

# Final Project



Group 16

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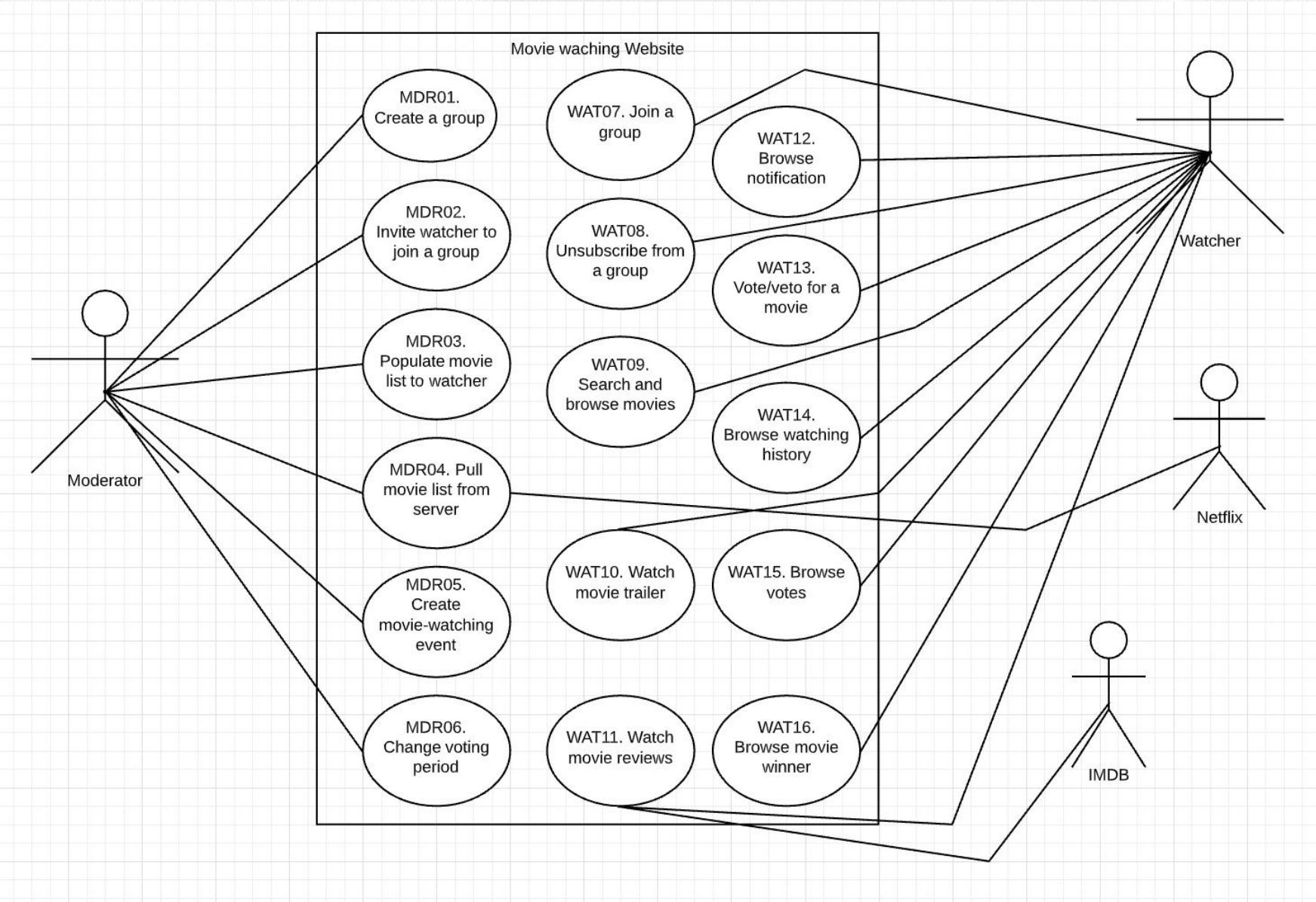
# 01

Part One

# Use Case Diagram



# /// Use Case Diagram



# 02

Part Two

# Use Case Specification

# Use Case Specification

Use Case ID: MDR01

Title: Create a movie watcher group

Description: Moderator create a movie watcher group

Pre-Conditions: have an account; successfully logged in

Post-Conditions:

Steps: Moderator add group information in the create page -> create

Use Case ID: MDR02

Title: Invite watcher to join the group

Description: Moderator inviting watcher to join the group

Pre-Conditions: A group with the moderator exists

Post-Conditions: Watcher is in the group

Steps: 1. Moderator chooses the watchers to be invited 2. Moderator clicks the “invite” button 3. System sends the notification to the watcher  
4. Watcher receives the invitation 5. Watcher either clicks accept or refuse 6. If accepts, watcher is in the group list; if refuse, the system notifies the moderator

Use Case ID: MDR03

Title: Populate movie list to watcher

Description: Moderator populate movie watcher's groups with a list of potential movies that could be watched

Pre-Conditions: the moderator has a group

Post-Conditions: Watcher has a list of movies to watch

Steps: 1. Moderator selects a list of movies 2. Moderator makes the list of movies available to the watchers in the group 3. System adds the list of movies to the watcher's homepage 4. Watchers can see a list of movies in their homepage

# Use Case Specification

Use Case ID: MDR04

Title: Pull a movie list from a movie list server/API

Description: Moderator pull a movie list from a movie list server/API

Pre-Conditions: the moderator has a movie list, at least one server is available

Post-Conditions: A list of movies exists in the movie watching app

Steps: 1. Moderator connects to the movie server 2. Moderator sends a request to pull a movie list from the server 3. The movie server receives the request 4. The movie server sends the movie list to the system 4. System stores the movie list from the server

Use Case ID: MDR05

Title: Create movie-watching event

Description: Moderator create a movie-watching event

Pre-Conditions: The moderator has at least one group

Post-Conditions: The moderator and group members have the new event.

Steps: 1. Moderator clicks the “create movie event” button 2. System receives the request 3. System displays the creation page 4. Moderator types in the information and clicks submit 5. System receives the information 6. System checks duplicate, if no then next step, otherwise displays error and back to step 3 7. System displays new movie watching event homepage

Use Case ID: MDR06

Title: Change voting period

Description: Moderator open and close voting period for a specific movie event

Pre-Conditions: Moderator has at least one movie event

Post-Conditions: The voting period of the event is updated

Steps: 1. Moderator browse the list of the events he/she created 2. Moderator selects one event 3. Moderator clicks the “change the voting period” button 4. System receives the request 5. System displays change page 6. Moderator types in the new voting period and clicks “submit” button 7. System receives the information 8. System displays the new voting period

# Use Case Specification

Use Case ID: WAT07

Title: Join group

Description: Watcher join a group through an invitation

Pre-Conditions: Watcher has an invitation

Post-Conditions: Watcher has a new group

Steps: 1. Watcher browse the list of the invitations he/she received 2. Watcher selects the group he wants to join 3. Watcher click the “accept” button 4. System receives the request 5. System adds the watcher to the group 6. Watcher is in the group’s member list

Use Case ID: WAT08

Title: Unsubscribe from a group

Description: Watcher unsubscribe a specific group

Pre-Conditions: Watcher is in a group

Post-Conditions: Modify the user’s group list (delete the specific group)

Steps: 1. Watcher browse the list of the groups he/she subscribed 2. Watcher chooses the group he wants to unsubscribe from 3. Watcher clicks the “unsubscribe” button 4. System receives the request 5. Systems remove the watcher from the group

Use Case ID: WAT09

Title: Search and browse movies

Description: Users browse movies provided by the moderator and click to see details.

