

PROJECT PART 2

- **Team:** Omkar Reddy Seelam,
Rishabh Berlia,
Shivasankar Gunasekaran
- **Title:** Rated – Online Movie Rating System
- **Project Summary:** An Online Movie Rating System in the form of a stand-alone web application. It is an online database of movies which allows the users can get access to movie reviews and ratings by other users and critics.

- **Project Requirements:**

➤ **User Requirements**

User Requirement		
ID	Description	User
UR-01	As a new user, I should be able create a role based account	All Actors
UR-02	As an existing user, I should be able to login to the system	All Actors
UR-03	As a User or a Critic, I should be able to view and give and modify a rating and review	User, Critic
UR-04	As a User or a Critic, I should be able to delete my rating and review	User, Critic
UR-05	As a user, I should be able to view movie list based on a filter	All Actors
UR-06	As a User or a Critic, I should be able to up-vote an existing review	User, Critic
UR-07	As a User or a Critic, I should be able to share any review on social media	User, Critic
UR-08	As an Admin or a Moderator, I should be able to add/remove movie in the list	Admin, Moderator
UR-09	As an Admin or a Moderator, I should be able monitor reviews	Admin, Moderator
UR-10	As an Admin, I should be able to promote Users to Critics and Critics to Moderators.	Admin
UR-11	As an Admin, I should be able to add/remove users	Admin
UR-12	As a Moderator, I should be able to approve request to add movies by a Critic	Moderator
UR-13	As a Critic, I should be able to request to add a movie	Critic
UR-14	As a User or a Critic, I should be able to flag a review	User, Critic

➤ **Business Requirements**

Business Requirement			
ID	Requirement	Topic Area	User
BR-01	Must be implemented in Java	Implementation	-

BR-02	Must be a stand-alone application	Implementation	-
BR-03	User must login with their Colorado email id	Authentication	Employees

➤ **Functional Requirements**

Functional Requirement		
ID	Requirement	Topic Area
FR-01	Password based authentication during user login	Authentication
FR-02	All the users should be able to reset password	Logging
FR-03	The Critics' rating should have higher weightage than Users'	Rating
FR-04	The rating displayed is the weighted average of ratings by Critics/ Users	Rating

➤ **Non-Functional Requirements**

Non-Functional Requirement		
ID	Requirement	Topic Area
NFR-01	The system should run 24x7	Performance
NFR-02	The system should create a backup of the database weekly	Reliability
NFR-03	The user password should be hashed [sha-256]	Security
NFR-04	The system should automatically start the backup server when the current server fails.	Reliability
NFR-05	Adding a Site under maintenance page	Updates

