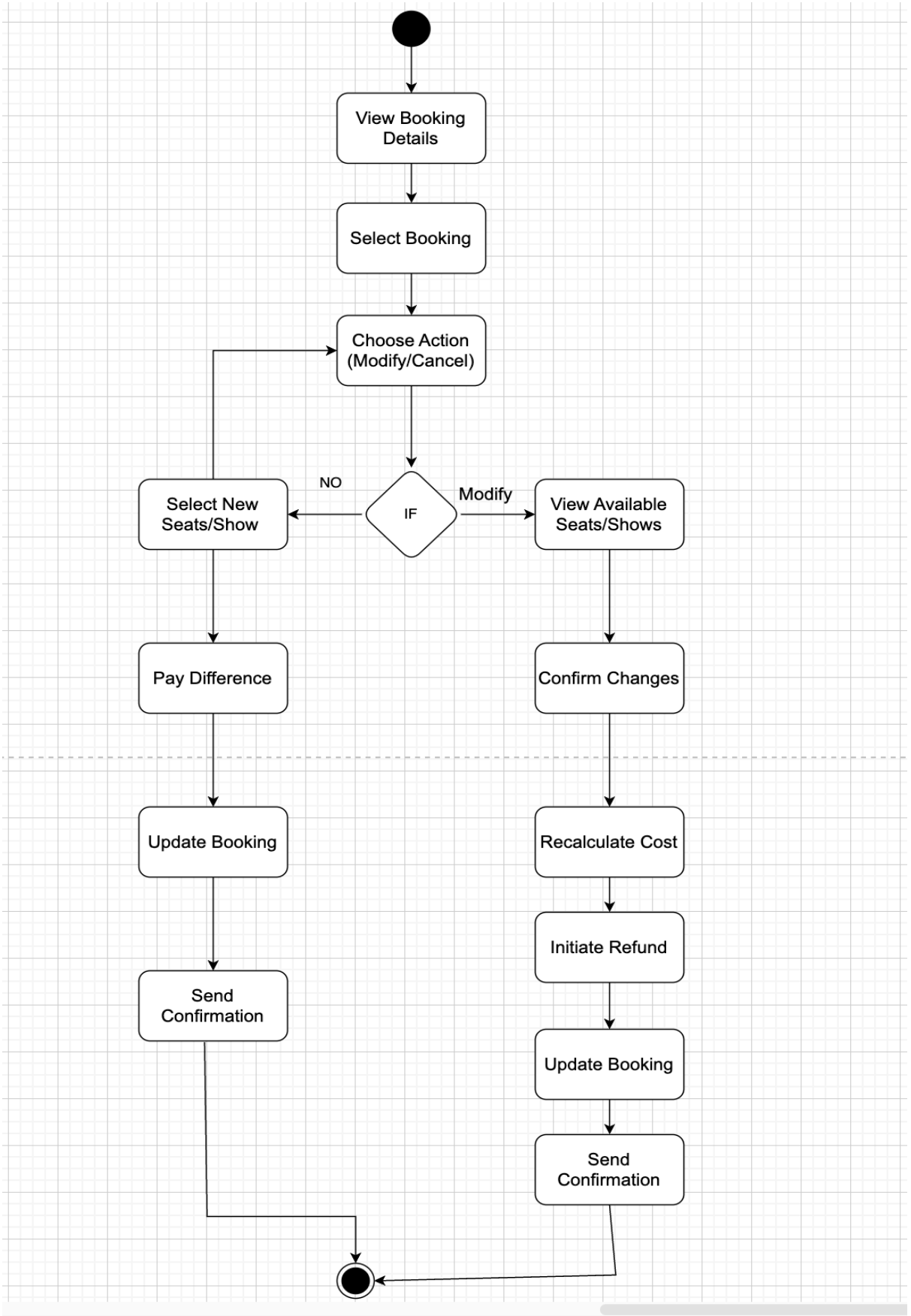
Activity Diagram-2: Browsing & Selecting Shows



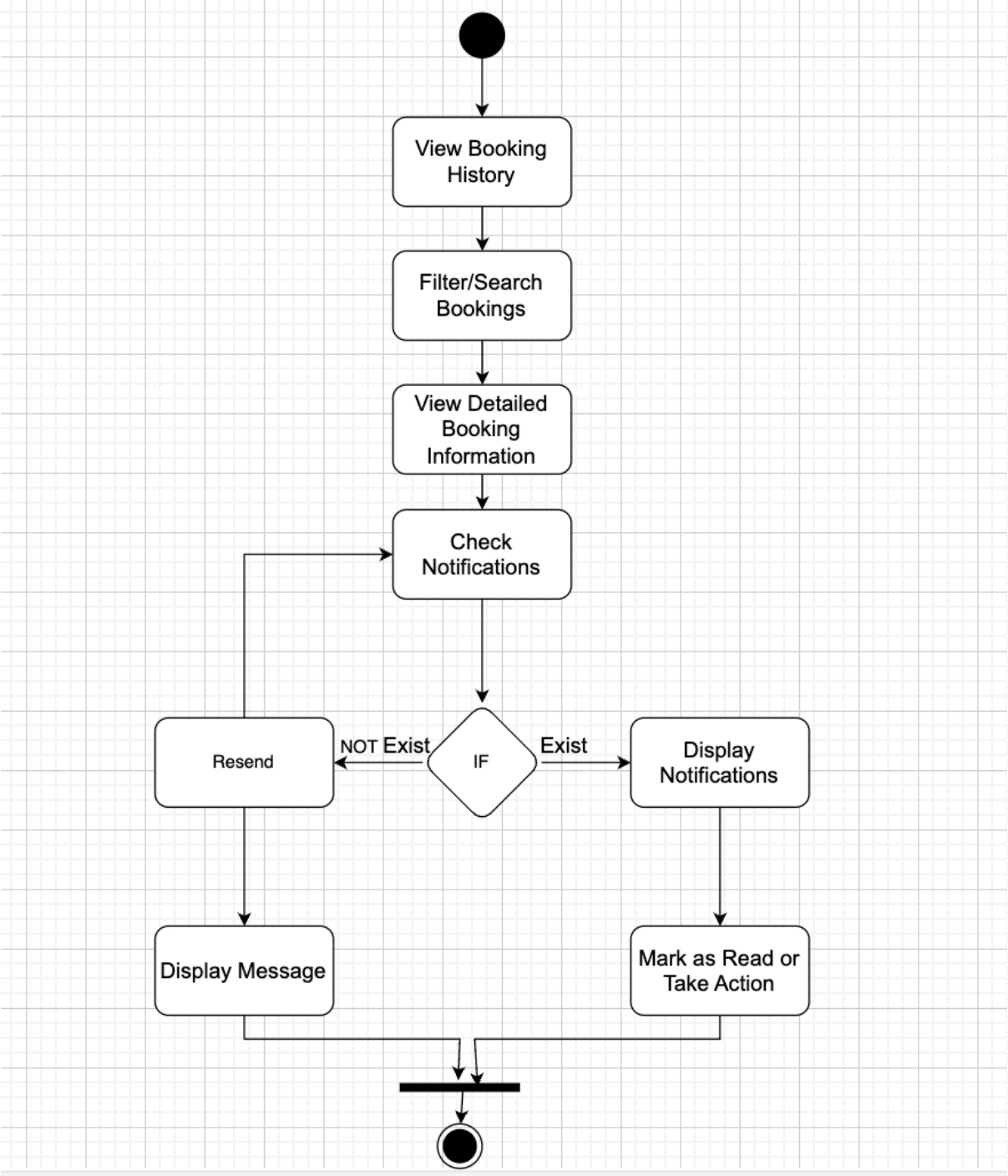
Activity Diagram-3: Ticket Booking Process