Pre-Condition: Movie list should not be empty

Post-Condition: N/A

Steps: 1. Watcher types in the name of the movie in the search bar 2. Watcher clicks the “search” button 3. System receives the request 4. System displays a list of movies related to the search 5. Watcher sees a list of movies on his page

# Use Case Specification

Use Case ID: WAT10

Title: Watch movie trailer

Description: Users watch movie trailer

Pre-Condition: Movie trailer is not empty

Post-Condition: N/A

Steps: 1. Watcher navigates to a specific movie 2. Watcher clicks the “trailer” button 3. System receives the request 4. System plays the movie trailer 5. Watcher sees the movie trailer on his page

Use Case ID: WAT11

Title: Watch movie reviews

Description: User browses other people's reviews regarding this movie.

Pre-Condition: Movie reviews exist

Post-Condition: N/A

Steps: 1. Watcher navigates to a specific movie 2. Watcher clicks the “review” button 3. System receives the request 4. System displays the movie reviews 5. Watcher sees the movie reviews on his page

Use Case ID: WAT12

Title: Browse notification

Description: Notify users of movie-watching event.

Pre-Condition: A movie should not be voted by same user. Movies should come from the list populated by the moderator.

Post-Condition: A movie can only be voted once by same user

Steps: 1. Watcher clicks the “notification” button 2. System receives the request 3. System displays the notifications the watcher has received 4. Watcher sees a list of notifications on his page

# Use Case Specification

Use Case ID: WAT13

Title: Vote and veto for movies

Description: watchers cast a vote to a movie

Pre: Watcher in movie-watching event, moderator opened movie watching period

Post: movies have their own votes

Steps: 1. Watcher navigates to the specific movie her wants to vote 2. Watcher clicks the thumb up or thump down button to vote 3. System receives the request 4. System updates the current voting of the movie

Use Case ID: WAT14

Title: Browse movie watching history

Description: watchers can browse watching history

Pre: Watchers watch movies

Post: N/A

Steps: 1. Watcher clicks the “watching history” button 2. System receives the request 3. System displays the watcher’s watching history 4. Watcher see his own movie watching history on his page

Use Case ID: WAT15

Title: Browse votes

Description: watchers can browse votes

Pre: watchers can cast vote

Post: N/A

Steps: 1. Watcher navigates to a specific movie 2. Watcher can see the votes next to the movie title

# / / Use Case Specification

Use Case ID: WAT16

Title: Browse winners

Description: watchers browse winners in a movie watching event

Pre: winners elected

Post: N/A

Step: 1. Watcher chooses a movie watching event 2. The winners are displayed in the movie watching event



# 03

Part Three

## Bi-direction Traceability Matrix



# / / Bi-direction Traceability Matrix

**Requirement Traceability Matrix (RTM)** is a document that maps and traces user requirement with test cases.

The main purpose of Requirement Traceability Matrix is to validate that all requirements are checked via test cases such that no functionality is unchecked during Software testing.

There are 3 types of RTM:

1. Forward: Requirements->Test Cases
2. Backward: Test Cases->Requirements
3. Bi-directional: Forward+Backward

# Bi-direction Traceability Matrix

Test Case ID	Test Case Description
TC01	Verify if moderator is able to create a new movie watcher group
TC02	Verify if moderator is able to invite watcher to join the group
TC03	Verify if moderator is able to pull a movie list from IMDB/Douban Verify if moderator is able to populate a movie list to watcher
TC04	Verify if moderator is able to create a movie-watching event
TC05	Verify if moderator is able to change voting period
TC06	Verify if watcher is able to join a group
TC07	Verify if watcher is able to unsubscribe from a group
TC08	Verify if watcher is able to search and browse movies/trailers/reviews
TC09	Verify if watcher is able to browse notification
TC10	Verify if watcher is able to vote and veto for movies
TC11	Verify if watcher is able to browse watching history Verify if watcher is able to browse votes history Verify if watcher is able to browse winners history

# Bi-direction Traceability

	<b>Group Movie APP</b>		
<b>Requirement ID</b>	<b>Required Features</b>	<b>Requirement Use Case ID</b>	<b>Test Case ID</b>
1	Moderator creates a movie watcher group	MDR01	TC01
2	Moderator invites watchers to join a group	MDR02	TC02
3	Moderator populates a movie list from IMBD/Douban to group	MDR03, MDR04	TC03
4	Moderator creates a movie-watching event	MDR05	TC04
5	Moderator changes voting period	MDR06	TC05
6	Watchers join a group	WAT07	TC06
7	Watcher unsubscribes form a group	WAT08	TC07
8	Watcher searches and browses movies/ trailers/reviews	WAT09, WAT10, WAT11	TC08
9	Watcher browses notification	WAT12	TC09
10	Watcher votes for movies	WAT13	TC10
11	Watcher browse watching/ votes/ winners history	WAT14, WAT15, WAT16	TC11