➤ **Use Cases Diagrams**

➤ **Actors:**

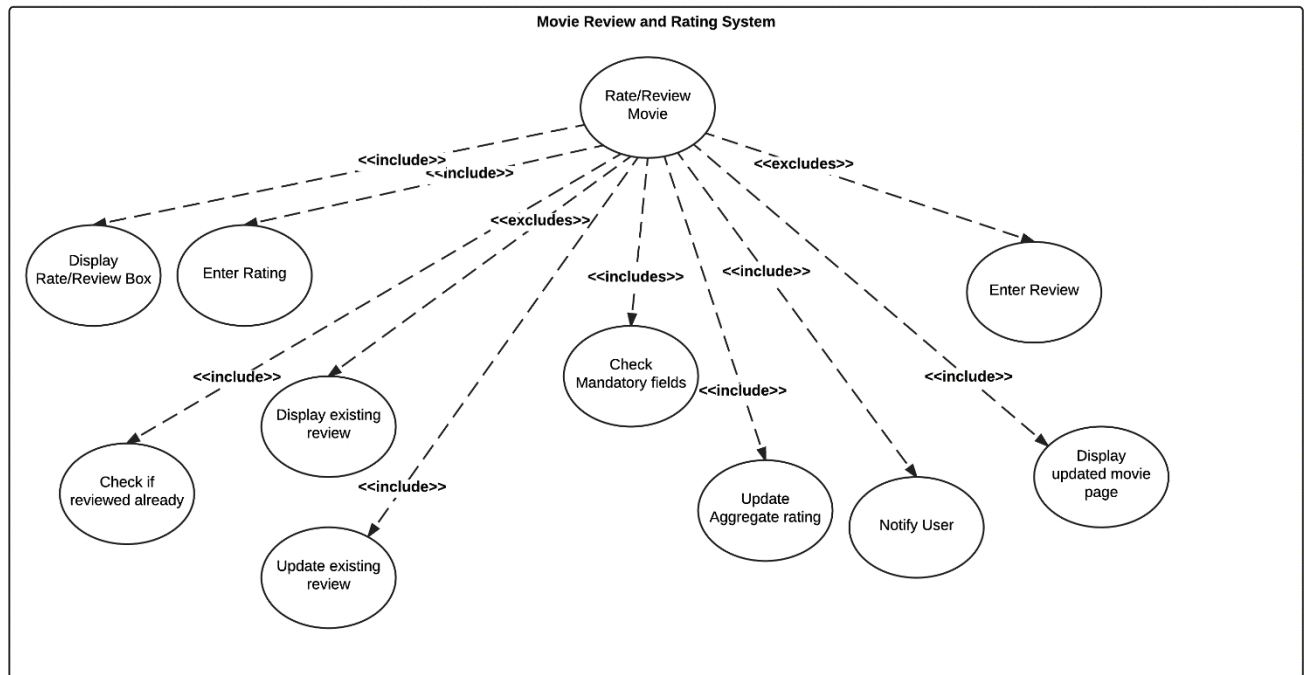
Admin, Moderators, Critic, Users

➤ **Use Case Overview:**

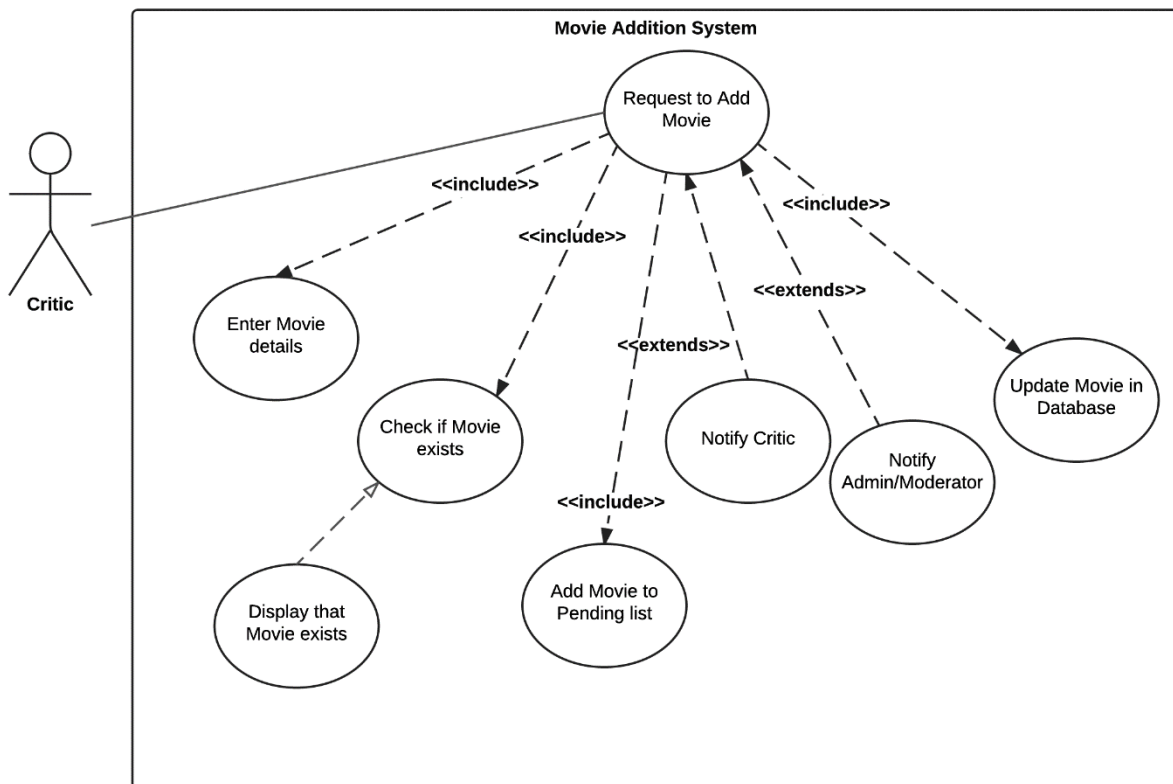


➤ Sub-Diagrams

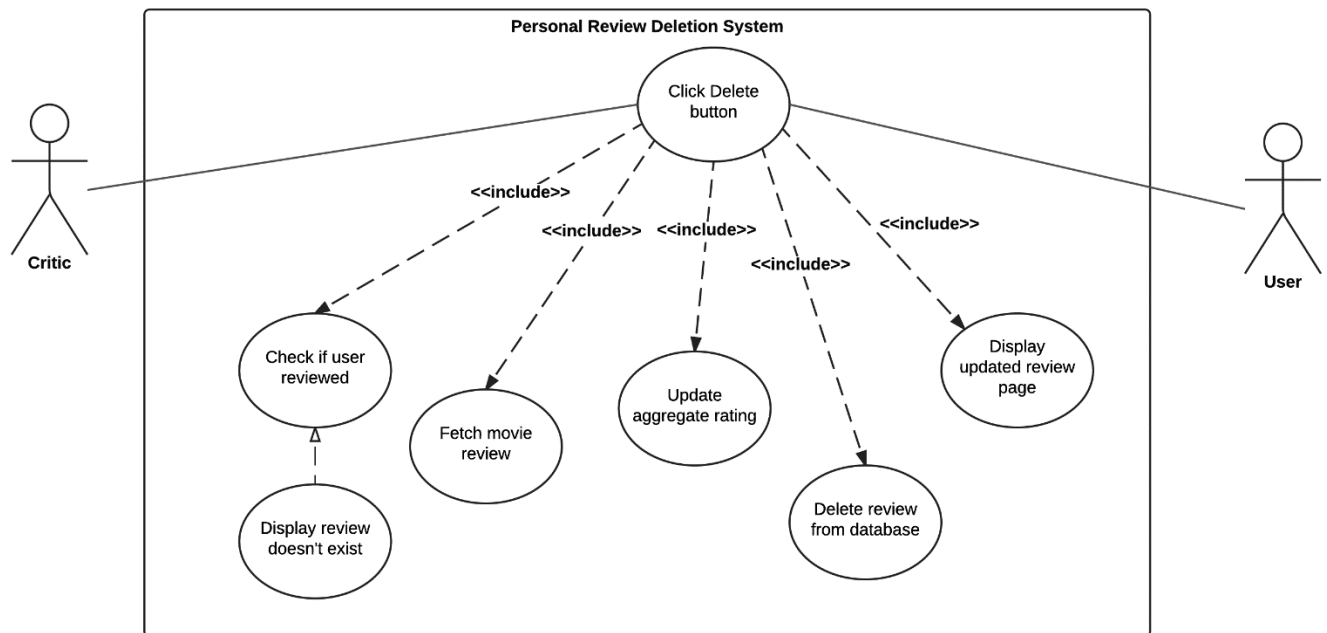
• Rate/Review a Movie



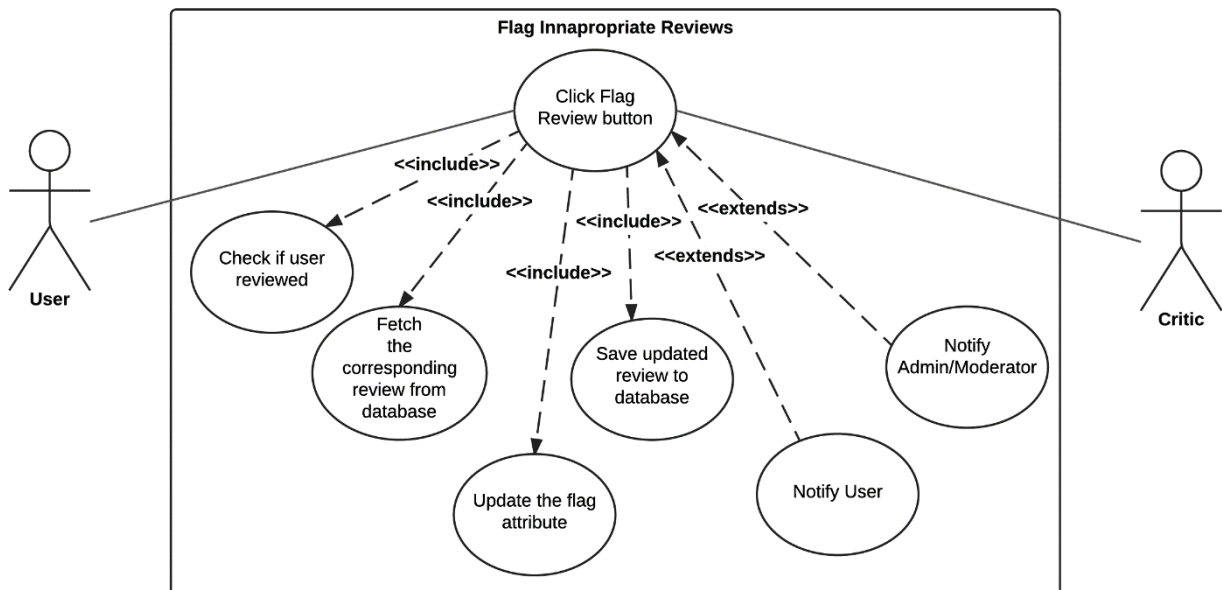
• Request to Add a Movie



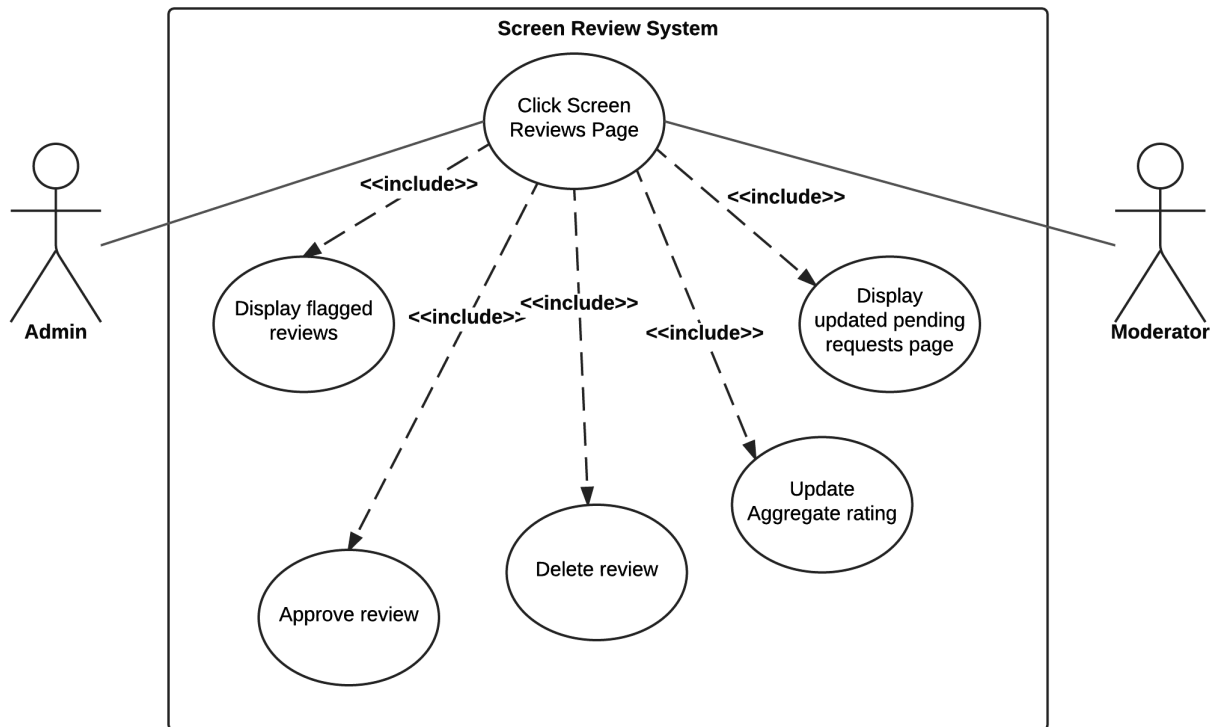
- **Delete a Review**



- **Flag a Review**



- **Screen a Review**



➤ Use Case Documentation

Use Case ID:	UC-01		
Use Case Name:	Sign-up User		
Description:	User can sign up and enter information in the system		
Actors:	User		
Pre conditions:	User is not signed up in the system		
Post conditions:	User is signed up in the system		
Frequency of Use:	Whenever the user wants to create an account		
Flow of Events:		Actor Action	System Response
	1	Select Sign-up	Show a create new account page
	2	Enter Details Agree to Terms & Condition	Check if all required fields are entered
	3	Click signup complete	Store the user information Notify User
	4	User is signed up in the system	
Variations:	1. User with same email-id already exists <ul style="list-style-type: none"> System notifies the user, asks to enter the details again 		
Exceptions:			
Developer Notes:			

Use Case ID:	UC-02
Use Case Name:	Login User
Description:	User can login to use the system

Actors:	User, Critic, Moderator, Admin		
Pre conditions:	Actor is signed up in the system		
Post conditions:	Actor is logged in onto the system		
Frequency of Use:	Anytime of the day		
Flow of Events:		Actor Action	System Response
	1	Enter username & password Press login	Authenticate the user
	2	User logged in	Display the Movie List Page
Variations:	1. User enters wrong username or password <ul style="list-style-type: none"> System notifies the user, asks to enter the details again System will block the user in case of three wrong login attempts in the past half hour 		
Exceptions:			
Developer Notes:			

Use Case ID:	UC-03
Use Case Name:	Rate/Review Movie
Description:	User or Critic can rate and review (optional) a movie

Actors:	User, Critic		
Pre conditions:	User or Critic should be logged in		
Post conditions:	The User/Critic's rating and review (optional) is given for the movie. The aggregate rating is updated		
Frequency of Use:	Anytime of the day		
Flow of Events:		Actor Action	System Response
	1	Click on a listed movie	Show the movie details page
	2	Select Rate the movie	Display the Rate Movie dialog box
	3	Enter Rating and Submit it	Mandatory fields are checked Rating is added to the database Aggregate rating is updated
Variations:	1. User/Critic has already rated the movie <ul style="list-style-type: none"> System notifies the user and updates the existing rating with the new values. 		
Exceptions:	1. User/Critic cancels the rating <ul style="list-style-type: none"> Return to the movie page. Rating is not updated 		
Developer Notes:			

Use Case ID:	UC-04
Use Case Name:	Delete review
Description:	User/Critic can delete his own review for a listed movie

Actors:	User/Critic		
Pre conditions:	User/Critic is signed up in the system User/Critic is logged in to the system User/Critic is already on the Movie page for which he wishes to remove review.		
Post conditions:	User/Critic's review is removed. Aggregate Rating is updated.		
Frequency of Use:	Anytime of the day.		
Flow of Events:		Actor Action	System Response
	1	Click on Delete review button	Display Confirmation dialog box.
	2	Confirm deletion	Delete it and notify user. Update Ratings for movie. Return to the movie page.
Variations:	If the review does not exist in the database, notify the error to the user		
Exceptions:	If user cancels the delete request during confirmation, return to movie page		
Developer Notes:	Many-to-many relationship between movies and reviews		

Use Case ID:	UC-05
Use Case Name:	Request to add Movie in the System
Description:	Critic can request to add a Movie in the Database

Actors:	Critic		
Pre conditions:	Critic is signed up in the system Critic is logged in to the system The movie does not exist already		
Post conditions:	The approval request is sent to the Admin (and all Moderators)		
Frequency of Use:	Anytime of the day.		
Flow of Events:		Actor Action	System Response
	1	Go to 'request to add a movie' page.	Display the 'request to add a movie' page with all the fields.
	2	Enter movie details	Get confirmation to send request to add a movie
	3	Submit request	Check if all the required details are added. If not, notify user to enter again. Check if movie already exists. If not, then the request is submitted. Admin and Moderator are notified. User is also notified.
Variations:	If all required details are not entered, return to request to add a movie page. If movie already exists, notify the error to the user and return to movie page.		
Exceptions:	If confirmation is cancelled, return to the movie page.		
Developer Notes:			

Use Case ID:	UC-06
Use Case Name:	Up-vote an already existing review
Description:	User/Critic wants to Up-Vote an existing review.