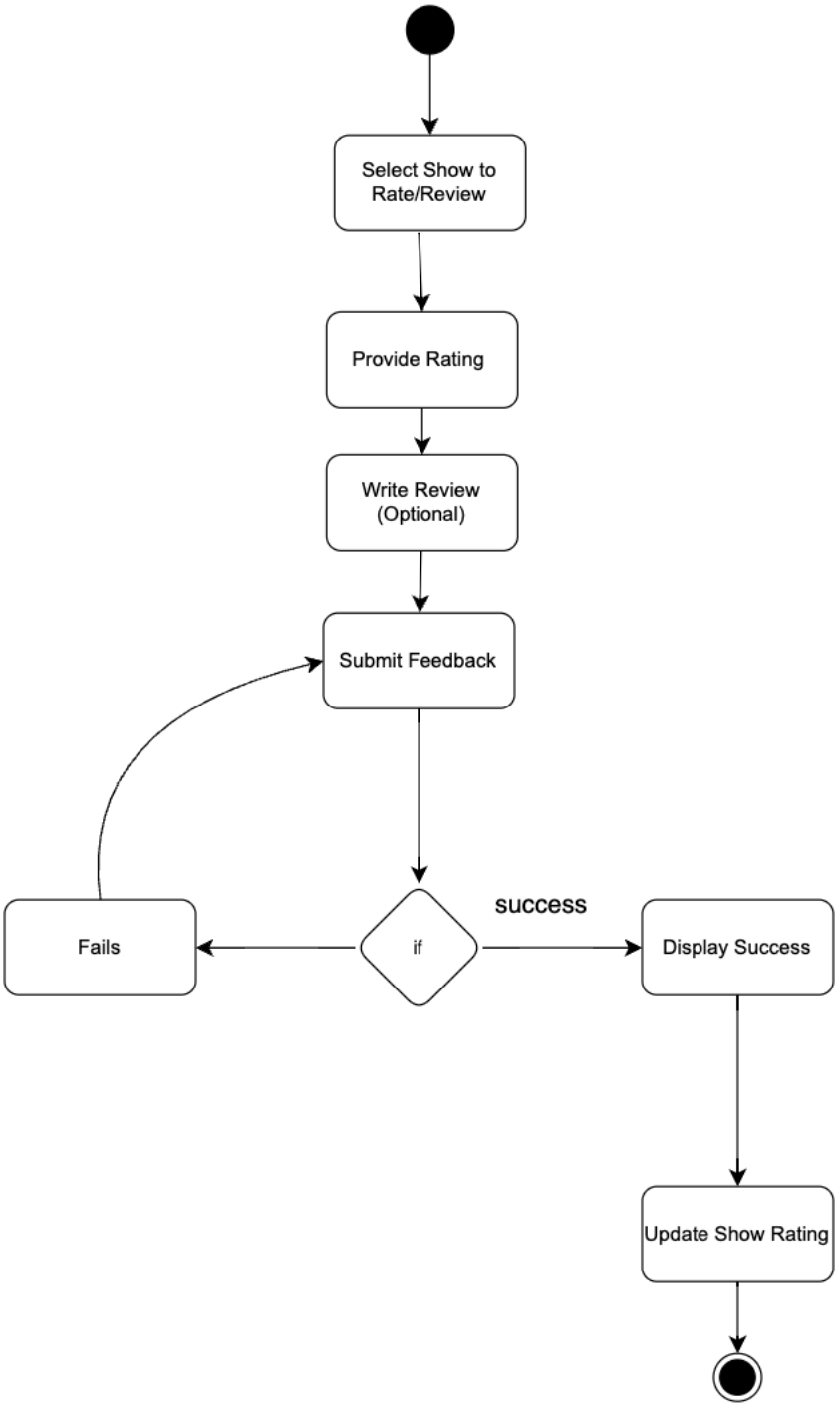
Activity Diagram-4:Modify or Cancel Booking



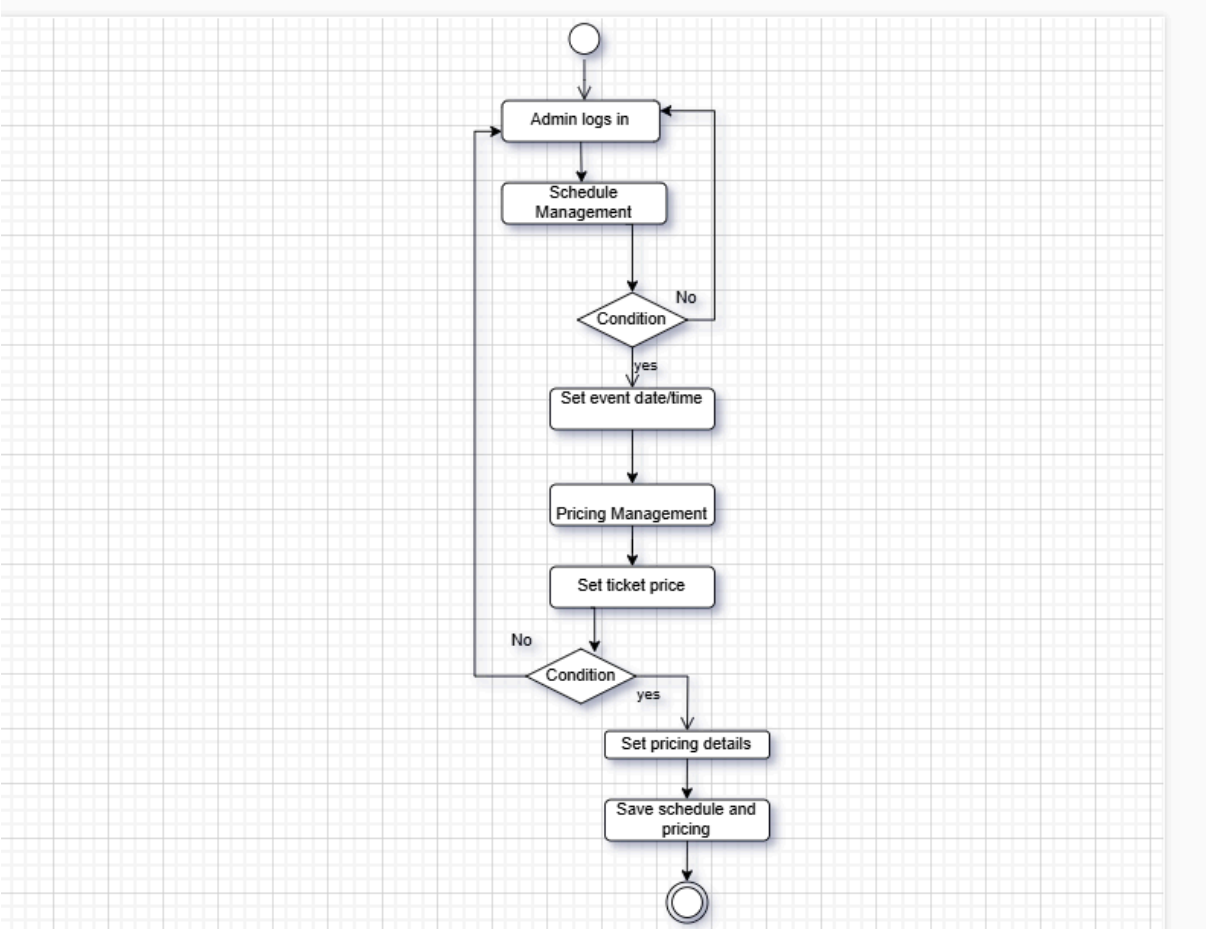
Activity Diagram-5: Booking History & Notifications



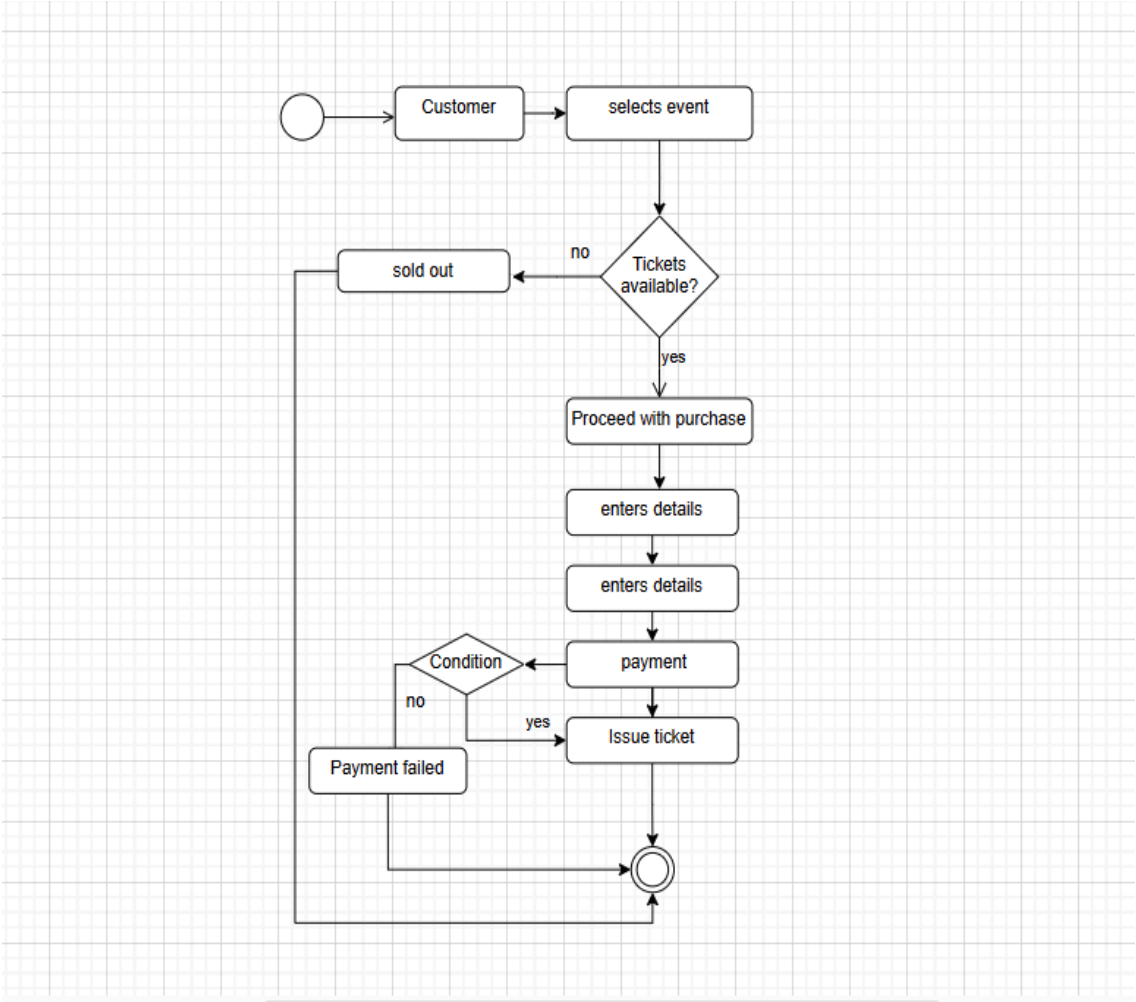
Activity Diagram-6: Rating & Reviewing Shows