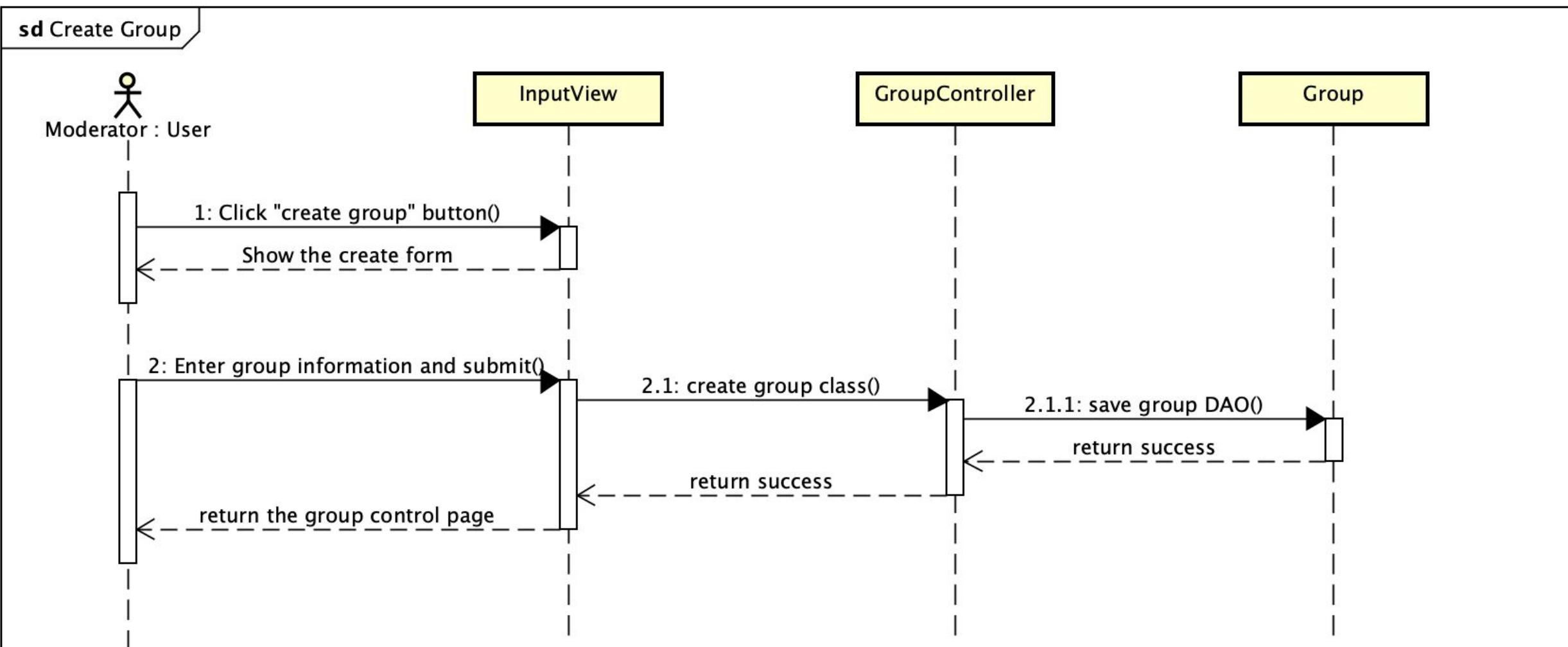
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Part Four

