

ASSIGNMENT - 3
IDENTIFYING USE CASES AND DEVELOPING A USE CASE DOCUMENT

TEAM MEMBERS :

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The Project that we have chosen is a Movie E-ticketing system. An Online Movie Ticketing System brings the theatres closer to the customers. It eases and improves the booking experience. The system holds the database of all the movies being played along with their show timings and available seats. This system can be accessed using a website by the customers a few days prior to the show to book their seats of choice, and at the same time, keeps the theatre admins updated about the seats being booked.

The Actors involved :

1. Customer:
 - a. The customer is the end recipient of the services who creates or has a registered user account.
 - b. He/she uses this website to browse for movies running at the theatre, book their tickets or apply for refunds.
2. Theatre Box Office Staff:
 - a. They are the Administrators who take care of the backend technical processes such as :
 - i. Managing the website.
 - ii. Handling the movie database.
 - iii. Ensuring tickets booked are reflected well by the system.
 - iv. Altering showtimes .

Use Cases :

1. New User Registration
2. User Login
3. Authorize User
4. Select Movie
5. Book Tickets
6. Make Payment
7. Add / Remove Movies
8. Add / Cancel Shows
9. Booking History
10. Apply Refund
11. Logout

USE CASE 1

USE CASE SECTION	COMMENTS
Use Case Name	Register New User
Scope	To register visitors of the website into the system.
Level	User-goal
Primary Actor	The Visitor/ Customer
Stakeholders and Interests	<ol style="list-style-type: none">1. Customer : Quick registration to enter the system and browse through the website.2. Theatre Staff : A new customer enrolled into the system.
Preconditions	NA
Success Guarantee	The visitor has been enrolled into the system and can start surfing through the theater page.
Main Success Scenario	<ol style="list-style-type: none">1. The visitor has visited the theatre web page2. The visitor clicks on the New User button,3. He/She is directed to the Register Page.4. The visitor enters their username password and would have to reconfirm their password.5. Upon submission of the form the visitor would be signed up on the system.
Extensions/Alternate Flows	<ol style="list-style-type: none">1. Invalid Entry: System signals an error and rejects entry.2. Password Mismatch: System signals an error and user has to re-enter the passwords.
Frequency Of Occurrence	Once
Includes / Extends	NA
Special Requirements	The user/visitor must have a stable network connection.

USE CASE 2

USE CASE SECTION	COMMENTS
Use Case Name	User Login
Scope	Allows an existing user access his/her account in the system and proceed with their purpose of visiting the website.
Level	User-goal
Primary Actor	User / Theatre Management staff
Stakeholders and Interests	<ol style="list-style-type: none">1. Customer : This enables them to access the system .2. Theatre staff : This would allow them to handle and manage the contents displayed by the website and alter the details being displayed.
Preconditions	The user should have an account with the system.
Success Guarantee	The user can proceed with their purpose for visiting the website.
Main Success Scenario	<ol style="list-style-type: none">1. The user visits the website.2. The user visits the Login page.3. He/She enters the username and password.4. Upon authorization, the user can access the theatre webpage and can continue with their work.
Extensions/Alternate Flows	<ol style="list-style-type: none">1. Invalid Username or Password System signals an error and informs the user about it.2. Multiple Failed Attempts System asks the user to Sign Up with the system.
Frequency Of Occurrence	Once
Includes	Authorize User
Special Requirements	<ol style="list-style-type: none">1. Authorization responses must be quick within 30seconds most of the time.2. The page should be responsive.