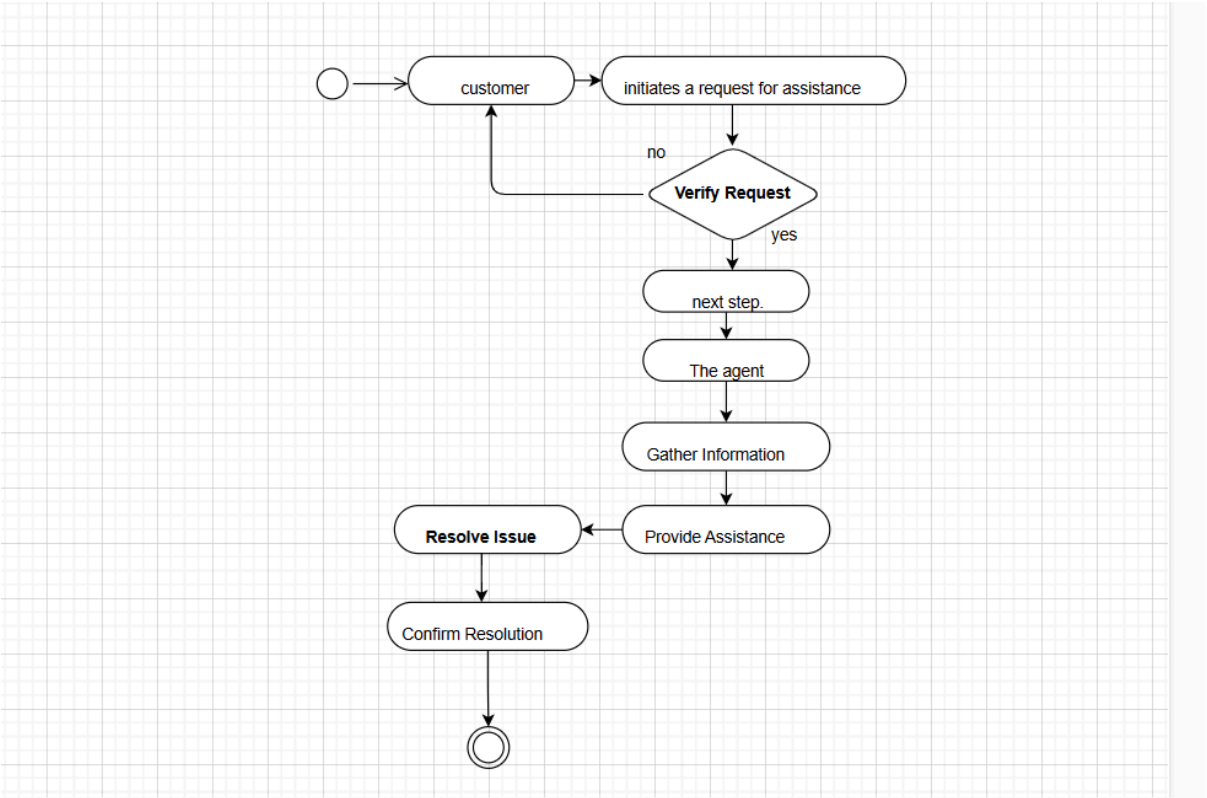
Activity Diagram-7: Show Scheduling & Pricing Management



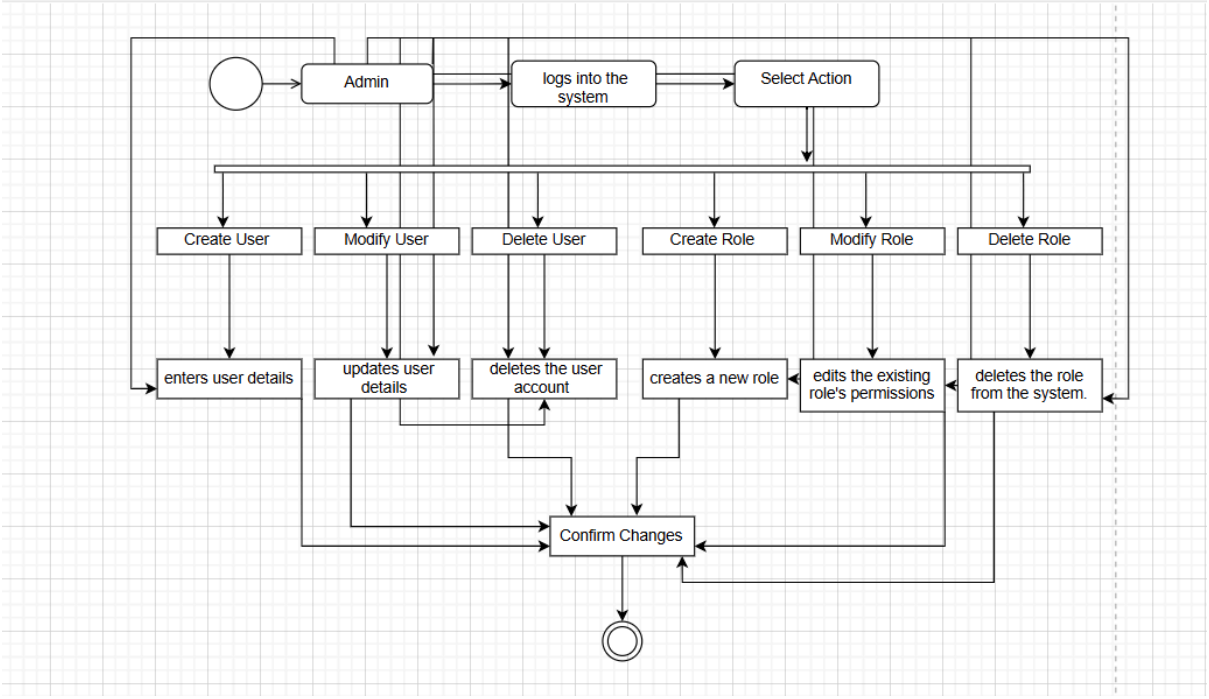
Activity Diagram-8: Ticket Sales & Issuance



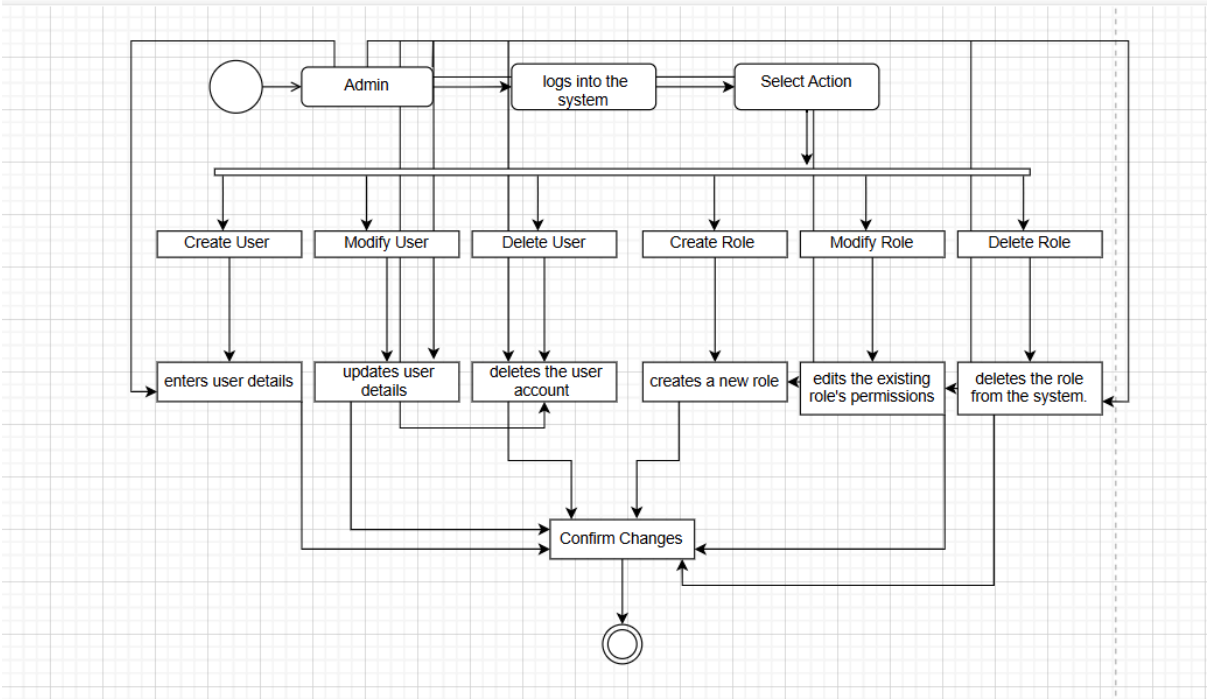
Activity Diagram-9: Customer Assistance Process.