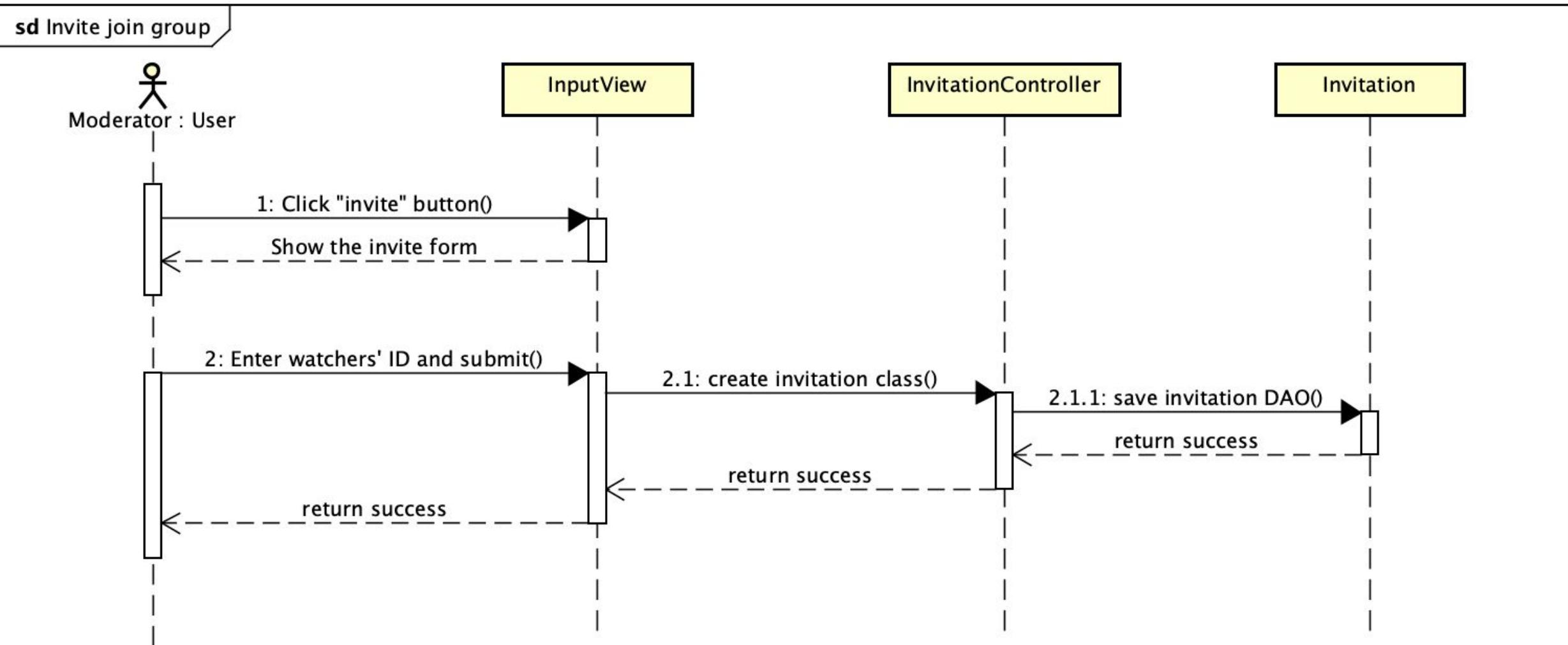
## Sequence Diagram



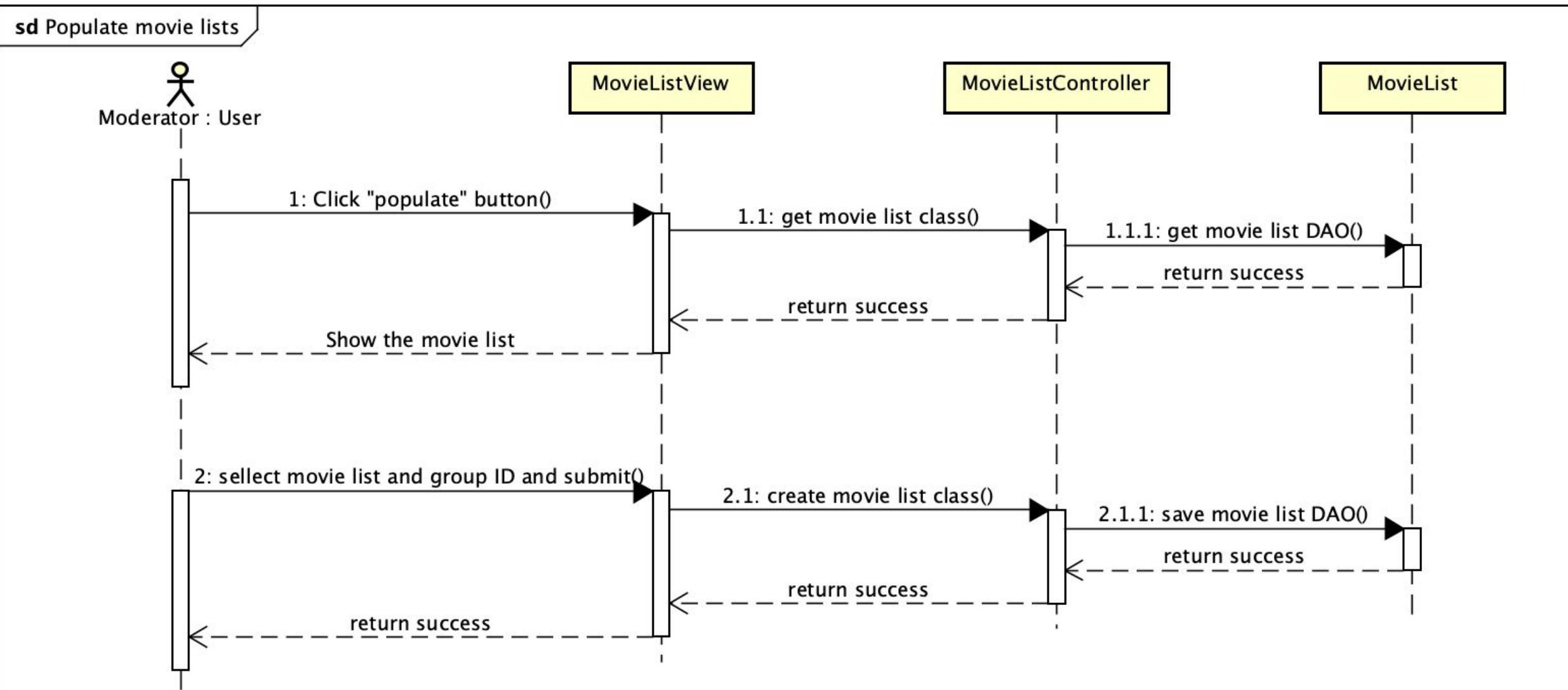
# Sequence Diagram



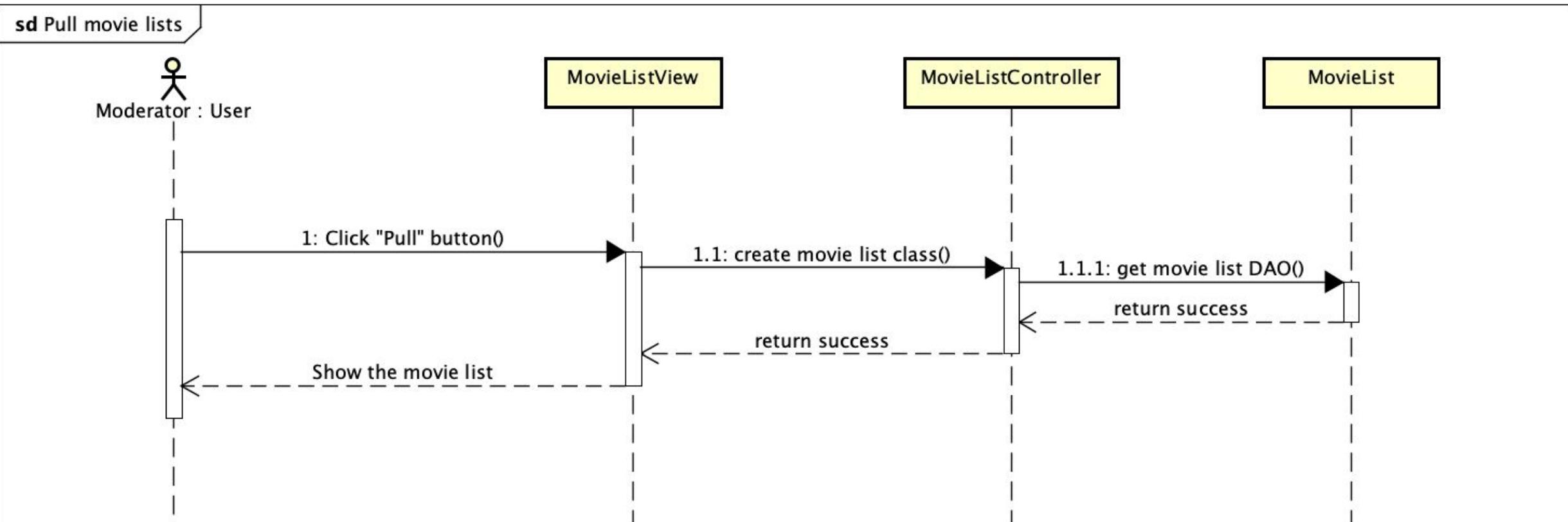
# Sequence Diagram



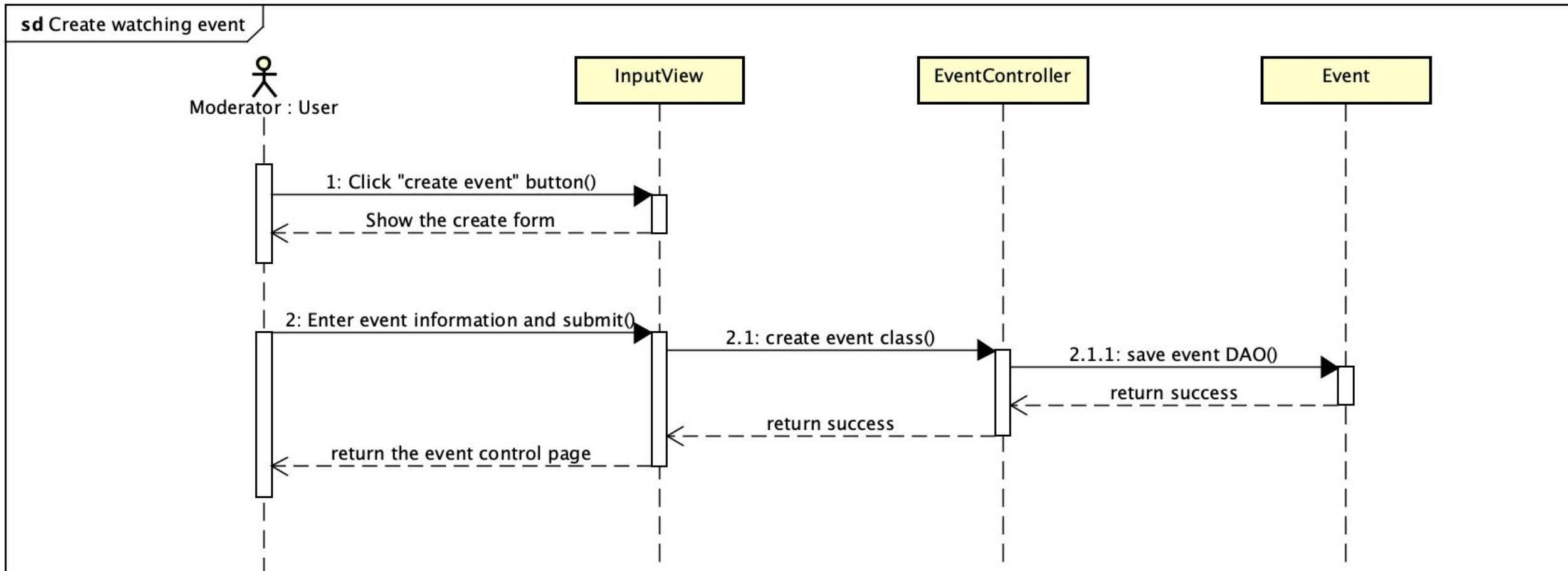