USE CASE 3

USE CASE SECTION	COMMENTS
Use Case Name	Authorize User
Scope	This verifies if the username and password entered by the user matches the ones present in the system.
Level	Sub-function
Primary Actor	System
Stakeholders and Interests	<p>This sub function is required to ensure that the person who has entered their credentials is authorized to access the system.</p> <ol style="list-style-type: none">1. Customer: This enables them access their account and continue with their purpose of visit.2. Theatre Staff : This enables them to continue with their administrative tasks.
Preconditions	The user should have entered their credentials in the login page.
Success Guarantee	The user gets authorized and can access the theatre website,
Main Success Scenario	<ol style="list-style-type: none">1. The credentials from the login page are passed to this function.2. These credentials are compared with the set of registered users in the system.3. If the user credentials are valid, the login page would shift into the homepage of the theatre website.
Extensions/Alternate Flows	<ol style="list-style-type: none">1. If the user credentials are invalid, an alert would be sent to display on the login page.2. The user could re-enter their credentials and submit to the system.
Frequency Of Occurrence	Multiple calls are possible.
Includes / Extends	NA
Special Requirements	The authorization must be quick generally under 30 seconds.

USE CASE 4

USE CASE SECTION	COMMENTS
Use Case Name	Select Movie
Scope	This displays the list of movies shown in the theatre.
Level	User-goal
Primary Actor	Customer
Stakeholders and Interests	<ol style="list-style-type: none">1. Customer : He/She can search for movies of their interest and check if it is being played at the theatre.2. Theatre Administrators: Ensure that the movie database has been represented as set by them.
Preconditions	The users must be authorized by the system.
Success Guarantee	The user finds the movie of their interest.
Main Success Scenario	<ol style="list-style-type: none">1. Customer enters movie ticketing website.2. Customer chooses the specific date.3. System provides an option for the customer to choose movies based on genre and censor rating.4. System displays the movie on a given date.
Extensions/Alternate Flows	<ol style="list-style-type: none">1. Movie is not being screened at the theatre.<ol style="list-style-type: none">a.User would be notified that the movie is not screened.b.Other movies of similar genres would be displayed for the user.2. If the movie is being screened<ol style="list-style-type: none">a.The user can proceed with selecting desired showtime and book tickets for that show.3. A change in the Database<ol style="list-style-type: none">a.Any recent committed changes by the admin could affect the movie titles screened at the theatre. If any changes deal with the movie being not screened it continues in a manner similar to case 1.
Frequency Of Occurrence	Multiple times.
Includes / Extends	NA
Special Requirements	<ol style="list-style-type: none">1. The changes to the movie database committed by the Theatre Administrators must be reflected on this page.2. The movie titles font must be visible from 1m.

USE CASE 5

USE CASE SECTION	COMMENTS
Use Case Name	Book Tickets
Scope	Allows the customer to select show timings, and preferred seats for their desired movie and proceed to confirming the tickets.
Level	User Level
Primary Actor	Customer
Stakeholders and Interests	<ol style="list-style-type: none">1. Theatre Administrator: They need to know the number of tickets sold for that particular movie at that showtime.2. Customers: They would need to know the seat layout at the screen.
Preconditions	<ol style="list-style-type: none">1. The users must be authorized by the system.2. The movie of choice must have the required seats available for the user's preferred showtime.
Success Guarantee	The user's showtime and seat of choice is available.
Main Success Scenario	<ol style="list-style-type: none">1. User decides the movie, the showtime and date.2. User proceeds to select the seats of choice.3. User is directed to the payment window.
Extensions/Alternate Flows	On the lapse of the set time for the completion of the transaction, the user will be directed to the home page immediately.
Frequency Of Occurrence	Occasionally multiple.
Includes	Make Payment.
Special Requirements	<ol style="list-style-type: none">1. The User is expected to book not more than 10 tickets per transaction.2. The booking of tickets is based on FCFS basis and the changes are cascaded across the database.