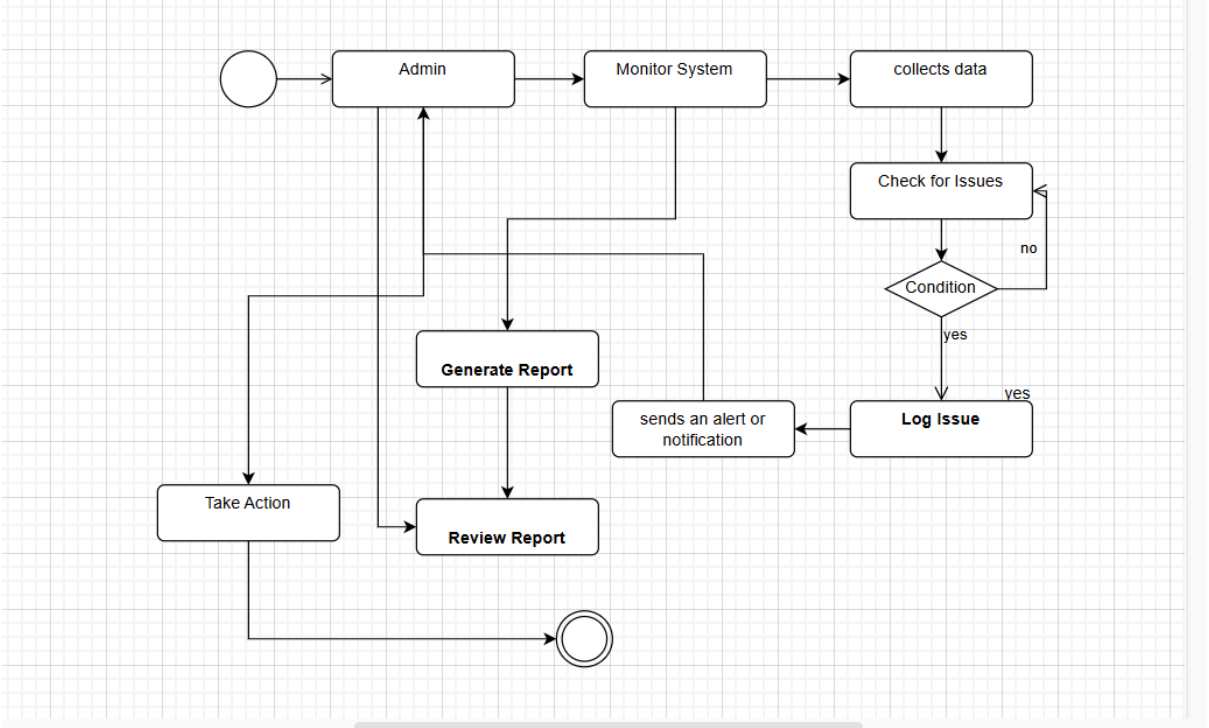
Activity Diagram-10: User & Role Management



Activity Diagram-11: System Monitoring & Reporting



Activity Diagram-12: Backup & Recovery Process



Class Diagram

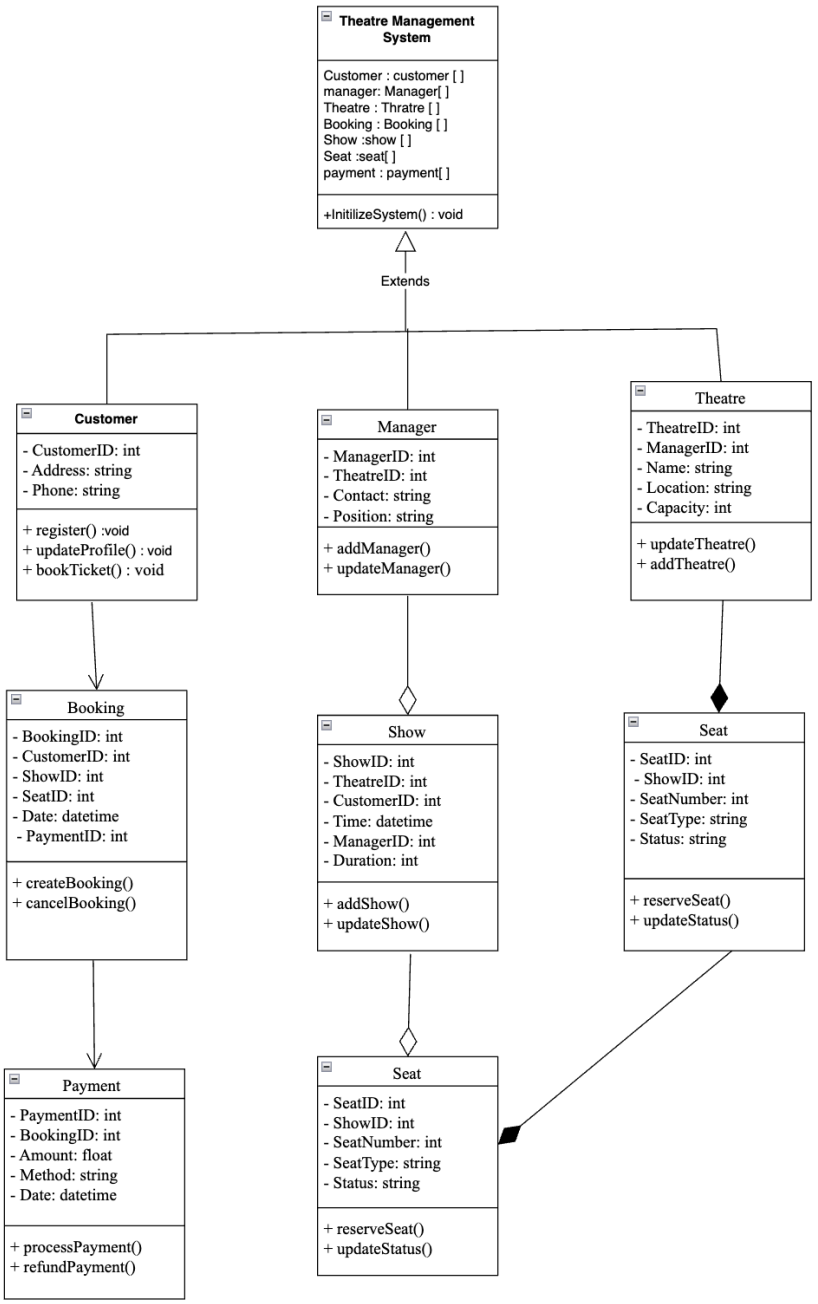
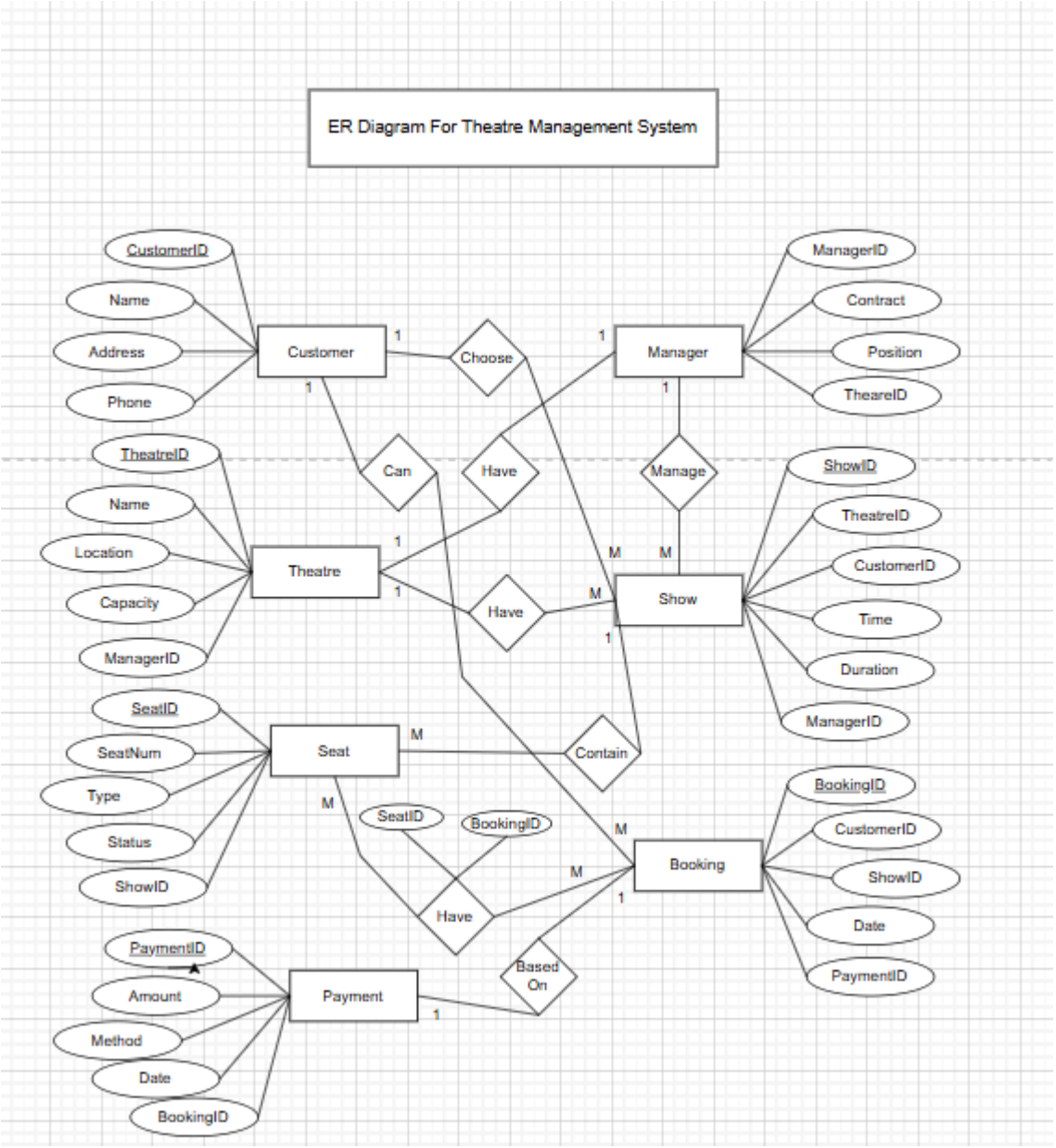