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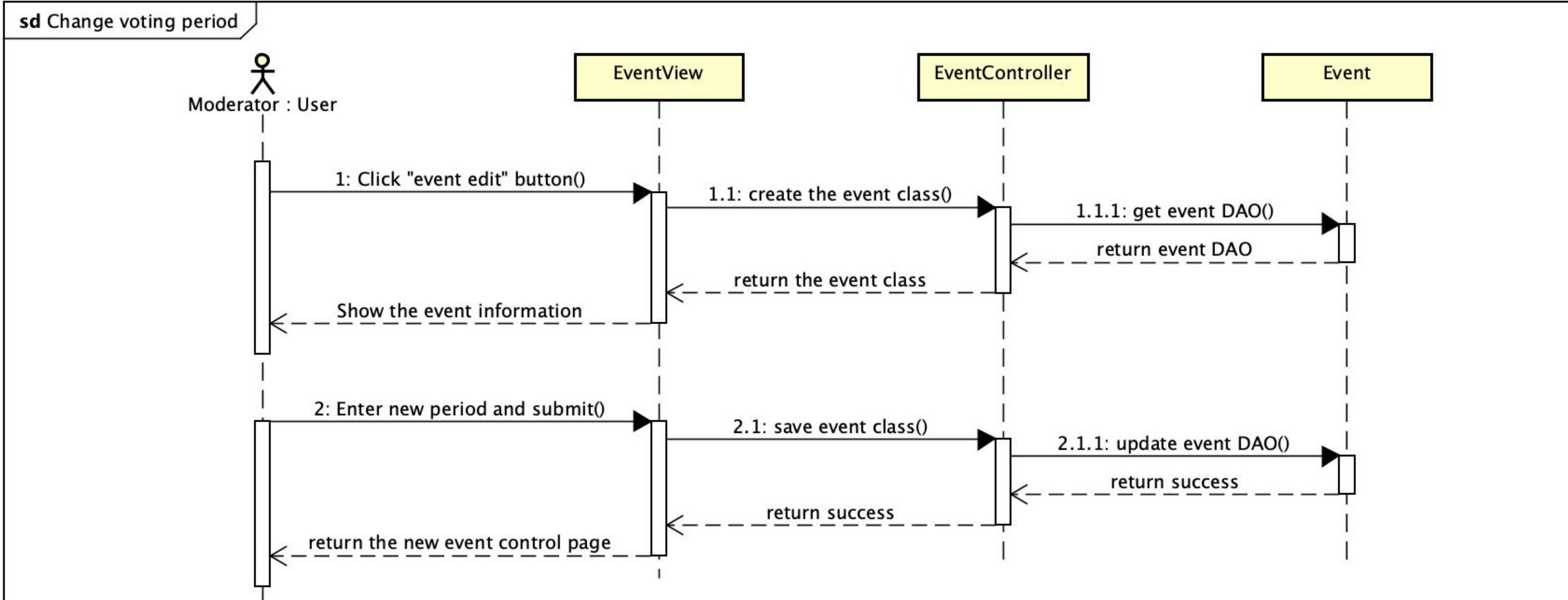
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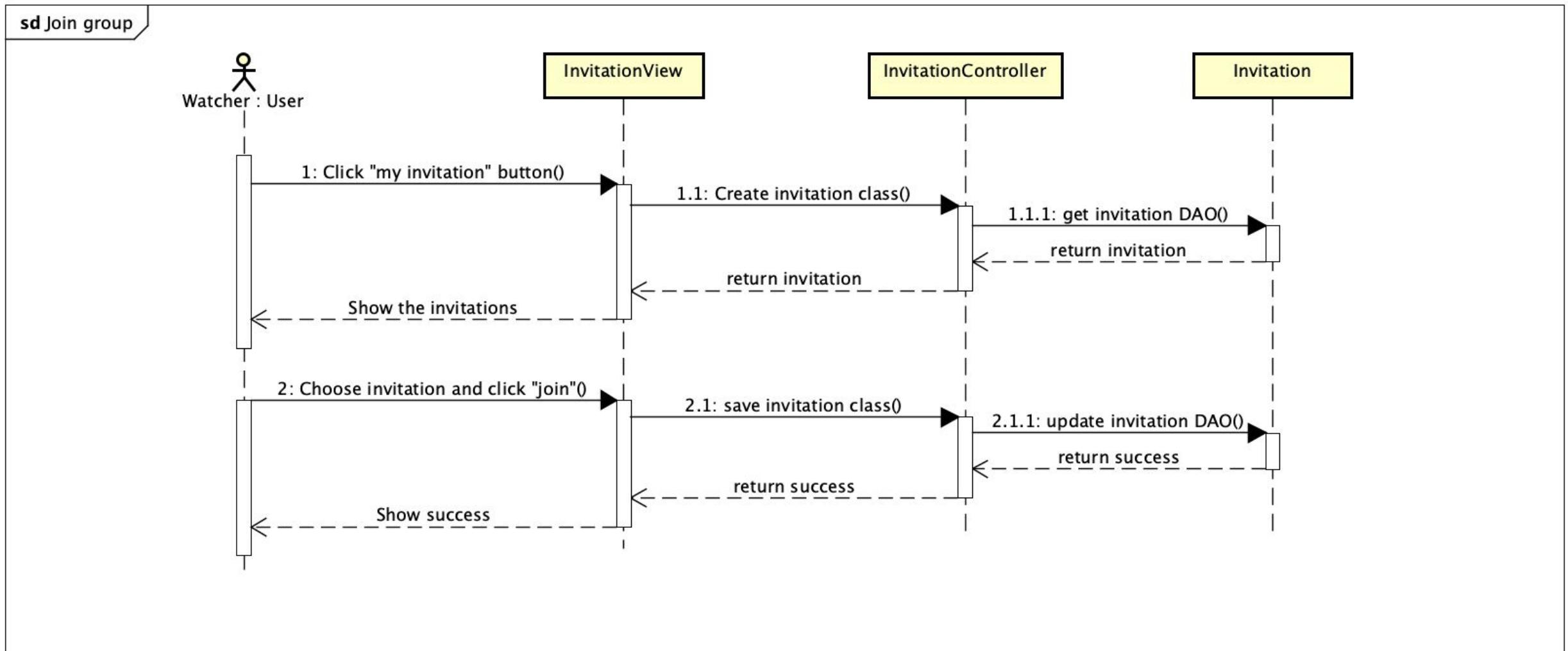