Actors:	User/Critic	
Pre conditions:	User/Critic is signed up in the system User/Critic is logged in to the system User/Critic is already on the Movie page for which he wishes to Up-vote a review. There exists at least one movie review which does not belong to the User/Critic	
Post conditions:	User/Critic has successfully Up-Voted a Review.	
Frequency of Use:	Anytime of the day.	
Flow of Events:		Actor Action
	1	Click on Up-Vote button.
		System Response
		Increase the Up-Vote count for the User/Critic whose review has been Up-Voted
Variations:	2. User/Critic is Up-Voting their own review <ul style="list-style-type: none"> Error is reported to the User/Critic Up-Vote is not updated. 	
Exceptions:		
Developer Notes:		

Use Case ID:	UC-07
Use Case Name:	Share a Movie review
Description:	User/Critic can share their review online.

Actors:	User/Critic		
Pre conditions:	User/Critic is signed up in the system User/Critic is logged in to the system		
Post conditions:	The movie review's URL is given to the user to share on Social Media.		
Frequency of Use:	Anytime of the day.		
Flow of Events:		Actor Action	System Response
	1	Select a Movie review to Share	Go to the selected movie review page.
	2	Click on share	Generate a Shareable link of the Review Page.
Variations:			
Exceptions:			
Developer Notes:			

Use Case ID:	UC-08
Use Case Name:	Promote to Moderator or Critic
Description:	The Admin can promote any User to Moderator privilege or a Critic privilege.

Actors:	Admin	
Pre conditions:	Admin is logged in in the admin console. User to be promoted is signed up on the system. One user can only have one type of privilege at a point of time.	
Post conditions:	Selected User has been Promoted to Moderator/Critic	
Frequency of Use:	For moderator promotion: Every time the number of user per moderator is more than 100. For Critic promotion: Number of Up-Votes for a critic is greater than 100.	
Flow of Events:		
	Actor Action	System Response
	1 Select the User and promote to Moderator/Critic	Update the User privilege to Moderator/Critic
Variations:		
Exceptions:		
Developer Notes:		

Use Case ID:	UC-09
Use Case Name:	Approve add Movie request
Description:	Admin/Moderator can approve a add Movie request from only Critic after review

Actors:	Admin/Moderator	
Pre conditions:	Admin/Moderator is signed in. They have pending request in the 'add a movie requests' page. Admin/Moderator have received a notification.	
Post conditions:	After approval movie is added to the Movie list.	
Frequency of Use:	Whenever a Critic makes an 'add a movie' request.	
Flow of Events:		Actor Action
	1	Go the 'add a movie requests page'
	2	Review the Movie and edit if required and Submit.
		System Response
		Displays the pending Movie request
		Update the movie list. Send user success notification.
Variations:	2. Admin rejects the add movie request <ul style="list-style-type: none"> Send a notification to the User about request denial. 	
Exceptions:		
Developer Notes:		

Use Case ID:	UC-10
Use Case Name:	Remove a User
Description:	Admin can remove a User/Critic/Moderator's account

Actors:	Admin	
Pre conditions:	Admin is logged in in the admin console. User/Critic/Moderator to be removed is signed up on the system.	
Post conditions:	User/Critic/Moderator has been removed from the system.	
Frequency of Use:	Sporadic. Could occur when the violation of the site's terms and condition is made by a User/Critic/Moderator.	
Flow of Events:		Actor Action
	1	Find and remove the User/Moderator/Critic
		System Response Remove User/Critic/Moderator from the database. Notify them about account deletion.
Variations:		
Exceptions:		
Developer Notes:		

Use Case ID:	UC-11
Use Case Name:	Filter Movies
Description:	All Actors can filter the Movie list based on different Categories.

Actors:	All Actors		
Pre conditions:	Actor must be signed up on the system. Actor must be logged in on the system.		
Post conditions:	The Movie list is sorted based on selected category.		
Frequency of Use:	Frequently throughout the day.		
Flow of Events:		Actor Action	System Response
	1.	Go to the Movie List page	Display the List of Movies
	2.	Select the Category to filter according.	Send a sort request to the Movie database based on the category. Return the sorted listed from the Database.
Variations:	User wishes to change the sorting order also (asc. Or desc.) <ul style="list-style-type: none"> Return the sorted list and display 		
Exceptions:			
Developer Notes:			

Use Case ID:	UC-12
Use Case Name:	Screen Reviews
Description:	Admin/Moderator can remove a review which is flagged

Actors:	Admin, Moderator		
Pre conditions:	Admin/Moderator is signed in. They have pending request in the 'flagged reviews' page.		
Post conditions:	The flagged review is deleted from the database/		
Frequency of Use:	Weekly basis		
Flow of Events:		Actor Action	System Response
	1	Navigate to flagged review page	Display the list of flagged reviews with an option to remove.
	2	Click on delete the flagged review	Display the confirmation dialog box. The review is deleted from the database and the page is refreshed.
Variations:	Admin/Moderator can unflag the review by clicking on the 'Unflag' button.		
Exceptions:			
Developer Notes:	Option can be given to select multiple reviews at once and Delete/Unflag them. Once either one is pressed, the page is refreshed.		

Use Case ID:	UC-13
Use Case Name:	Flag a review
Description:	Users can flag a review if it doesn't comply with the terms and conditions

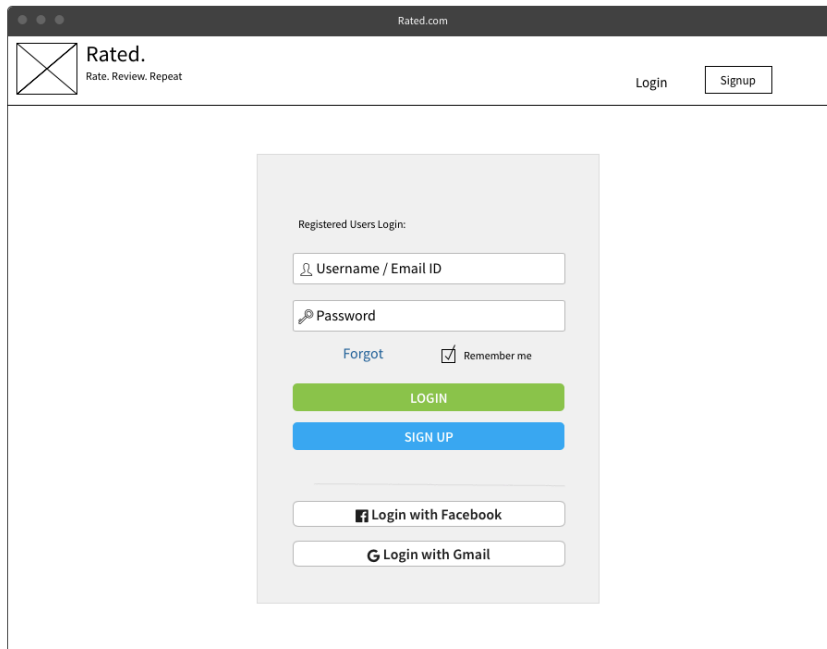
Actors:	User, Critic		
Pre conditions:	User/Critic must be signed up in the system User/Critic must be logged in the system		
Post conditions:	The review is flagged		
Frequency of Use:	Anytime of the day		
Flow of Events:		Actor Action	System Response
	1	Navigate to the movie review page	Display the movie review page of the corresponding movie
	2	Click on the flag review button	The review is flagged
Variations:			
Exceptions:			
Developer Notes:			

Use Case ID:	UC-14
Use Case Name:	Add a Movie
Description:	Admin and Moderator should be able to add a movie

Actors:	Admin , Moderator		
Pre conditions:	Admin/Moderator must be logged in the system		
Post conditions:	Movie is added to the database		
Frequency of Use:	Anytime of the day		
Flow of Events:		Actor Action	System Response
	1	Navigate to the 'add a movie' page	Display the 'add a movie' page
	2	Enter the details of the movie	Verify whether all the mandatory fields to add a movie are present
	3	Submit the details	Movie and its details are added to the database
Variations:	Admin/Moderator can cancel adding the movie at any point of time before submitting it.		
Exceptions:			
Developer Notes:			