Figure : Class Diagram for Theatre Management System

ER Diagram For Theatre Management System

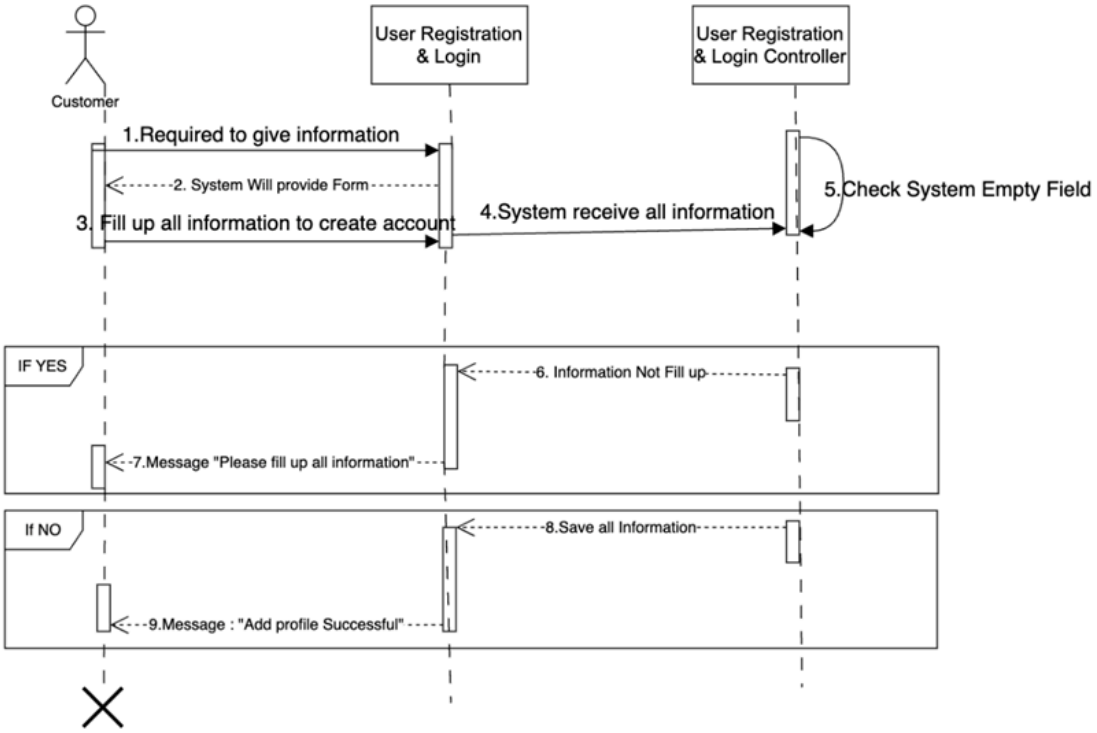
Entities & Attributes:

1. Customer (CustomerID, Phone, Address)
2. Manager (ManagerID, TheatreID, Contact, Position)
3. Theatre (TheatreID, ManagerID, Name, Location, Capacity)
4. Show (ShowID, TheatreID, CustomerID, Time, MAnagerID, Duration)
5. Seat (SeatID, ShowID, SeatNumber, SeatType, Status)
6. Booking (BookingID,CustomerID, ShowID, SeatID, Date, PayMentID)
7. Payment (PaymentID, BookingID, Amount, Method, Date)

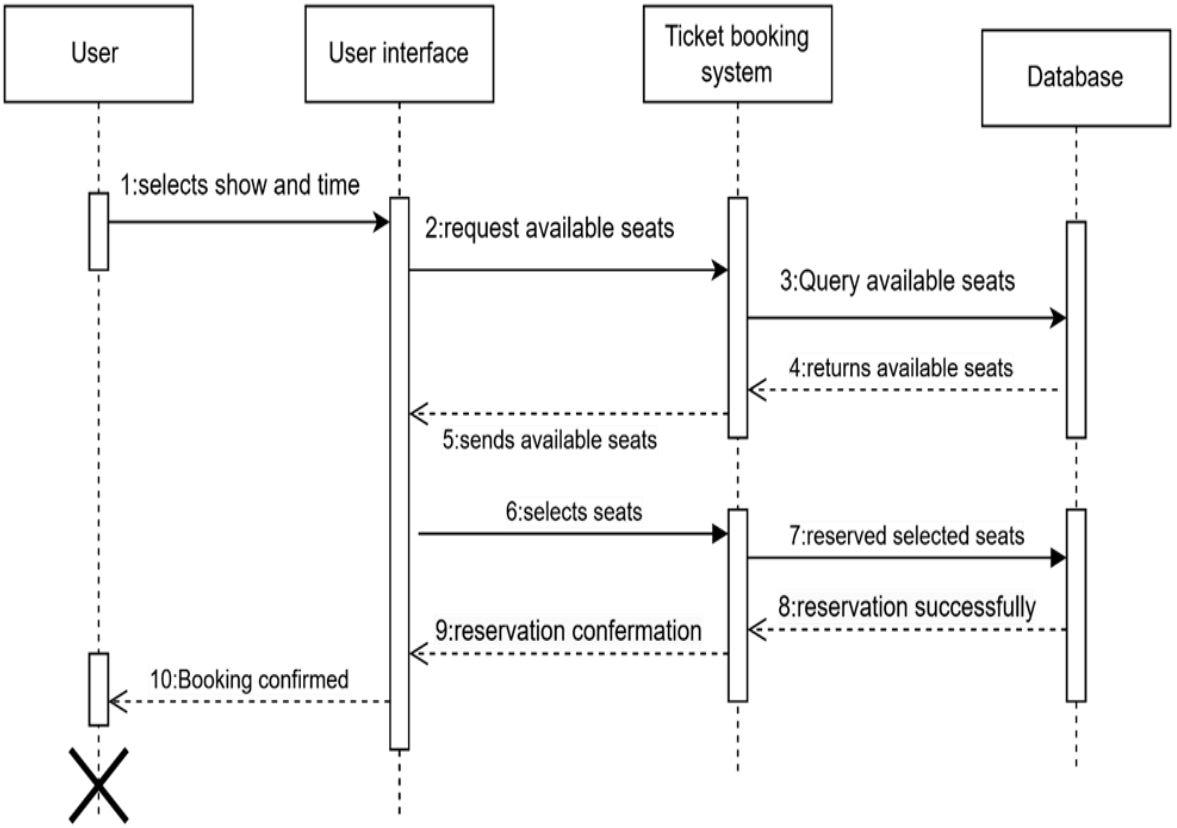


Sequence Diagram

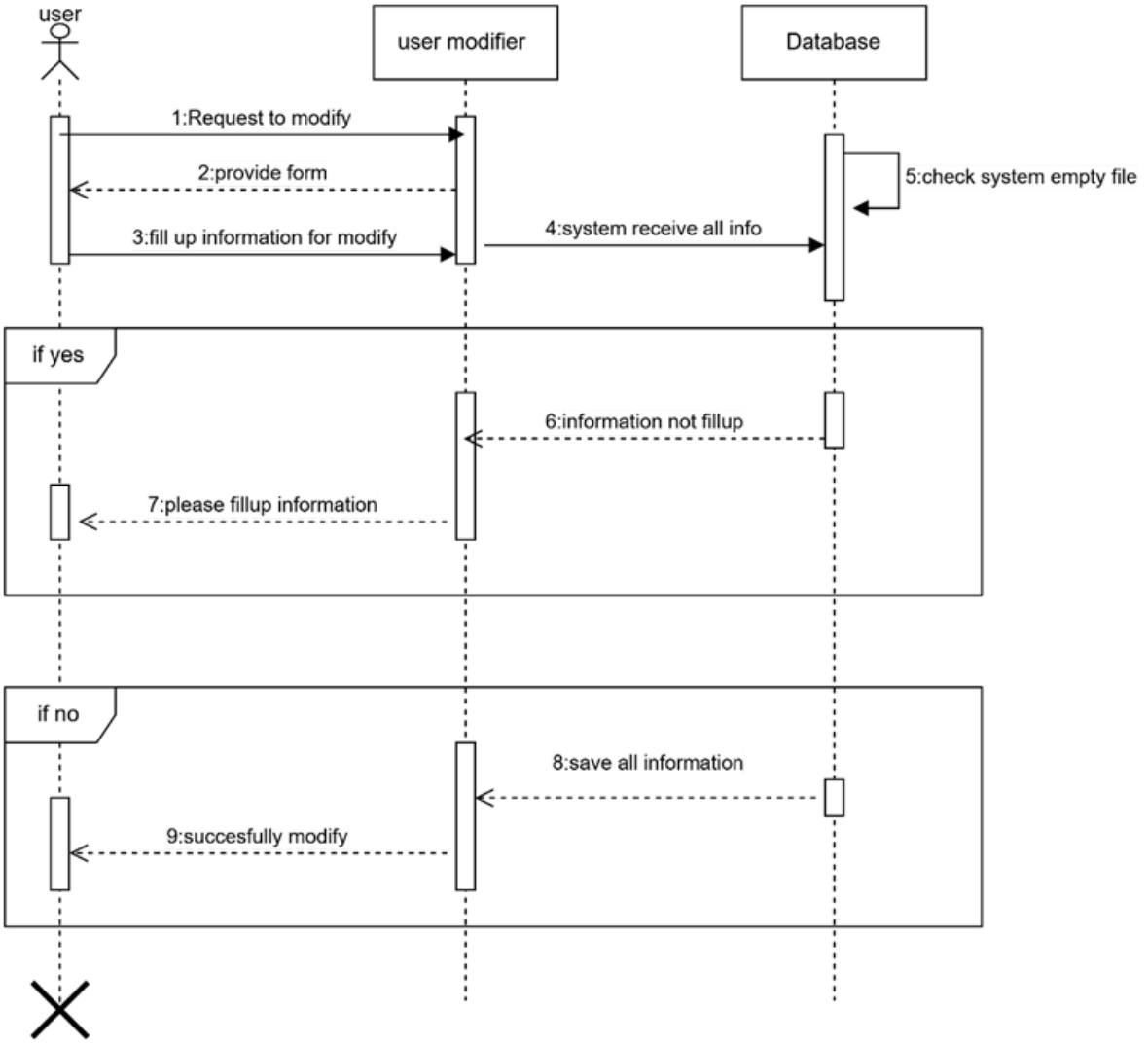
Sequence Diagram-1: User Registration & Login