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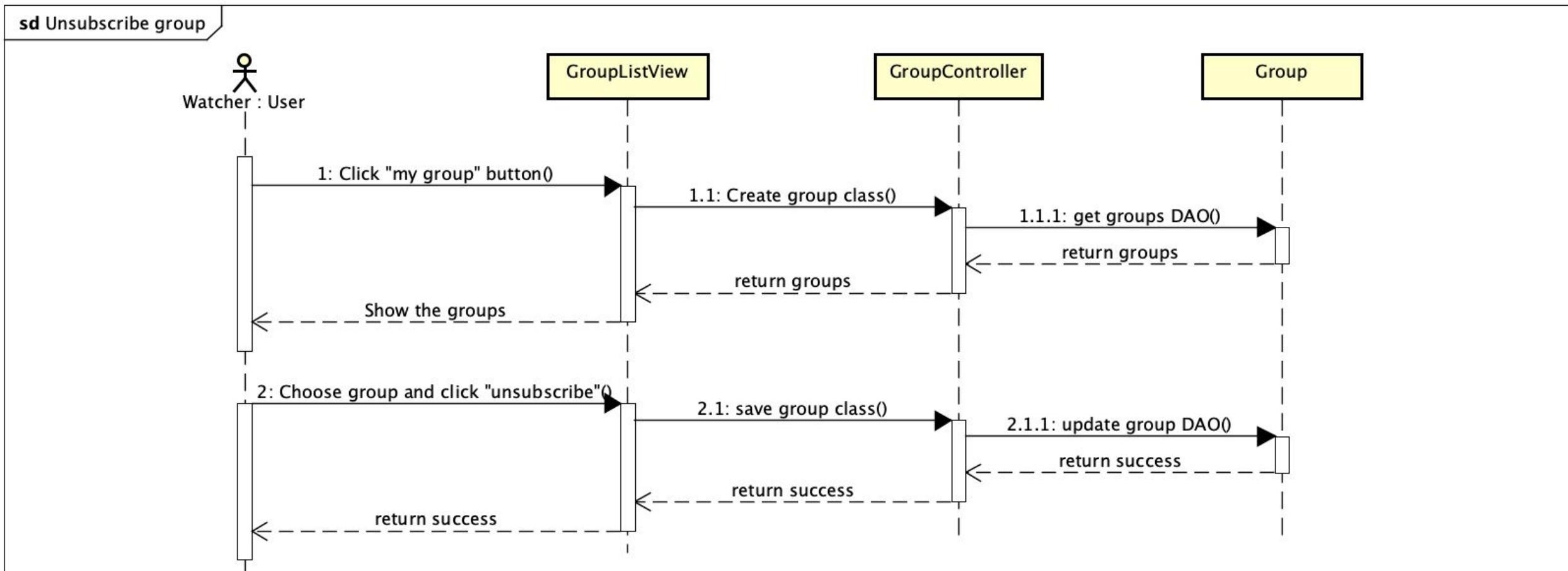
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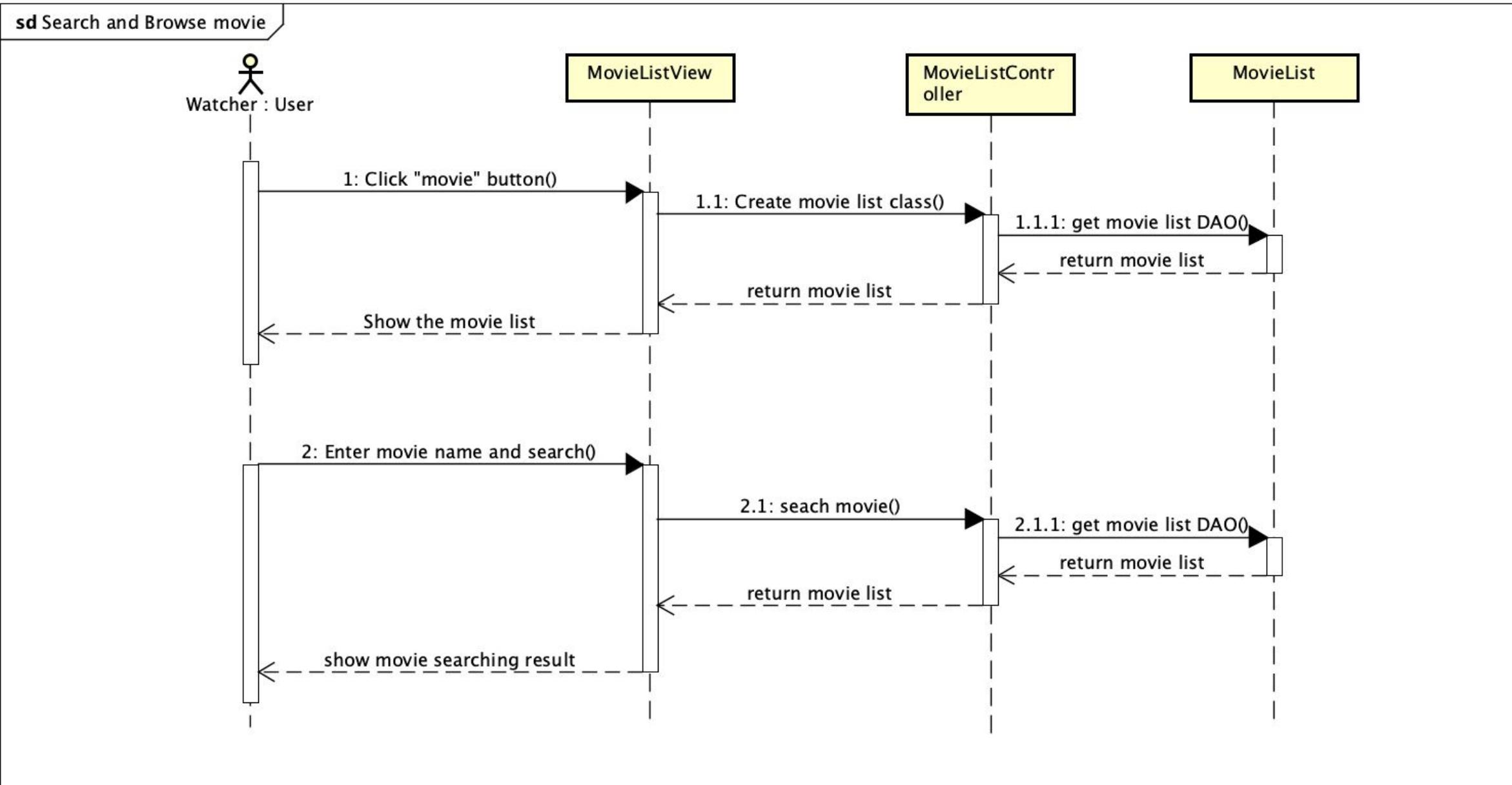