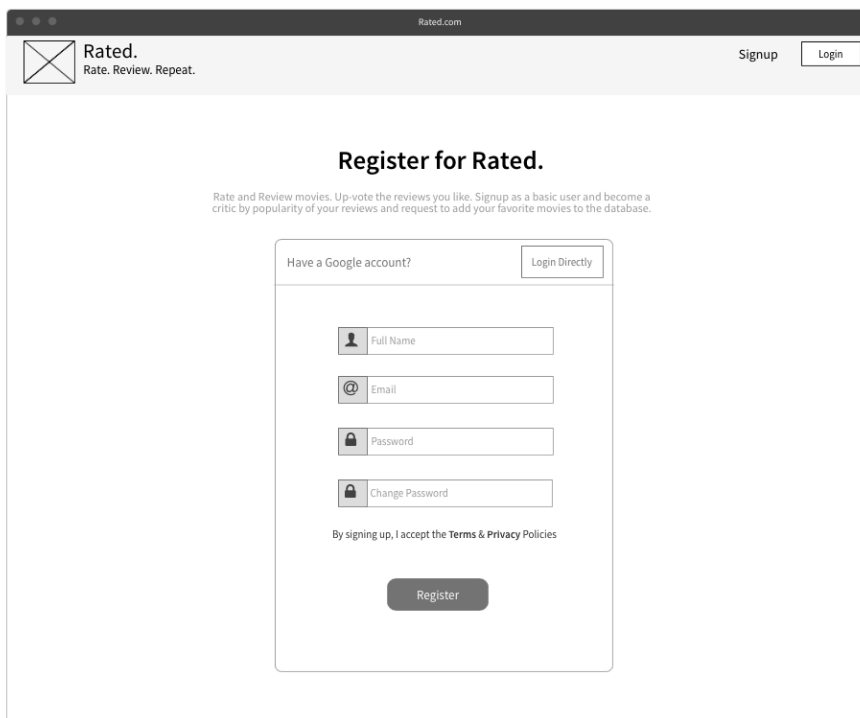
➤ UI Mockups

- **Home Page for all Users:**



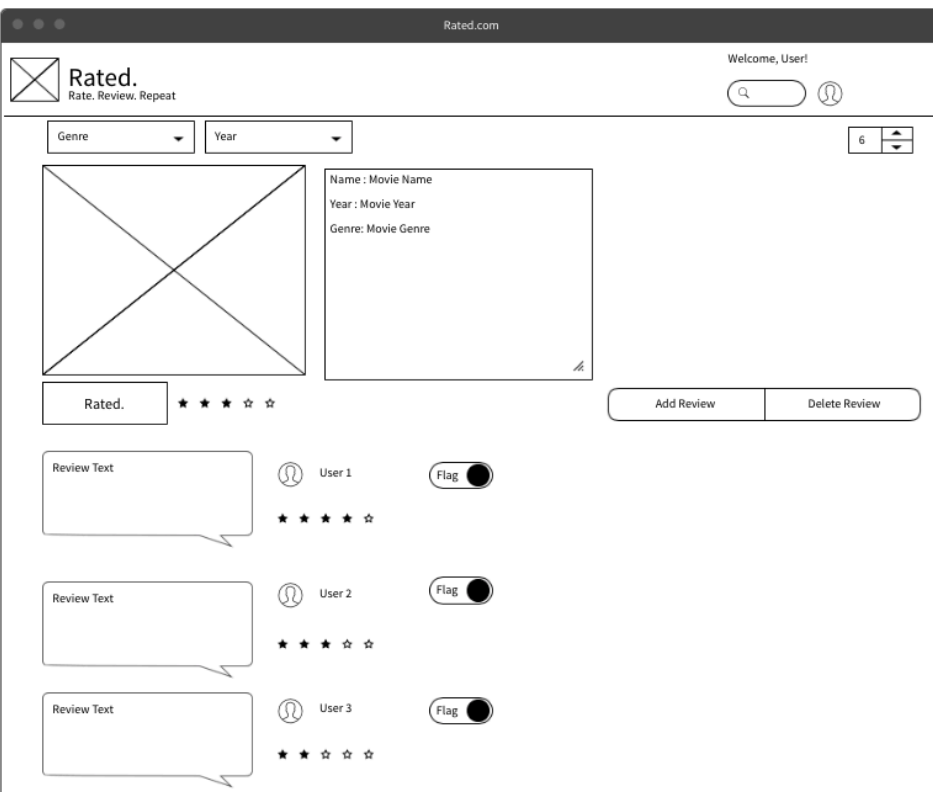
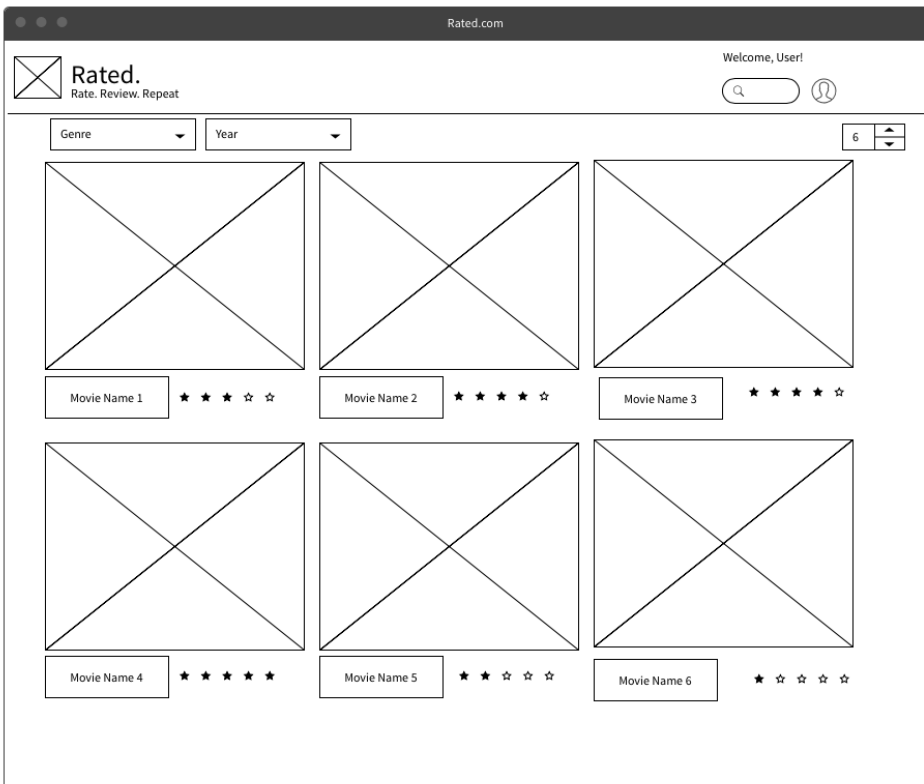
The mockup shows a web browser window with the URL "Rated.com". The header features the Rated logo (a square with an 'X') and the tagline "Rate. Review. Repeat." on the left, and "Login" and "Signup" buttons on the right. The main content area is a light gray box containing a "Registered Users Login:" section. This section includes input fields for "Username / Email ID" and "Password", a "Forgot" link, a "Remember me" checkbox, and two buttons: a green "LOGIN" button and a blue "SIGN UP" button. Below these are two social login buttons: "Login with Facebook" and "Login with Gmail".

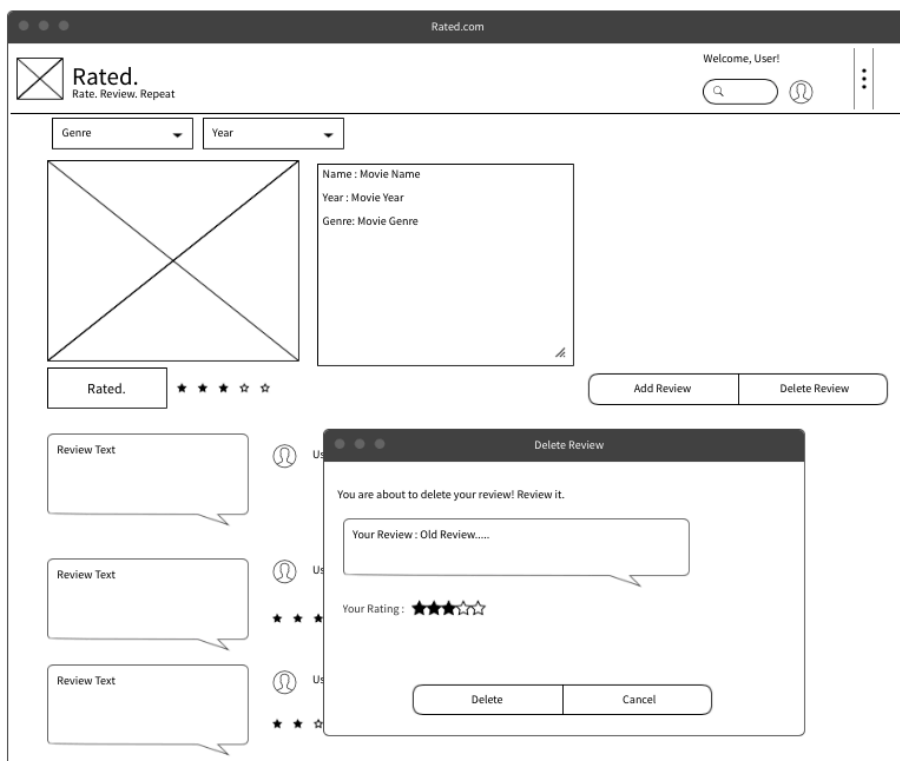
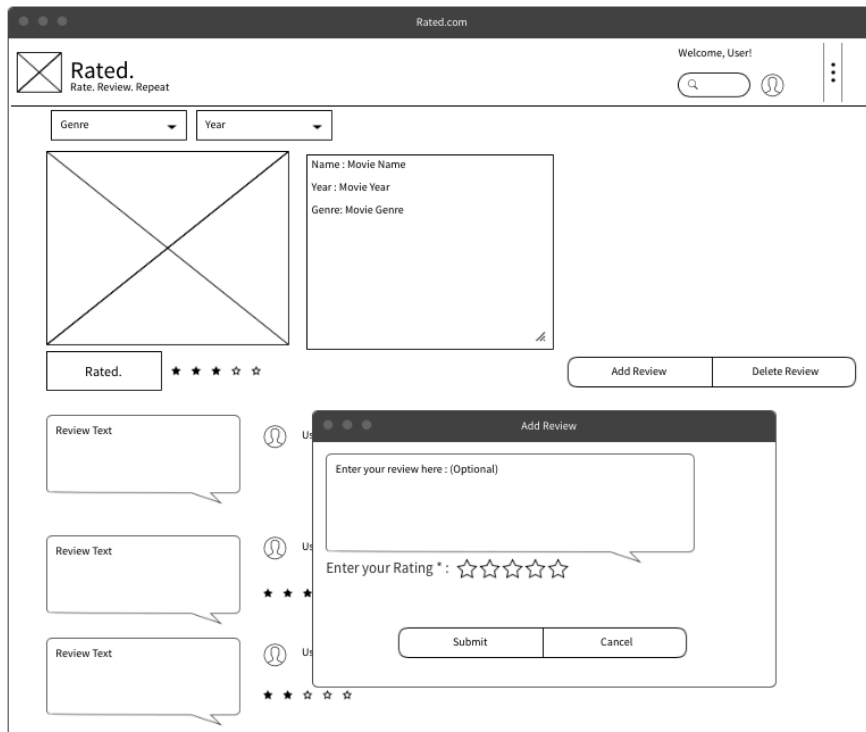
- **Sign Up page for all Users**