USE CASE 6

USE CASE SECTION	COMMENTS
Use Case Name	Make Payment
Scope	Allows the user to proceed with the payment of the booked ticket
Level	User-goal
Primary Actor	Customer
Stakeholders and Interests	<ol style="list-style-type: none">1. Customers: They can book the tickets for their preferred movie.2. Box Office Staff : The transaction and ticket sales for the movie forms their revenue.
Preconditions	Customer has selected the show timings and seatings for the available movie based on his/her choice
Success Guarantee	The tickets for the desired show have been successfully booked .
Main Success Scenario	<ol style="list-style-type: none">1. The details for the selected booking is shown2. Customer proceeds to select the required mode of payment3. Respective details are filled according to the mode selected4. Customer clicks "Make Payment" button5. System handles the payment6. System displays the confirmation of the payment
Extensions/Alternate Flows	Manually by card, or other online payment methods
Frequency Of Occurrence	Once or more
Includes / Extends	Authorization from respective payment option selected / Book Tickets.
Special Requirements	<ol style="list-style-type: none">1. The payment page must be responsive.2. The payment must support all major e-payment platforms and debit/credit card vendors.3. The user will be given 5 mins to complete the payment procedure.<ol style="list-style-type: none">a. Failure to complete the payment, within the said time would release the seats for other customers.

USE CASE 7

USE CASE SECTION	COMMENTS
Use Case Name	Add / Remove Movies
Scope	Allows the Theatre Staff to update the database by appending or deleting the desired movies.
Level	User-goal
Primary Actor	Box Office Staff / Theatre Administrator
Stakeholders and Interests	<ol style="list-style-type: none">1. Theatre Administrator : The administrator ensures which movies are to be screened, based on the movie performance or other criterias.2. Customers: They would get to know the movies that are recently being added to the database and could book their tickets.
Preconditions	<ol style="list-style-type: none">1. Administrators must be authorized to make those changes.2. They must have prior knowledge of the updations that ought to be made.
Success Guarantee	The movie database has been successfully updated, and the new list is available for the customers.
Main Success Scenario	<ol style="list-style-type: none">1. The user must be authorized to access this page for updating the list.2. The current database with the available movies is displayed.3. Staff edit the database by appending upcoming movies and removing the undesired ones.4. The updations made are then reflected on the customer end and are available for booking.
Extensions/Alternate Flows	<ol style="list-style-type: none">1. Adding a New Movie<ol style="list-style-type: none">a. The administrator would be asked to include the showtimes and screens for the movie.2. Deleting a Movie<ol style="list-style-type: none">a. If any prior bookings by customers are made, the administrator would be notified about it .b. Else, the movie and its showtimes would be removed from the database.
Frequency Of Occurrence	Could be continuous
Includes	Could include Add Showtime
Special Requirements	<ol style="list-style-type: none">1. The font size of the movie titles must be visible from 1m.2. The updates to the database must be quick.3. Changes to the database must reflect to different users that are logged in to the website.

USE CASE 8

USE CASE SECTION	COMMENTS
Use Case Name	Add / Cancel Shows
Scope	Allows Theatre staff to modify the shows available for a particular desired movie
Level	User-goal
Primary Actor	Box Office Staff / Theatre Administrator
Stakeholders and Interests	<ol style="list-style-type: none">1. Theatre Administration: The administrator ensures the number of screens and showtimes allotted for movies being screened, based on the movie performance or other criterias.2. Customers: They would need to know any updations to the showtimes of the movies being screened for booking tickets.
Preconditions	<ol style="list-style-type: none">1. The Administrator must be authorized to make changes to the movie system database.2. Prior knowledge of the movies being screened, their showtimes and performance.
Success Guarantee	The database has been successfully updated, and the modified shows are available for the customers to proceed with booking.
Main Success Scenario	<ol style="list-style-type: none">1. The user must be authorized to access this page for updating the list.2. The current database with the available movies and their respective shows is displayed.3. Staff can edit the database by either modifying the showtimes and allocating screens based on the movie's performance or upon adding a new movie.4. The updations made are then reflected on the customer end and are available for booking.
Extensions/Alternate Flows	<ol style="list-style-type: none">1. Add Showtime<ol style="list-style-type: none">a. Allocating showtime without considering the runtime of a film that would be playing<ol style="list-style-type: none">i. System sends an alert and the next best time for screening the next movie.