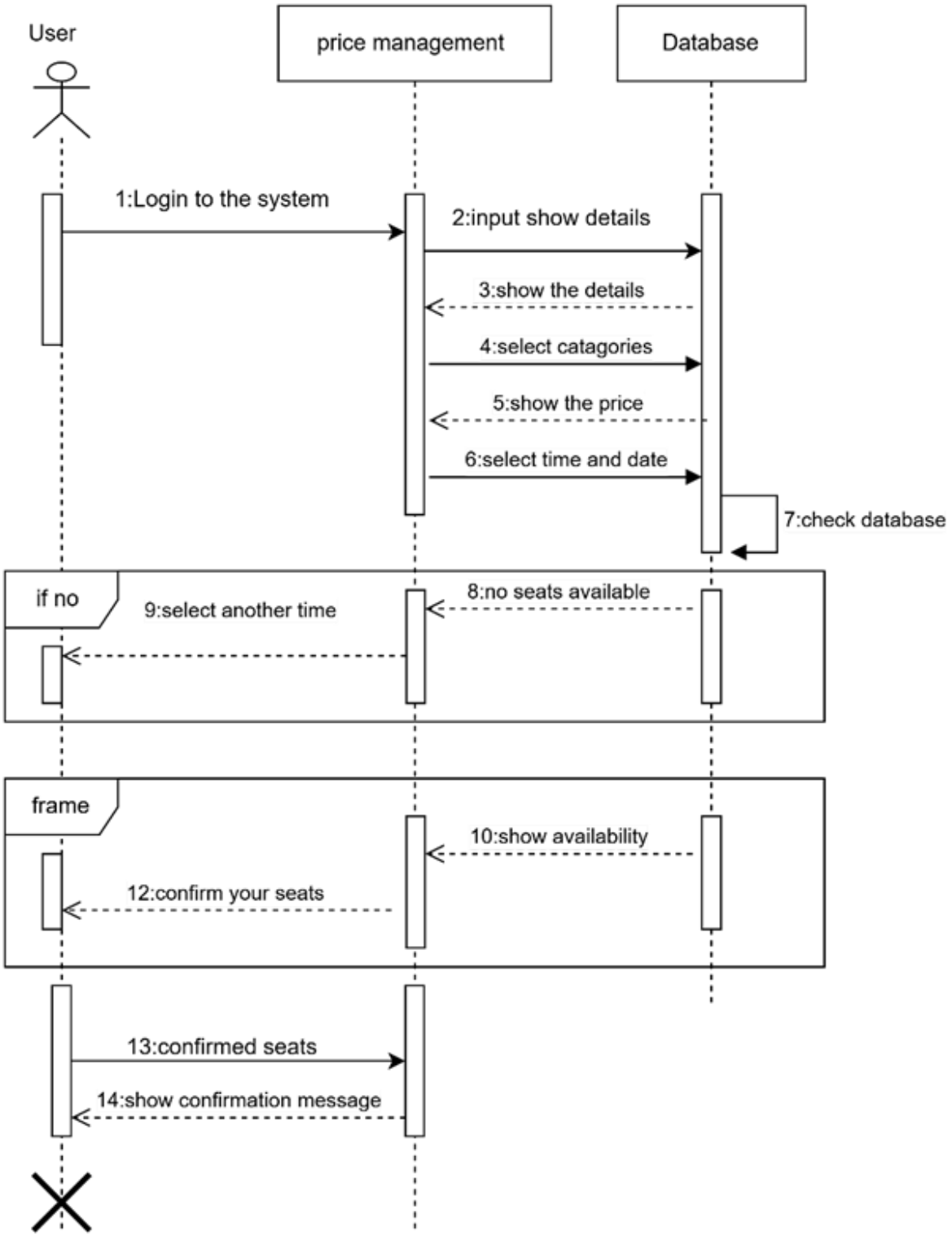
Sequence Diagram-2: Ticket Booking Process



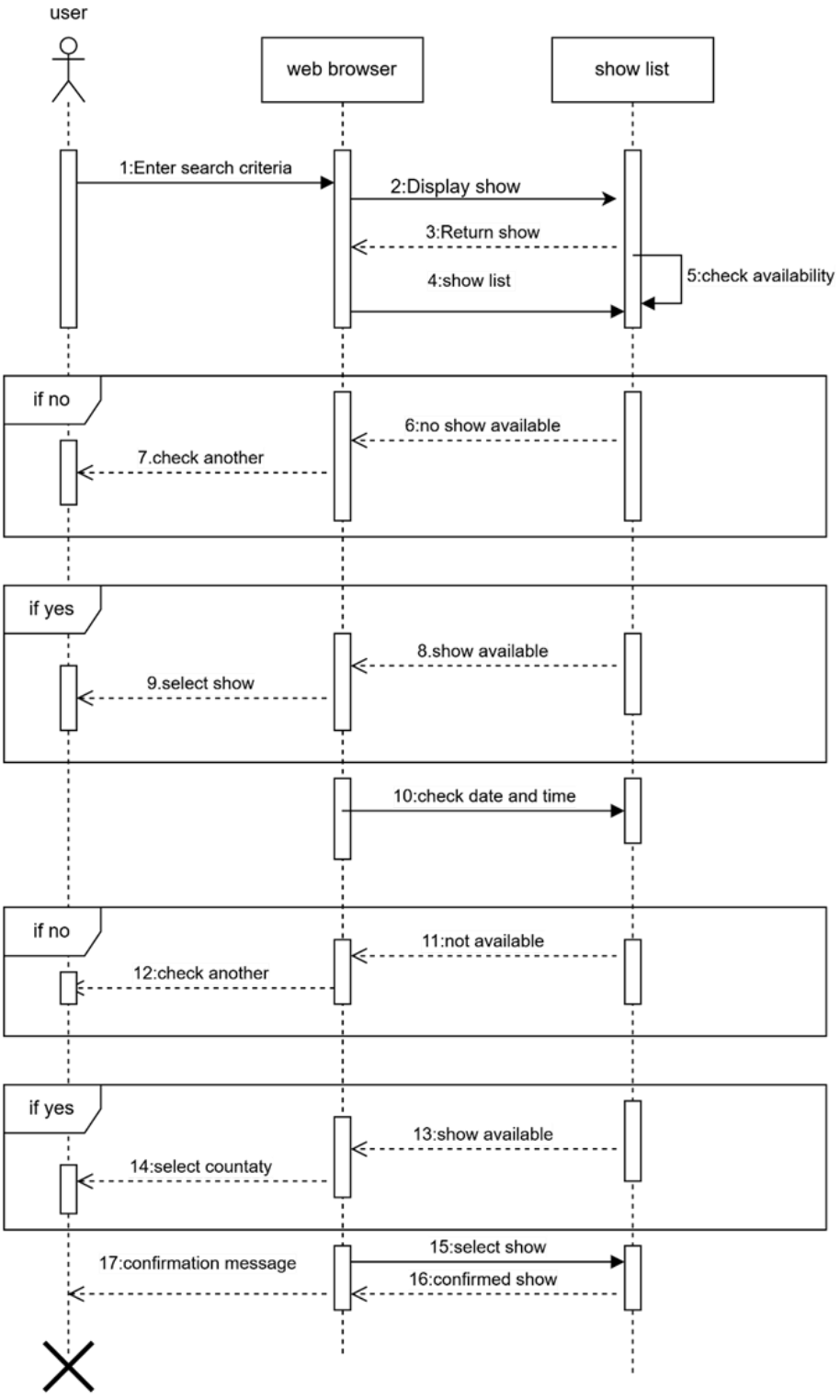
Sequence Diagram-3: Modify Booking


user
user modifier
Database
1:Request to modify
2:provide form
3:fill up information for modify
4:system receive all info
5:check system empty file
if yes
6:information not fillup
7:please fillup information
if no
8:save all information
9:succesfully modify