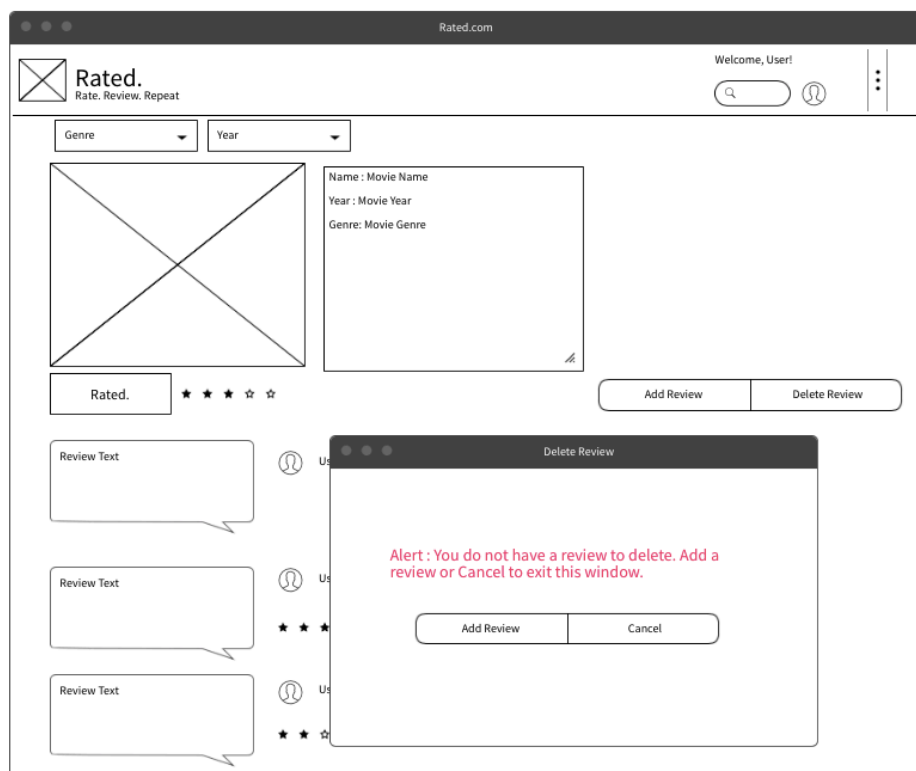
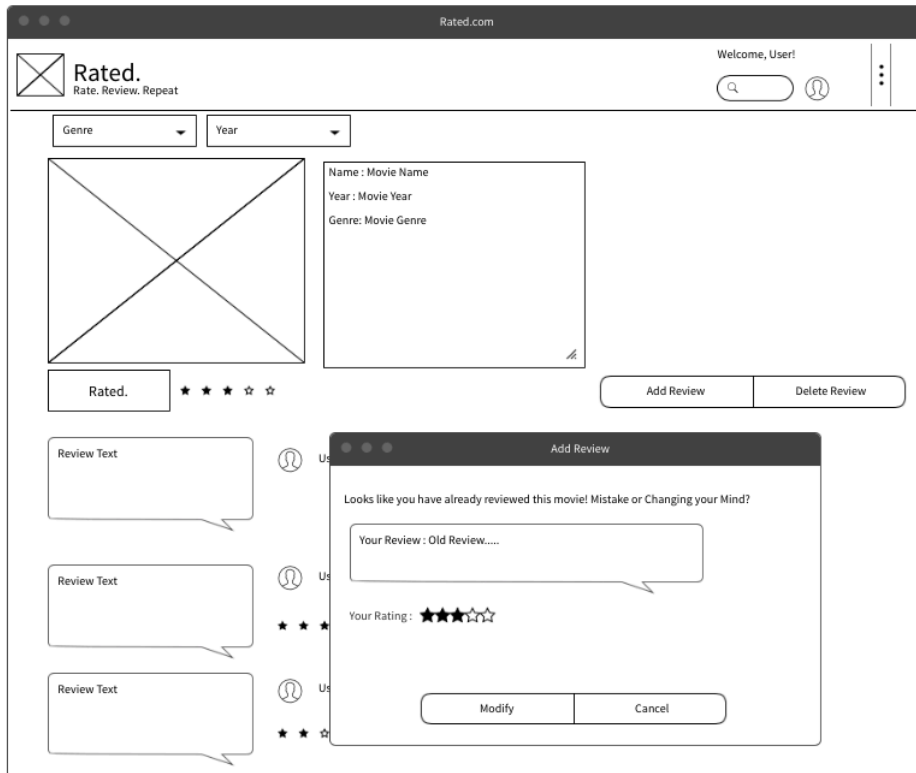


The mockup shows a web browser window with the URL "Rated.com". The header features the Rated logo and tagline on the left, and "Signup" and "Login" buttons on the right. The main content area is a light gray box with the heading "Register for Rated." and a subheading "Rate and Review movies. Up-vote the reviews you like. Signup as a basic user and become a critic by popularity of your reviews and request to add your favorite movies to the database." Below this is a registration form. The form starts with a "Have a Google account?" link and a "Login Directly" button. It then has input fields for "Full Name", "Email", "Password", and "Change Password". At the bottom, there is a checkbox for "By signing up, I accept the Terms & Privacy Policies" and a dark gray "Register" button.

- User Home Screen and Navigation Pages from Home Screen





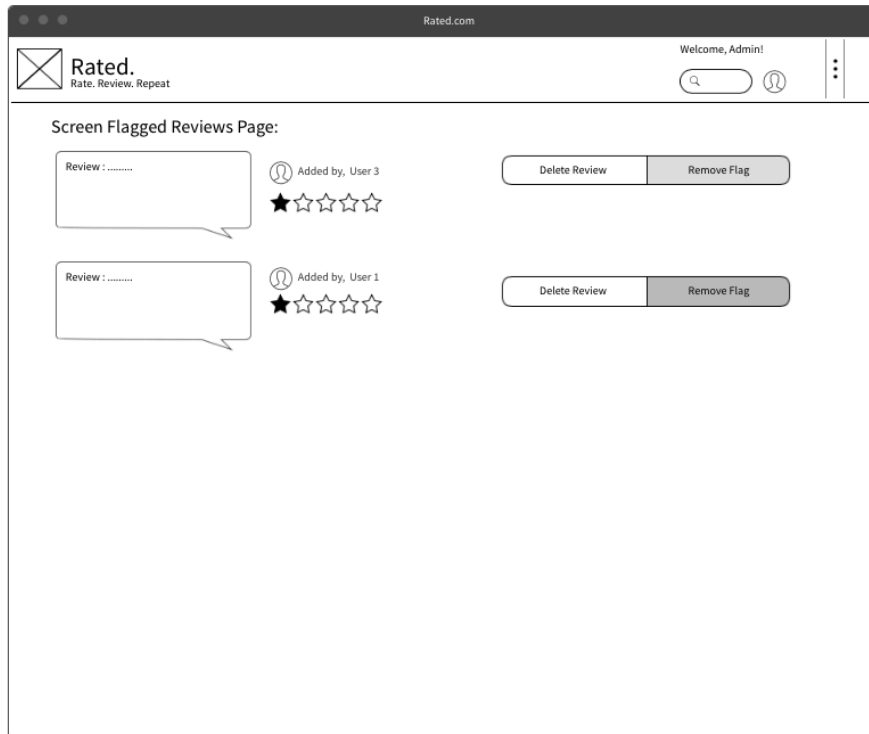


- **Critic Add Movie Request Screen**

The screenshot shows the 'Add a Movie Request Page' in the Rated.com application. The header includes the Rated.com logo, a search bar, and a user profile icon with the text 'Welcome, Critic!'. The main content area features a large placeholder for a movie banner with an 'X' over it and a button labeled 'Upload Movie Banner'. To the right of the banner placeholder are three input fields labeled 'Name*', 'Year*', and 'Genre*'. Below these fields is a button labeled 'Send Movie Add Request'.

- **Admin/Moderator Pages**

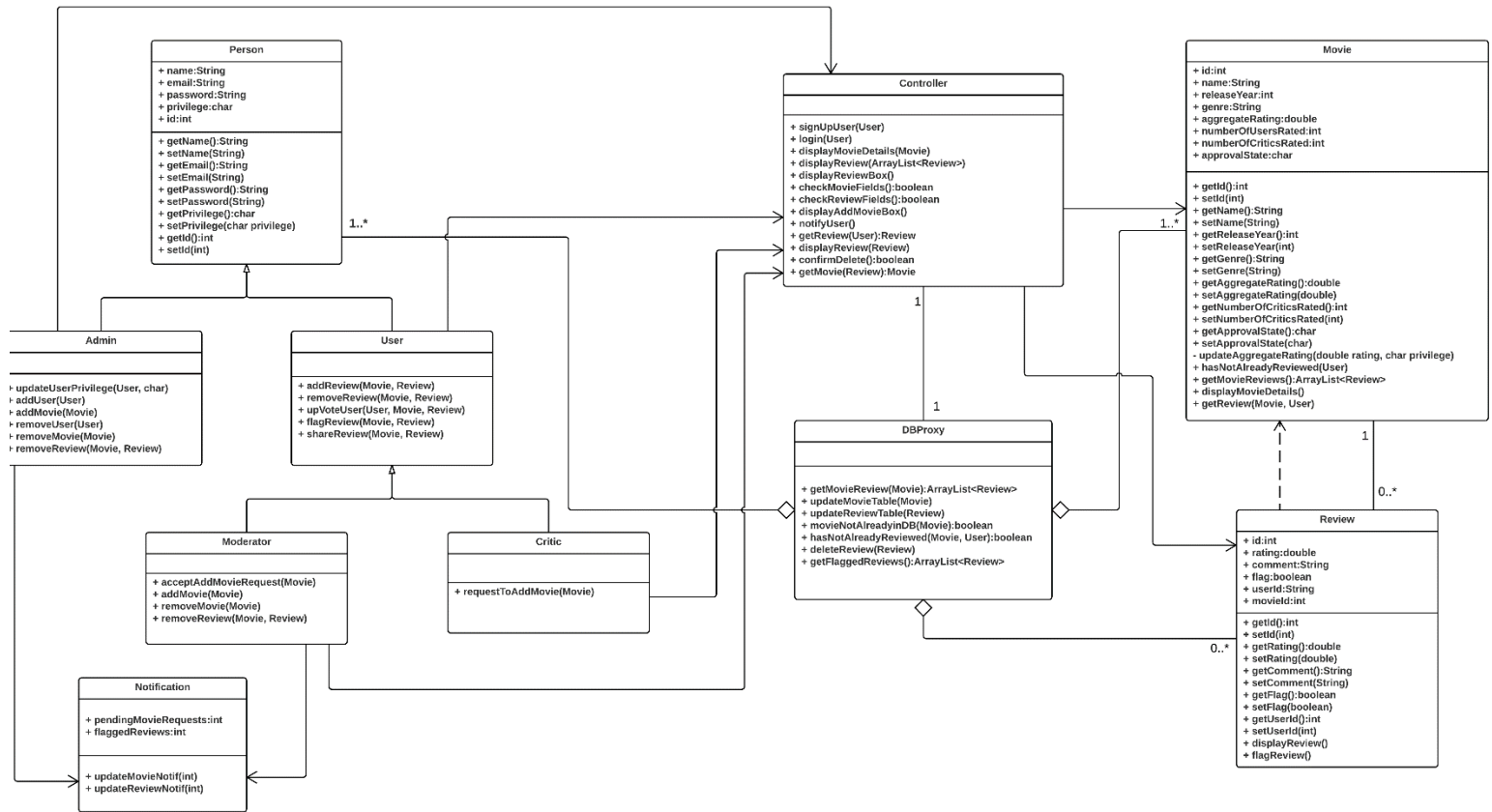
The screenshot shows the 'Pending Add Movie Requests Page' in the Rated.com application. The header includes the Rated.com logo, a search bar, and a user profile icon with the text 'Welcome, Admin!'. The main content area displays two pending movie requests. Each request is shown in a card format with a placeholder for the movie image, a box containing the movie details (Name, Genre, Year), and a button labeled 'Movie Image'. To the right of each card are two buttons labeled 'Approve' and 'Deny'. The first request is from 'Critic 3' and the second is from 'Critic 1'.