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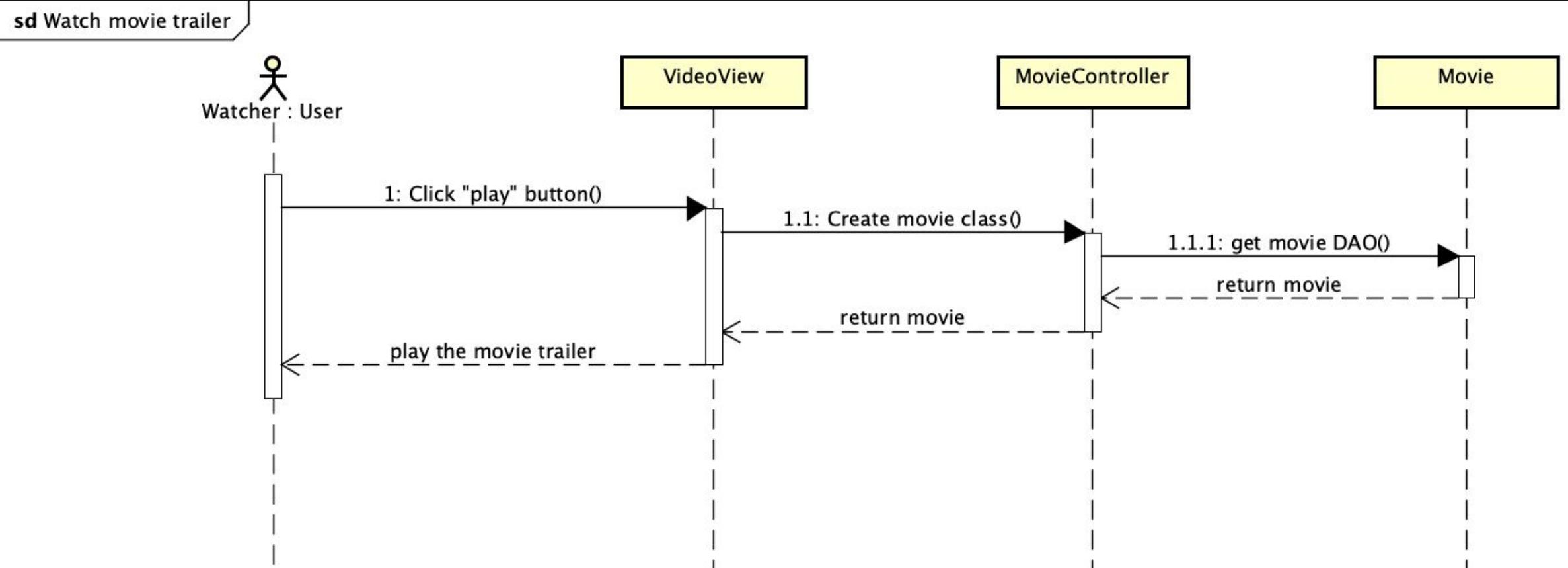
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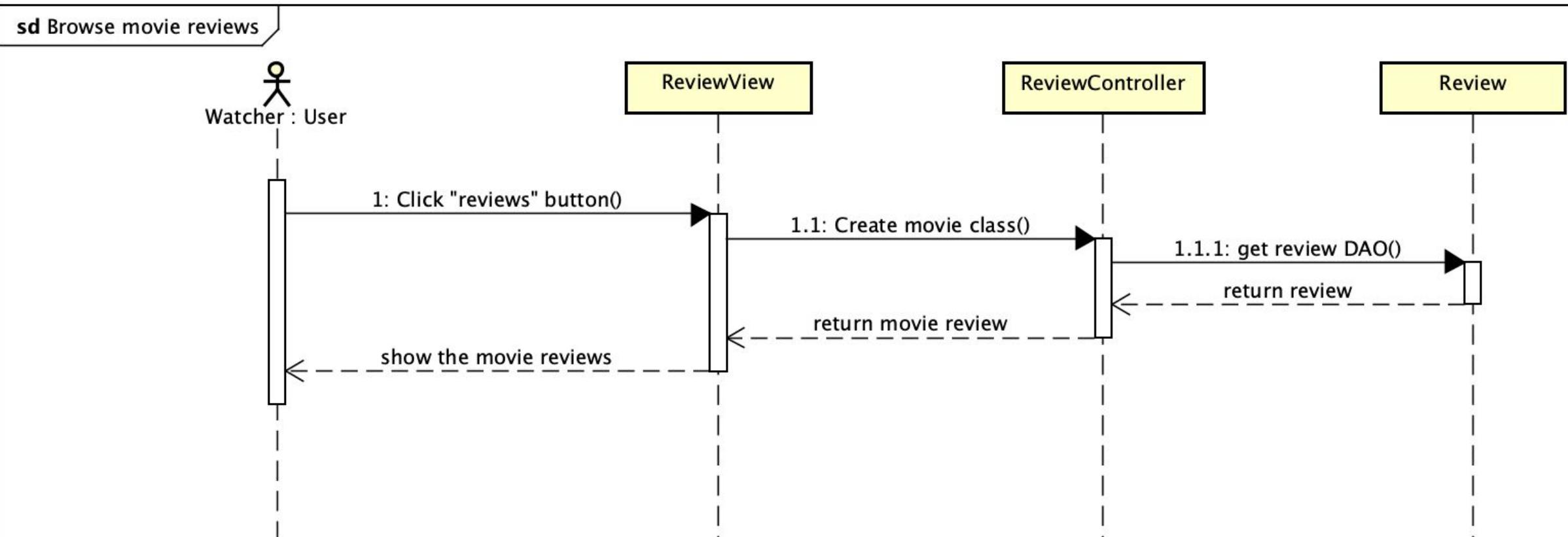
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