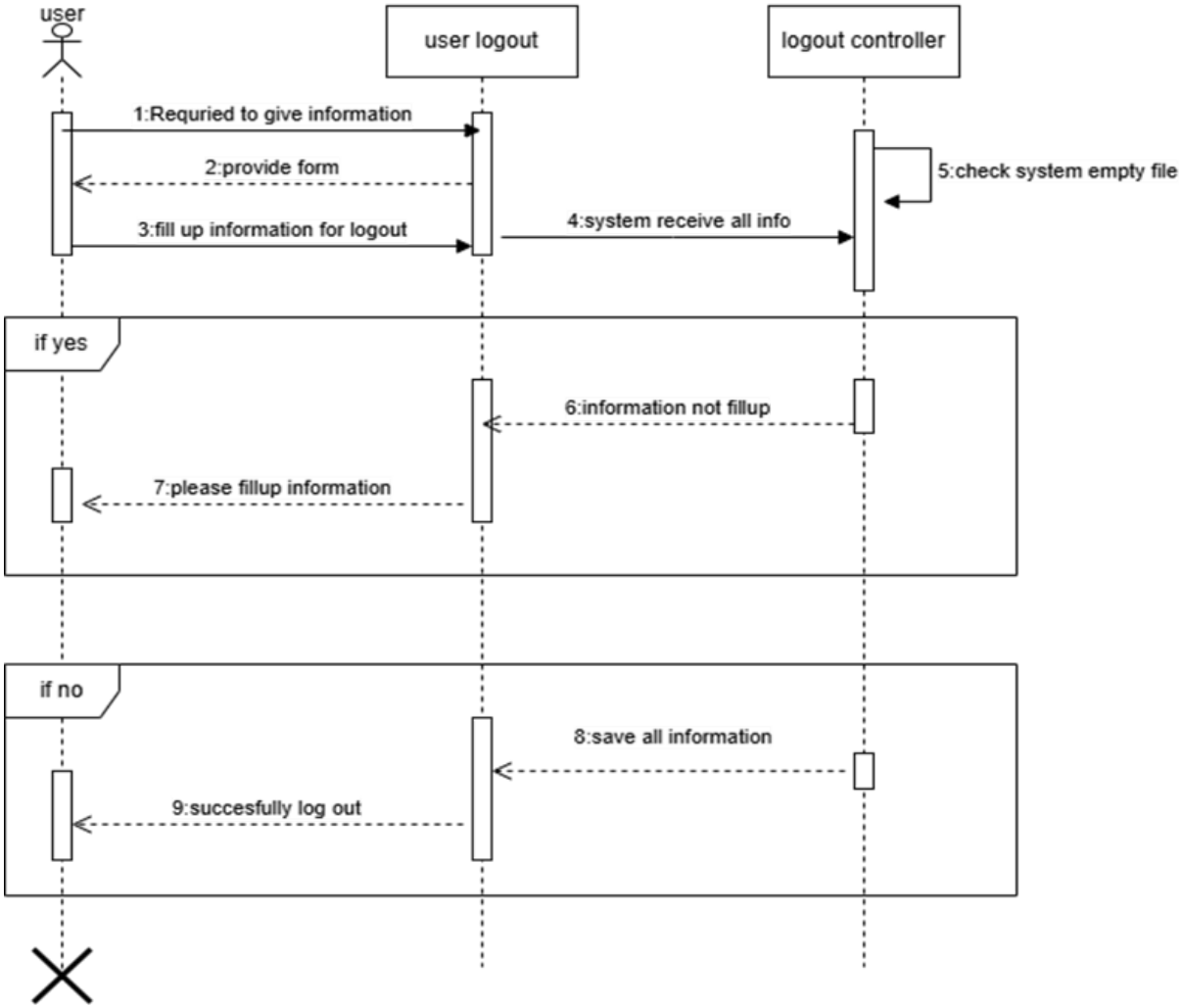
Sequence Diagram-4: Pricing Management



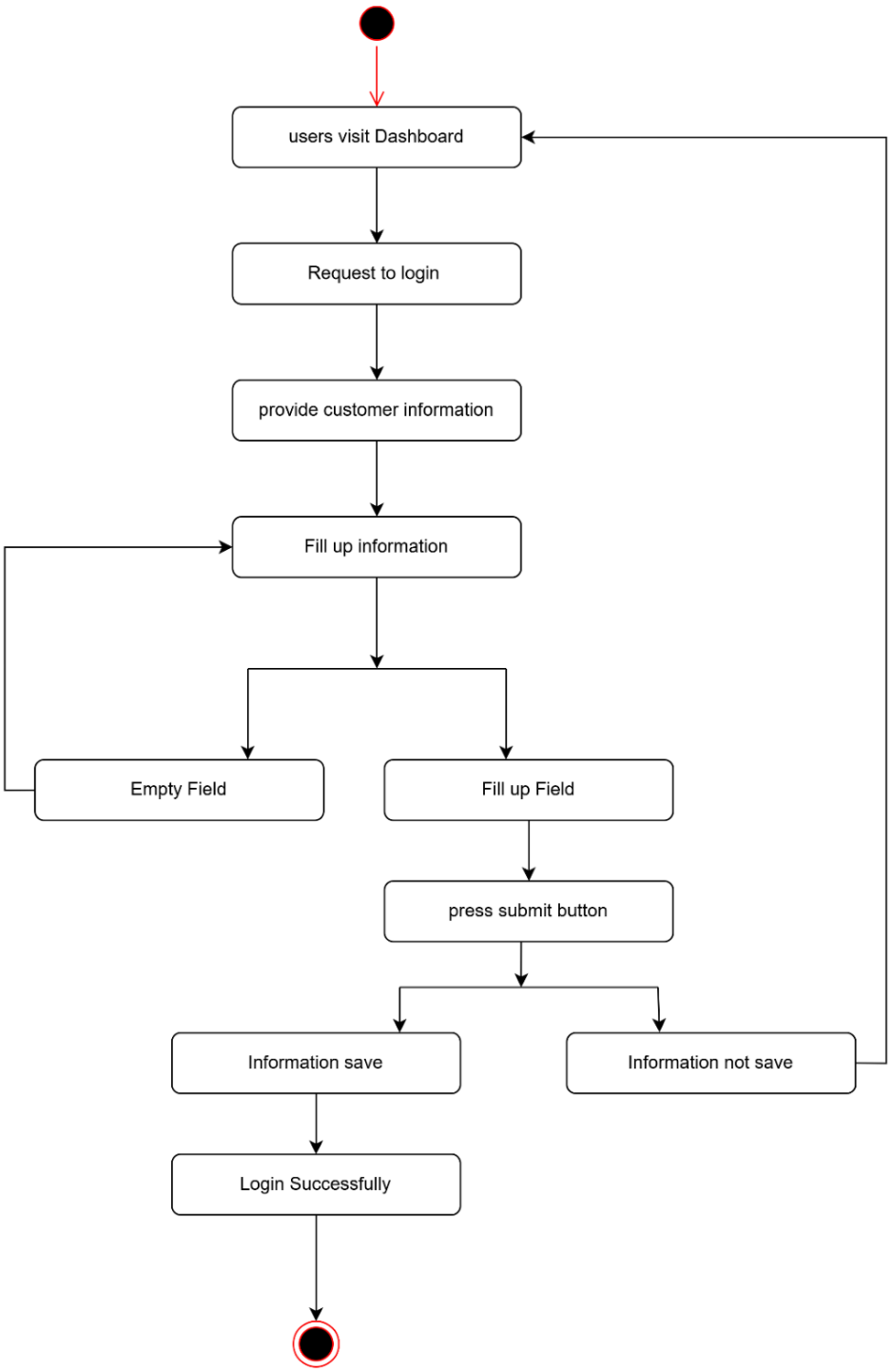
Sequence Diagram-5: Browsing & Selecting Shows