- **Data Storage:** We will be using MySQL to store the user information, movie details and review details in the database. There will be a database proxy class (DBProxy) to handle all database queries and updates.

➤ Class Diagram

- **Note:** Please visit this [link](#) to get a better resolution image of class diagram. We apologize for the inconvenience.

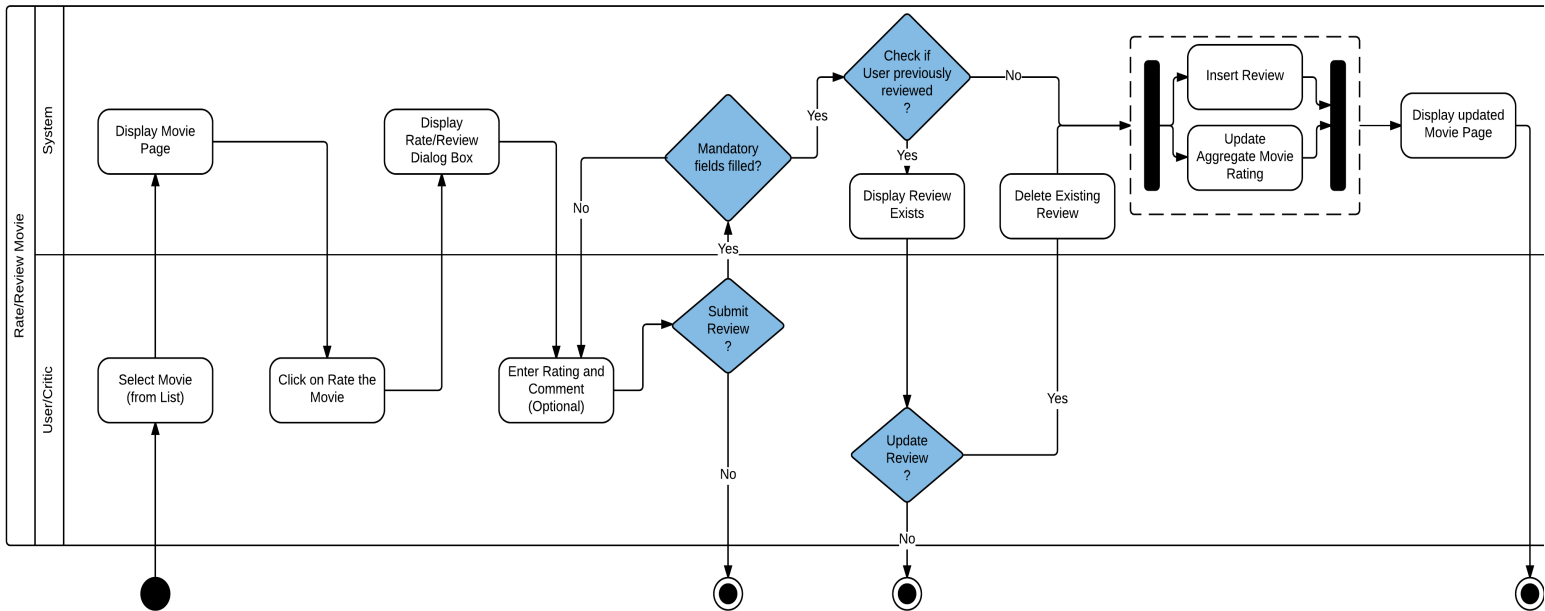


➤ **Activity Diagrams:**

➤ **Use Case Name: Rate/Review a Movie [Use Case ID #UC-03] (By- Shivasankar Gunasekaran)**

Description: This activity diagram allows the user to rate a movie available and provide comments about this movie. If the user has already reviewed this movie, they can also update it.

Rate/Review a Movie [Use Case ID #UC-03] (By- Shivasankar Gunasekaran)

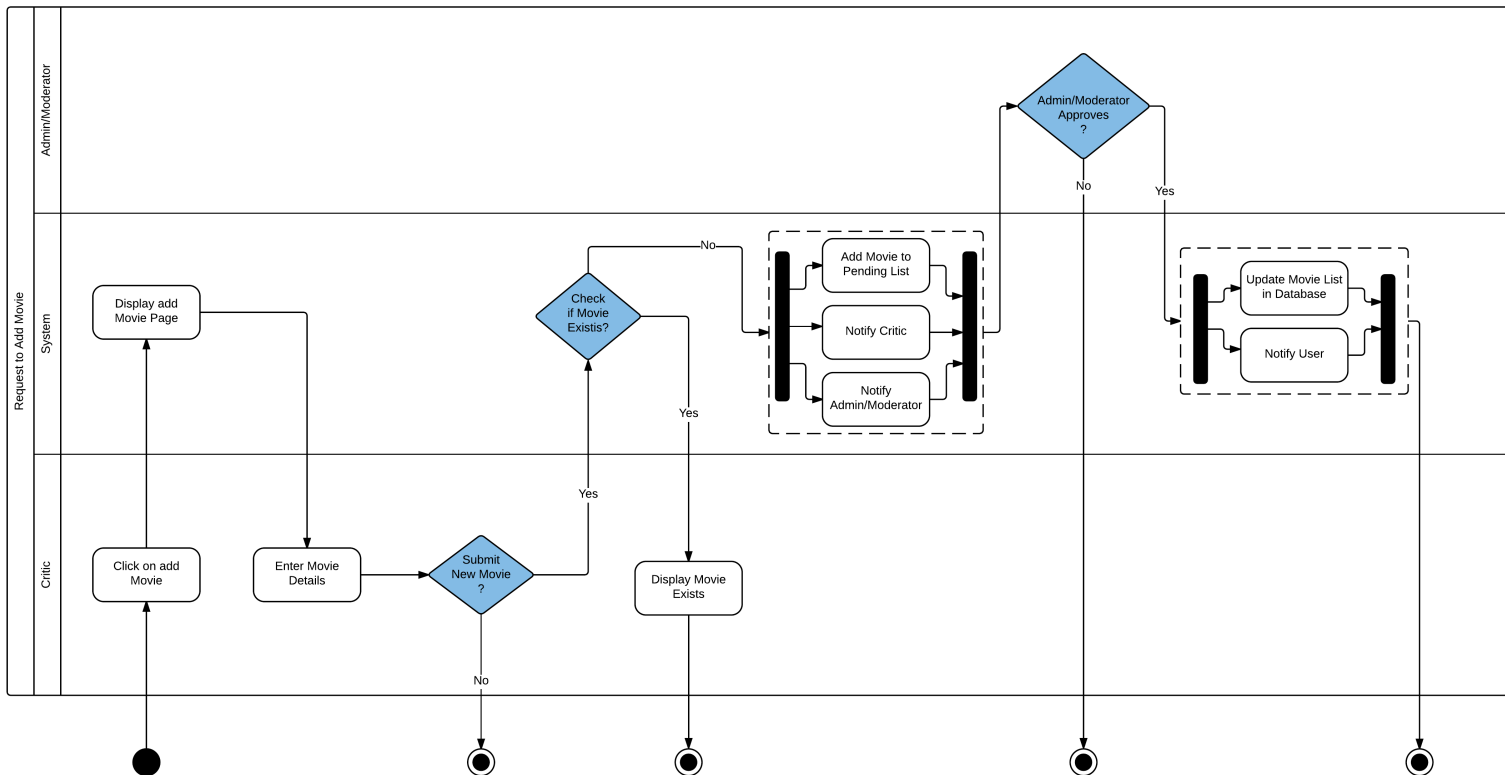


➤ **Use Case Name: Request to Add a Movie [Use Case ID #UC-05] (By- Omkar Reddy Seelam)**

Description:

The critic has the added functionality over the user that they can request to add a movie. The critic can click on request to add a movie button, enter the details and submit the request for approval of the Admin/Moderator.

Request to Add a Movie [Use Case ID #UC-05] (By- Omkar Reddy Seelam)

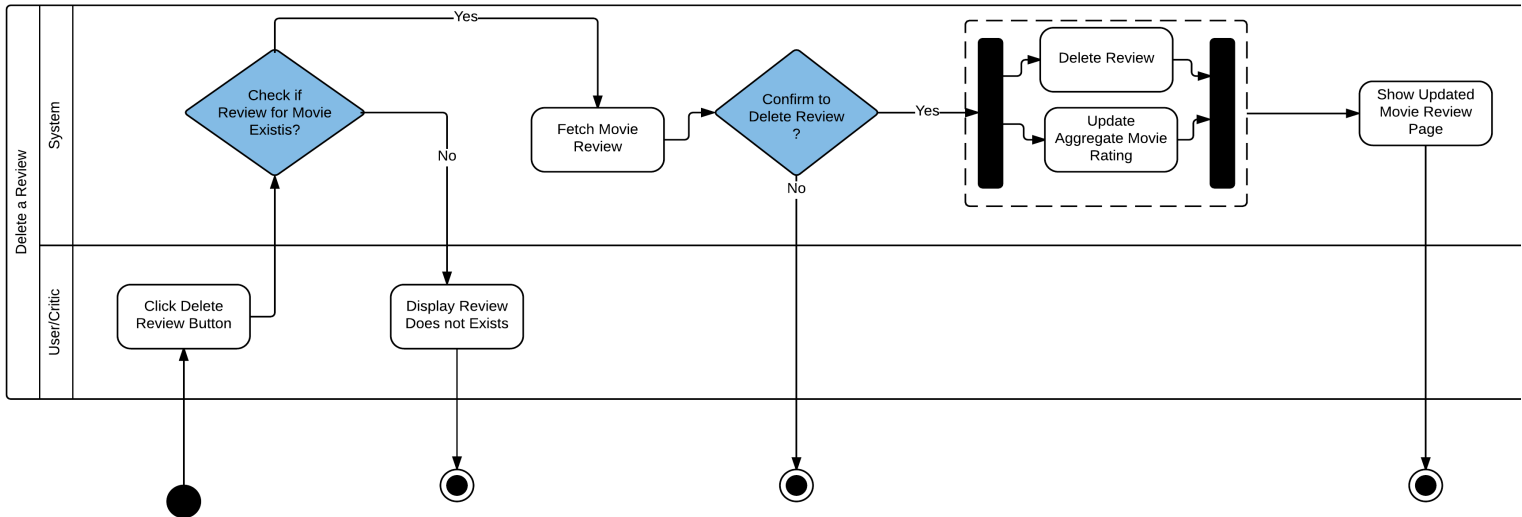


➤ **Use Case Name: Delete a Review [Use Case ID #UC-04] (By- Rishabh Berlia)**

Description:

The user/critic can delete a review that they have given for a movie. The delete option is only available for the reviews written by the corresponding user/critic.