	<ol style="list-style-type: none"> 2. Cancel Showtime <ol style="list-style-type: none"> a. If any prior bookings by customers are made, the theatre staff would be notified about it. b. Else the show time would be cancelled.
Frequency Of Occurrence	Could be continuous
Extends	Add Movies
Special Requirements	<ol style="list-style-type: none"> 1. The font size used must be visible form 1m. 2. The updates must reflect for all the users that have been logged in to the system. 3. The update to the database must be done under 60seconds.

USE CASE 9

USE CASE SECTION	COMMENTS
Use Case Name	Booking History
Scope	Allows the Customer to access the history of their previous bookings.
Level	User-goal
Primary Actor	Customer
Stakeholders and Interests	Customer : This would contain the list of all bookings of the customer . This would include the previous bookings and any upcoming shows he/she has booked.
Preconditions	Customer must have logged in to their registered account
Success Guarantee	System displays the details of the user's booking history.
Main Success Scenario	<ol style="list-style-type: none">1. User visits their booking history page2. Either of the following would happen:<ol style="list-style-type: none">a. The User can look for every bookings he/she has made.b. The User can type in the Transaction ID of the particular booking he/she is searching for3. System displays the details of all their past bookings, along with the Movie name, timings of the show, seating details, and transaction details.
Extensions/Alternate Flows	<ol style="list-style-type: none">1. Refund claimed for a booking<ol style="list-style-type: none">a. the details and refunded fee would be mentioned in addition to the other details.
Frequency Of Occurrence	Can be continuous
Includes	Apply Refund
Special Requirements	<ol style="list-style-type: none">1. Font size of the content displayed must be visible from 1m.2. Bookings retrieval must not have a retrieval time longer than 60seconds.

USE CASE 10

USE CASE SECTION	COMMENTS
Use Case Name	Apply Refund
Scope	The Customer can apply for a refund for shows previously booked.
Level	User-goal
Primary Actor	Customer
Stakeholders and Interests	<ol style="list-style-type: none">1. Customer : Owing to any commitments, the user would want to cancel their booking .2. Box Office Staff : They would need to know the status of the screens for each show.
Preconditions	<ol style="list-style-type: none">1. The Customer must be enrolled in the system.2. Customers must have already booked for an upcoming show before desiring to cancel and apply for refund.
Success Guarantee	The ticket has been successfully cancelled and an amount is added to the back to the user's account according to the theater's refund policy.
Main Success Scenario	<ol style="list-style-type: none">1. The user selects the booking they would like to cancel.2. A fee would be charged for cancelling the booking based on the guidelines set by the theatre.3. The remaining fee would be added to the users account with which he/she can claim the amount later.
Extensions/Alternate Flows	The prices refunded would generally follow: Of the amount paid <ol style="list-style-type: none">1. 75% if claimed a day in advance.2. 50% if claimed 2hrs prior to the show.3. 20% if claimed between 2hrs and 20 mins before the show.
Frequency Of Occurrence	According to the user's choice
Includes / Extends	NA
Special Requirements	<ol style="list-style-type: none">1. The refund amount must be visible in the users account after the refund has been carried out.2. The refunded value must be reflected on the database and the user can claim this for future bookings.

USE CASE 11

USE CASE SECTION	COMMENTS
Use Case Name	Logout
Scope	Allows the user to exit from his/her account in the system after completing their purpose for visiting the website.
Level	User-goal
Primary Actor	Customer / Theatre Management staff
Stakeholders and Interests	<ol style="list-style-type: none">1. Customer : Exit from the system after browsing through the theatre website.2. Theatre Staff : After applying the changes to the movie database or after a routine check of content displayed by the webpage.
Preconditions	The user must have already registered an account with the system.
Success Guarantee	The user will have successfully exited from their account
Main Success Scenario	<ol style="list-style-type: none">1. The user clicks on the logout option when desired to exit.2. He / She is then redirected to the login page.
Extensions / Alternate Flows	NA
Frequency Of Occurrence	Once for each Session
Includes / Extends	NA
Special Requirements	<ol style="list-style-type: none">1. The details set by the user during the session must be saved.