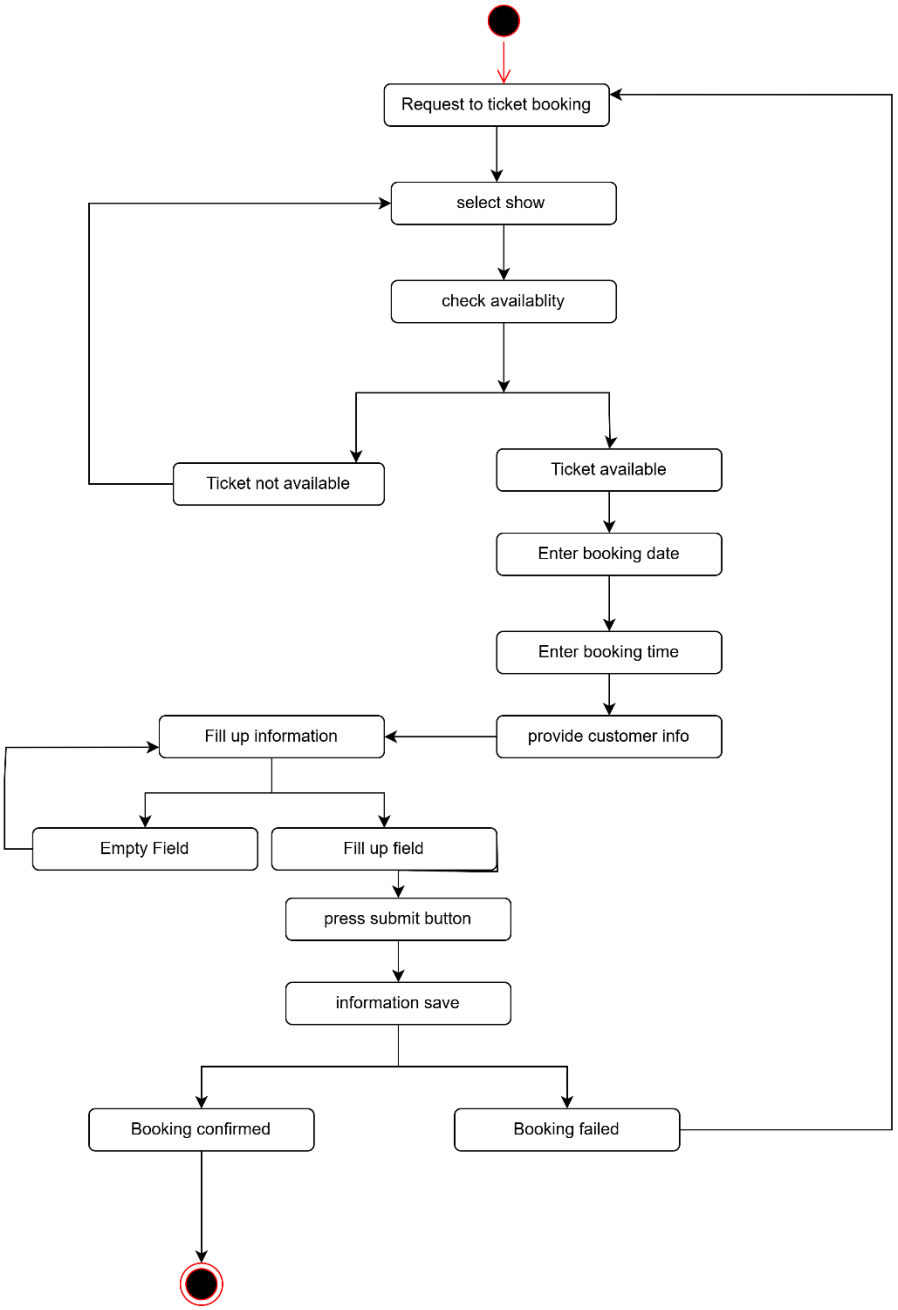
Sequence Diagram-6: Logout Process



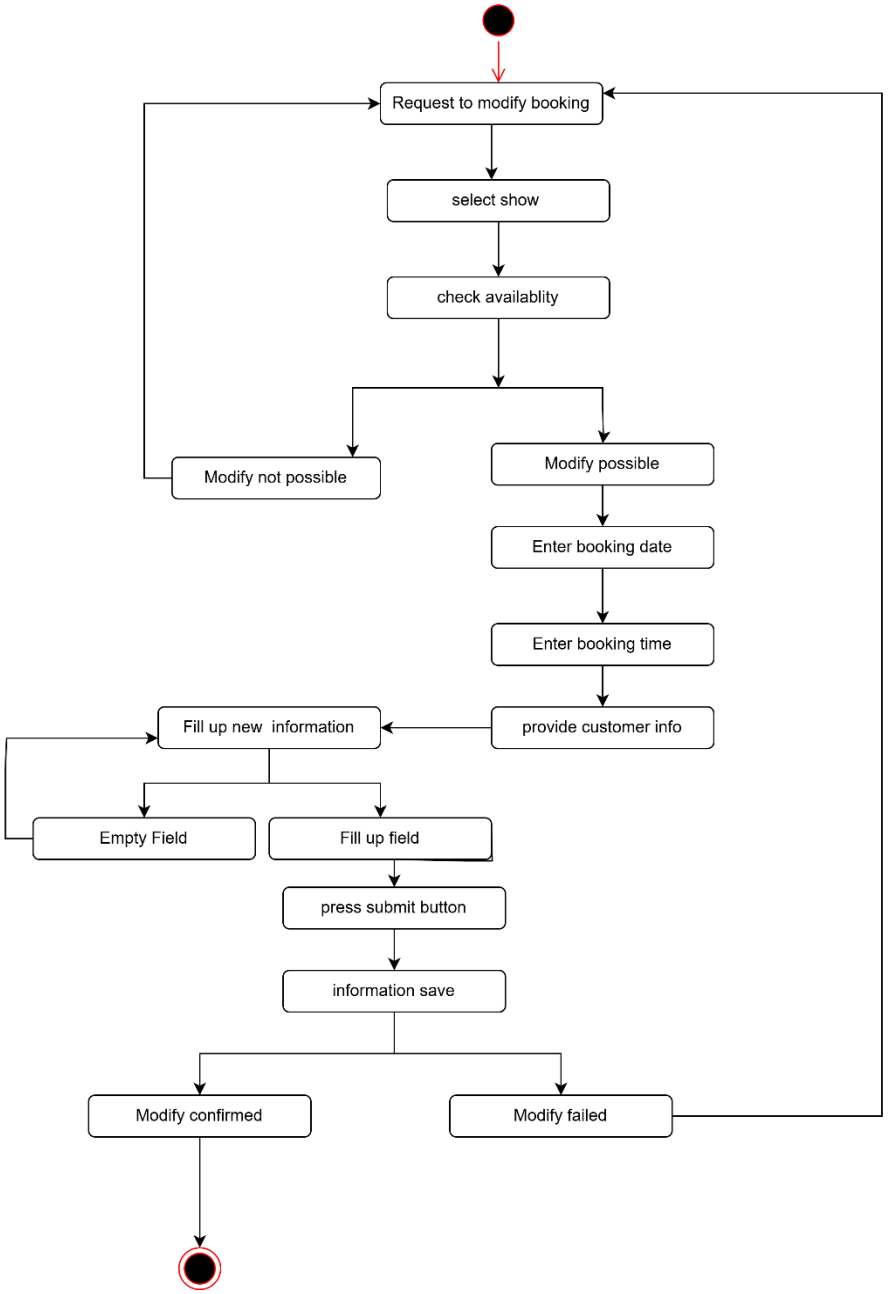
State Diagram-1: User Registration & Login



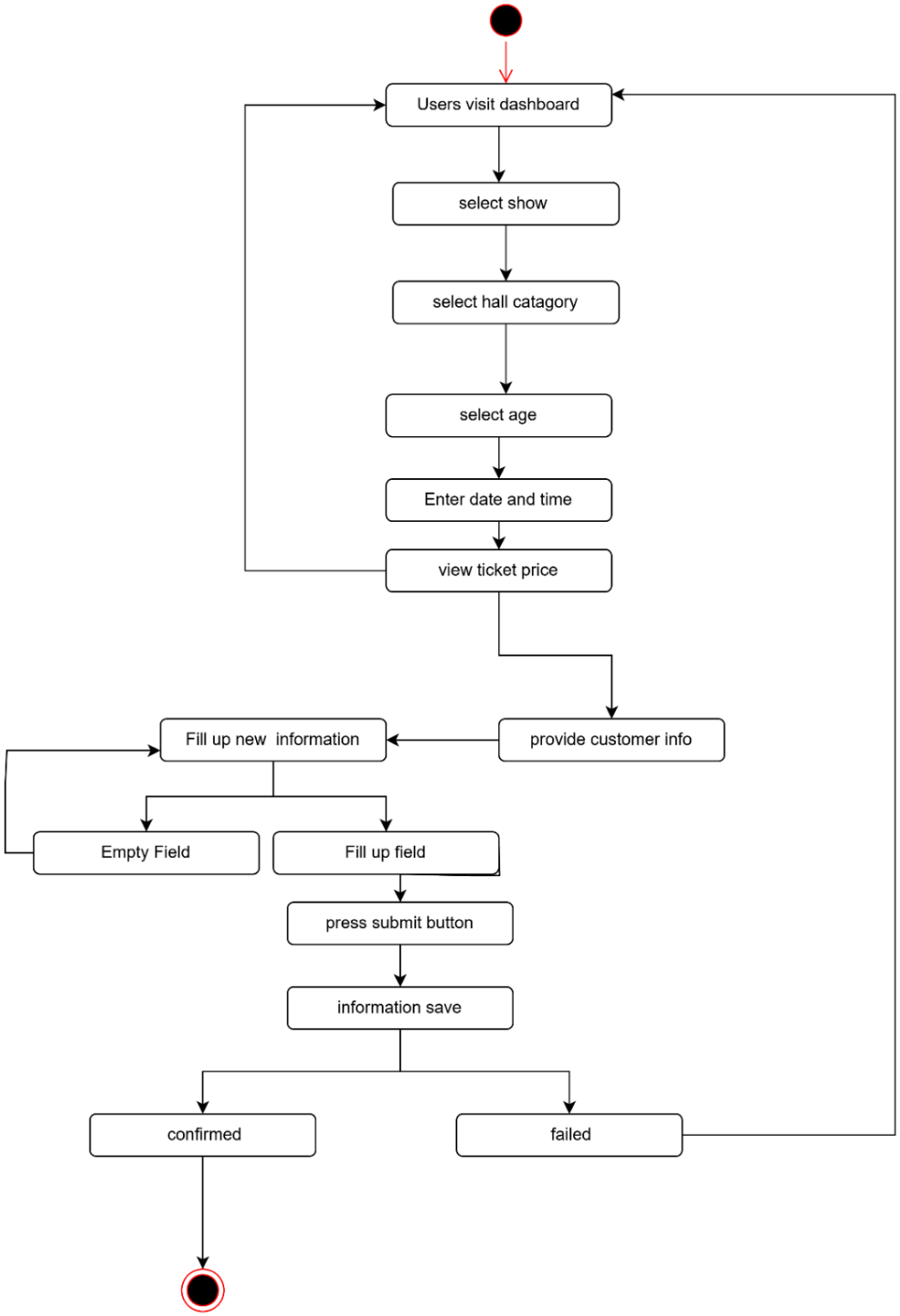
State Diagram-2: Ticket Booking Process



State Diagram-3: Modify Booking



State Diagram-4: Price Management



State Diagram-5: Logout Process