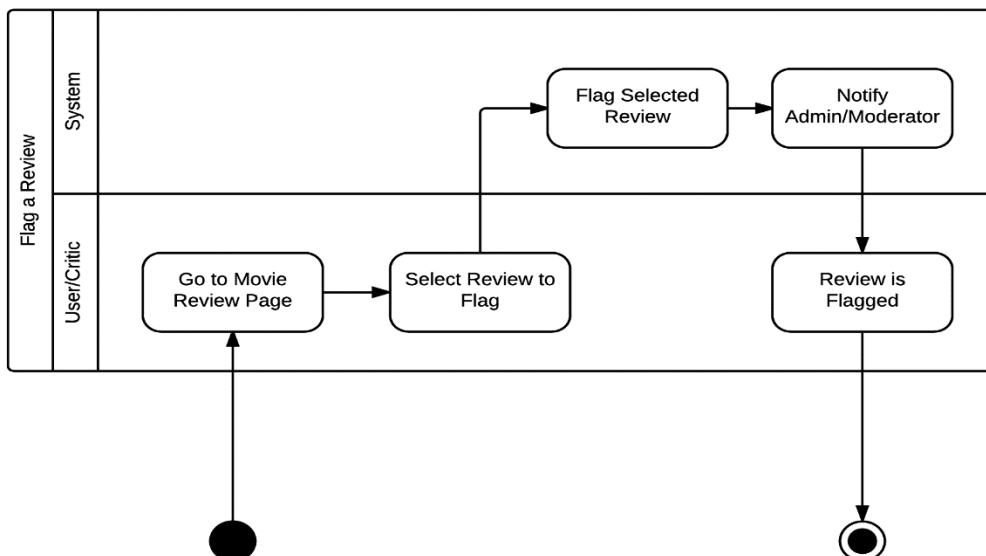
Delete a Review [Use Case ID #UC-04] (By- Rishabh Berlia)



➤ **Use Case Name: Flag a review [Use Case ID #UC-13] (By- Shivasankar Gunasekaran)**

Description: The user/critic can flag a review if they find that it violates the terms and conditions of the system. Once flagged, a notification is sent to the Admin/Moderator to screen the review and delete if needed.

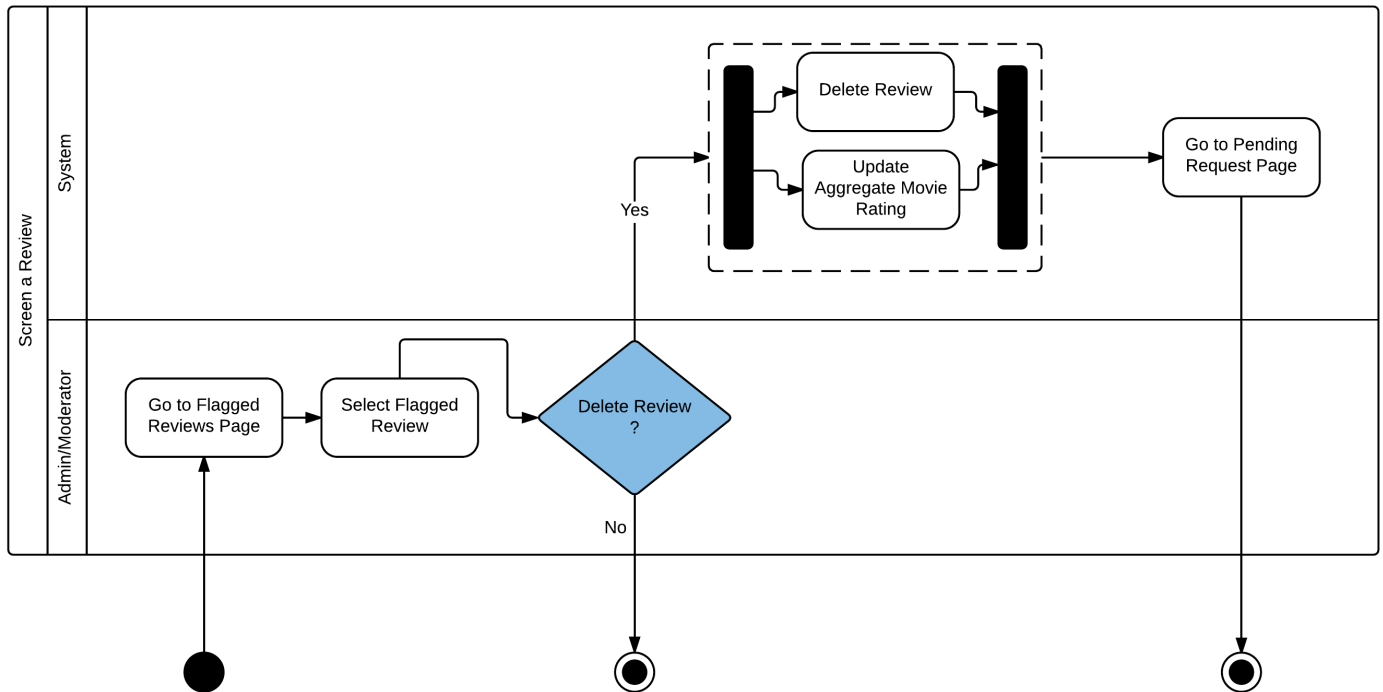
Flag a review [Use Case ID #UC-13] (By- Shivasankar Gunasekaran)



➤ **Use Case Name: Screen a review [Use Case ID #UC-12] (By- Rishabh Berlia)**

Description: The Admin/Moderator can view all the flagged reviews and read them. They can then decide on whether to delete the review or not, from the system.

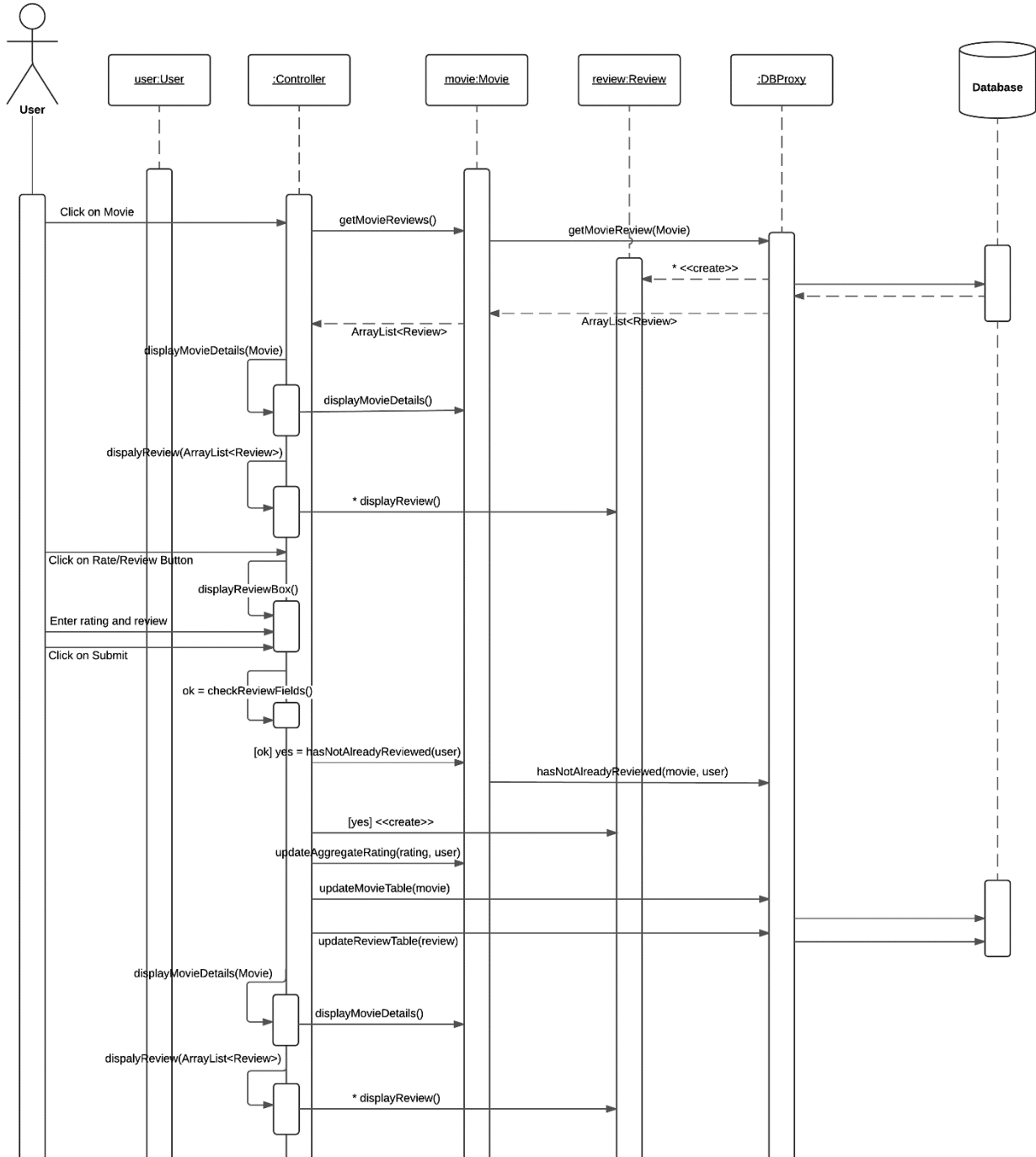
Screen a review [Use Case ID #UC-12] (By- Rishabh Berlia)