USE CASE DIAGRAM FOR MOVIE TICKETING SYSTEM

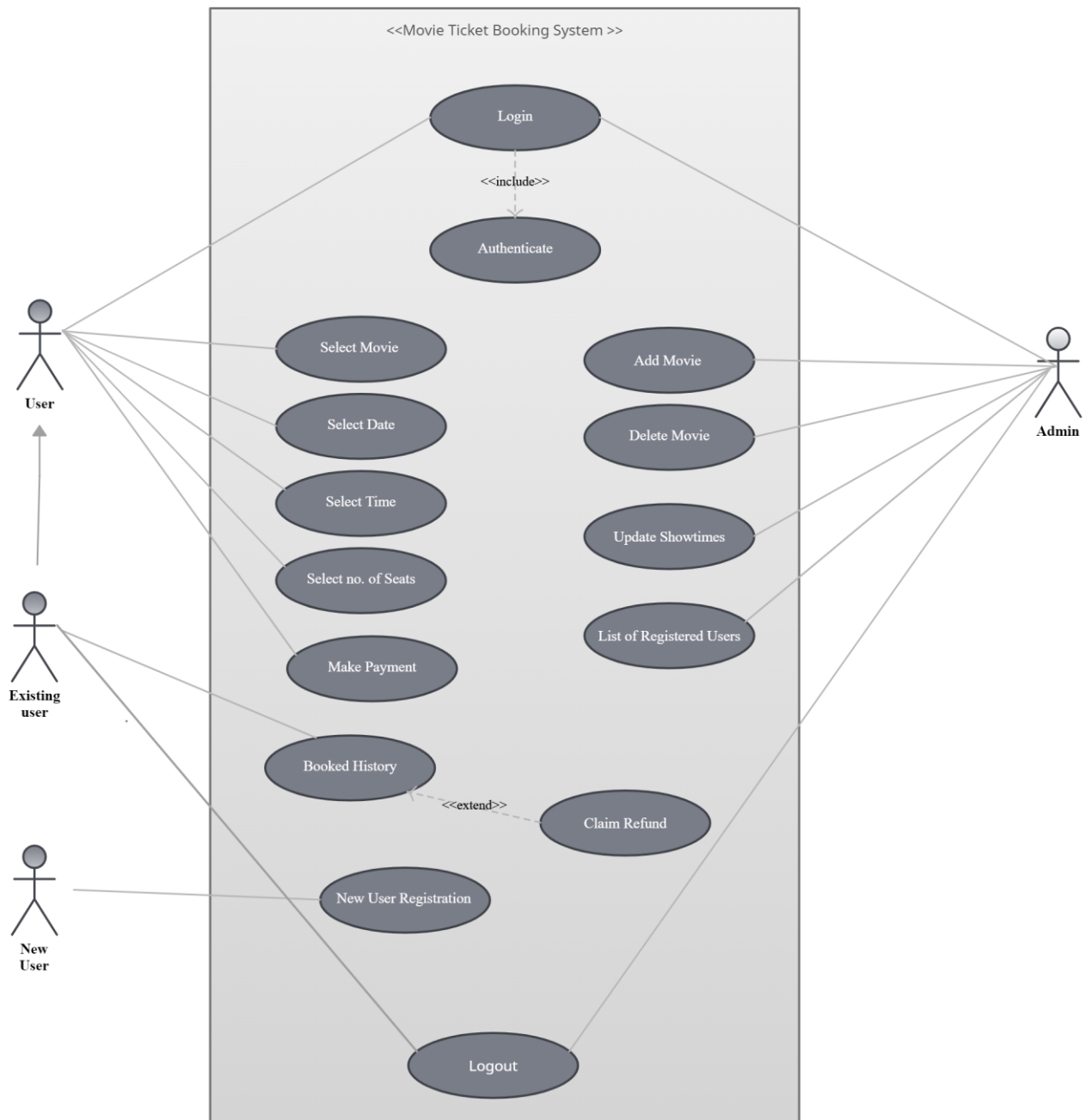


Fig 1: UML Diagram for Online Movie Ticket Booking System