➤ Sequence Diagrams

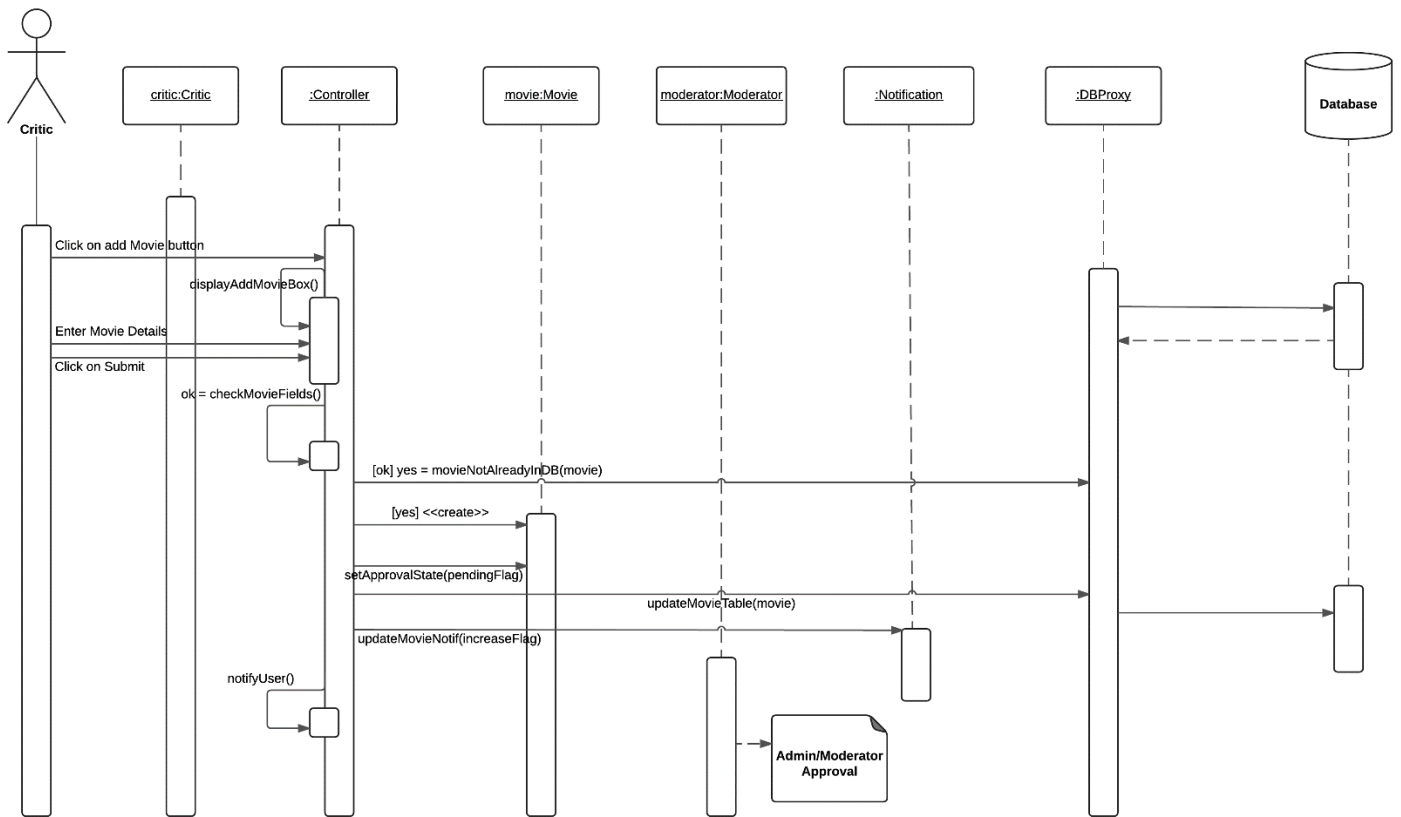
- **Use Case Name: Rate/Review a Movie [Use Case ID #UC-03] (By- Shivasankar Gunasekaran)**

Rate/Review a Movie [Use Case ID #UC-03] (By- Shivasankar Gunasekaran)



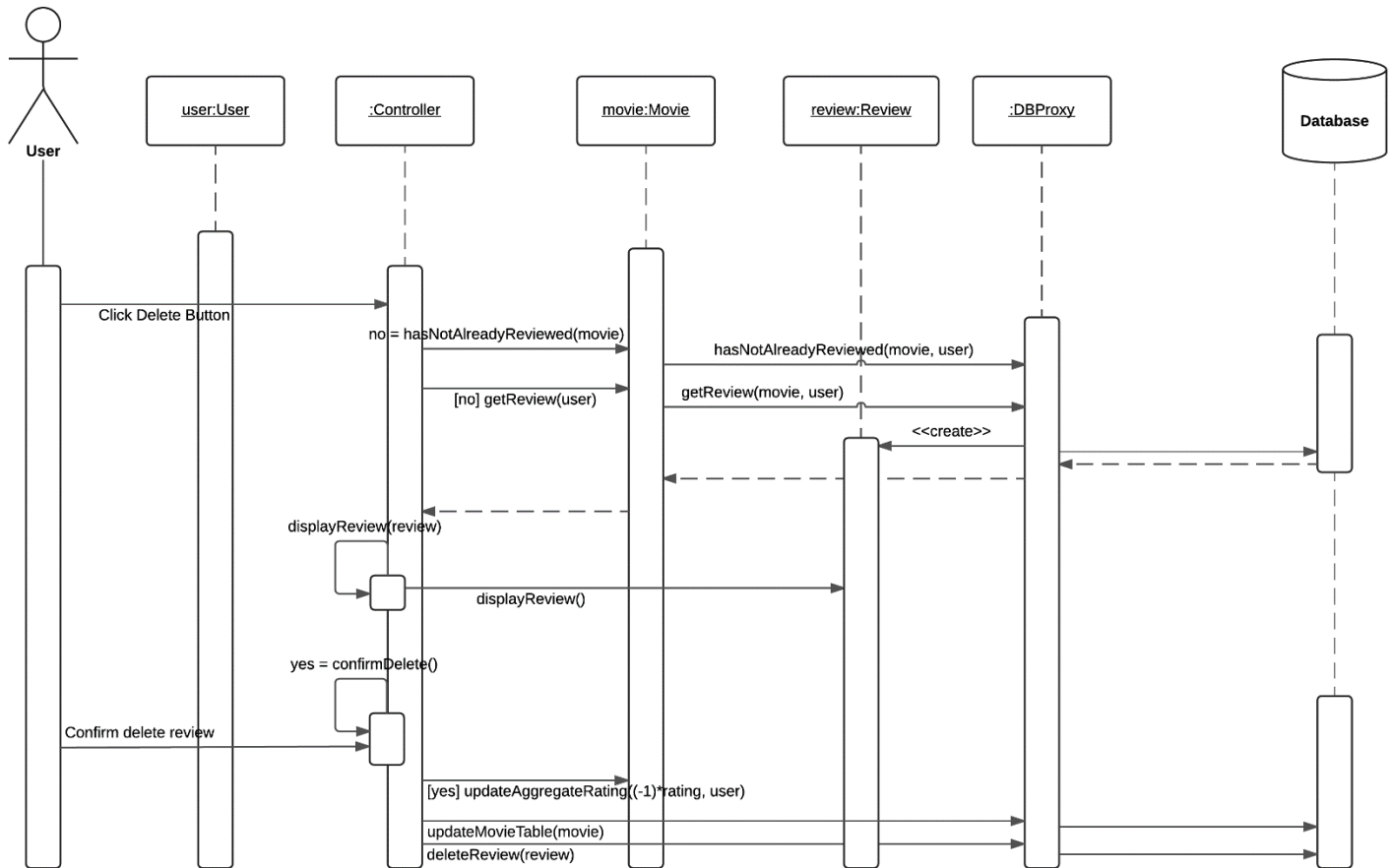
- **Use Case Name: Request to Add a Movie [Use Case ID #UC-05] (By- Omkar Reddy Seelam)**

Request to Add a Movie [Use Case ID #UC-05] (By- Omkar Reddy Seelam)



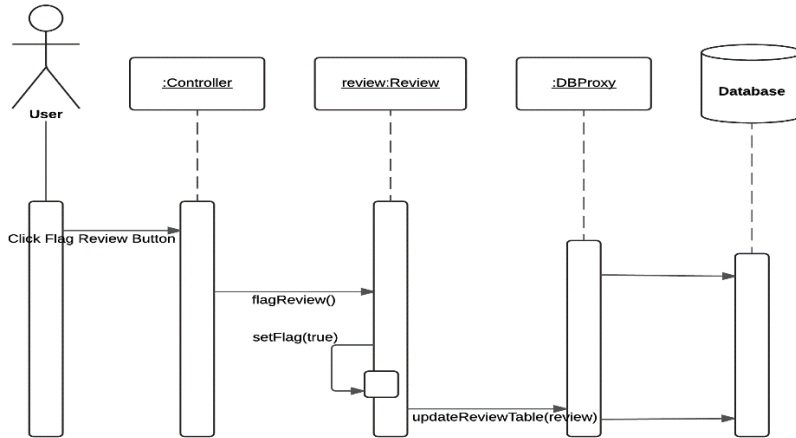
- Use Case Name: Delete a Review [Use Case ID #UC-04] (By- Rishabh Berlia)

Delete a Review [Use Case ID #UC-04] (By- Rishabh Berlia)



- **Use Case Name: Flag a review [Use Case ID #UC-13] (By- Shivasankar Gunasekaran)**

Flag a review [Use Case ID #UC-13] (By- Shivasankar Gunasekaran)



- **Use Case Name: Screen a review [Use Case ID #UC-12] (By- Rishabh Berlia)**

Screen a review [Use Case ID #UC-12] (By- Rishabh Berlia)