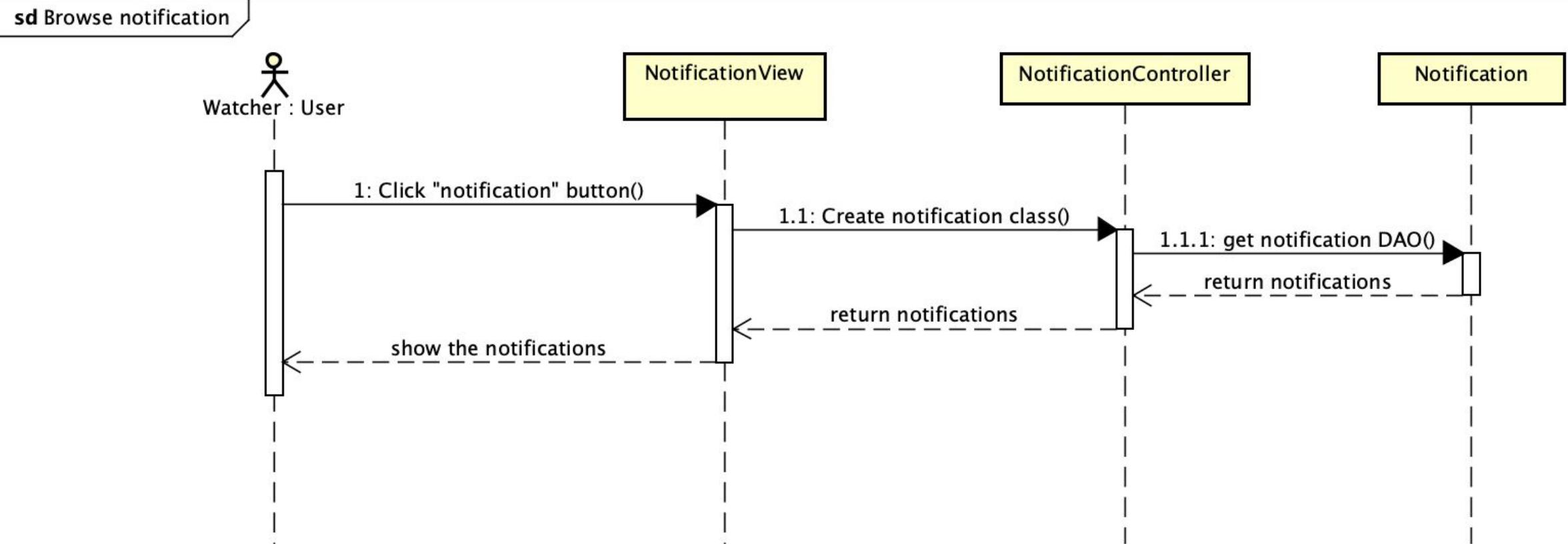
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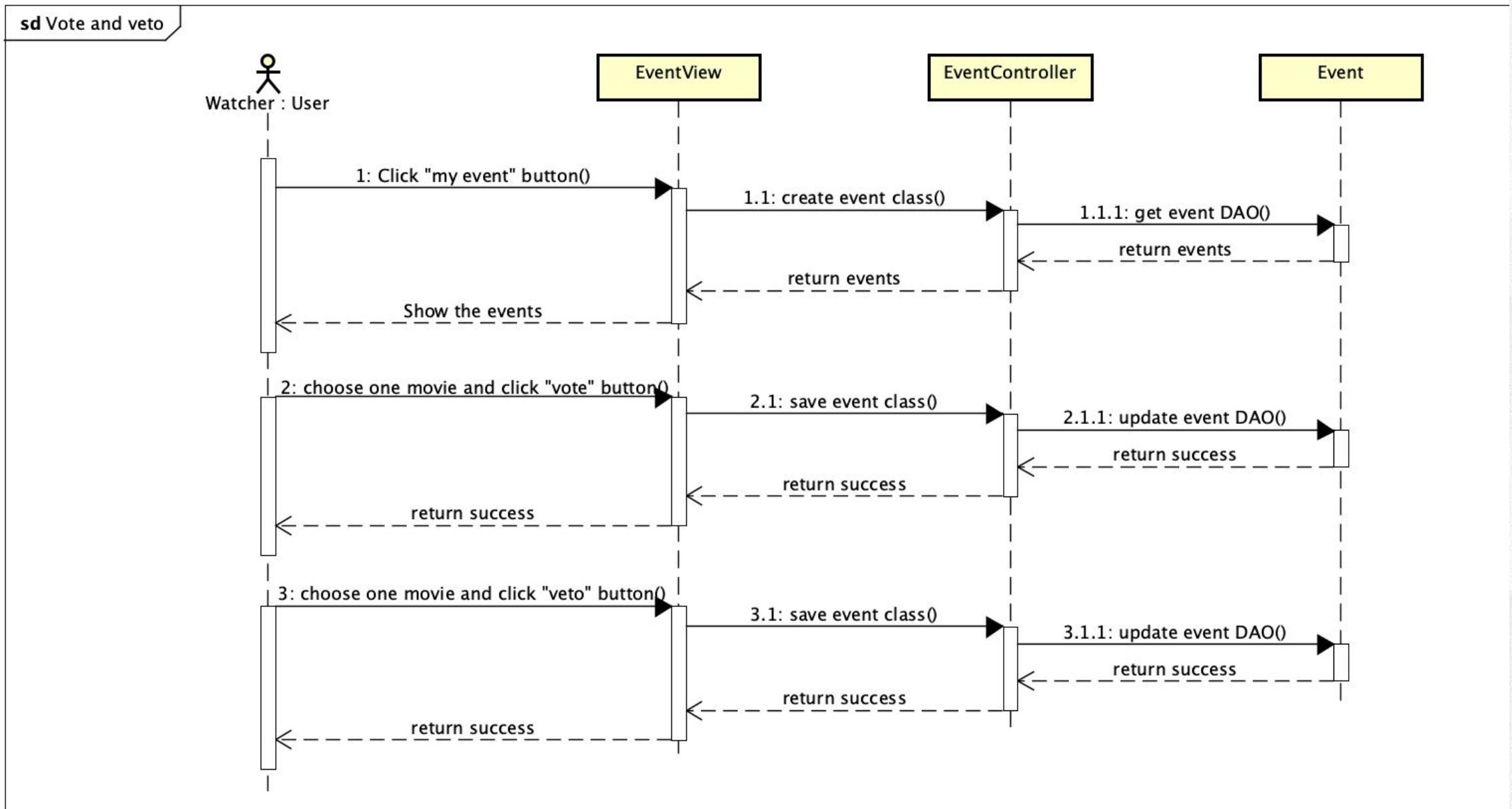
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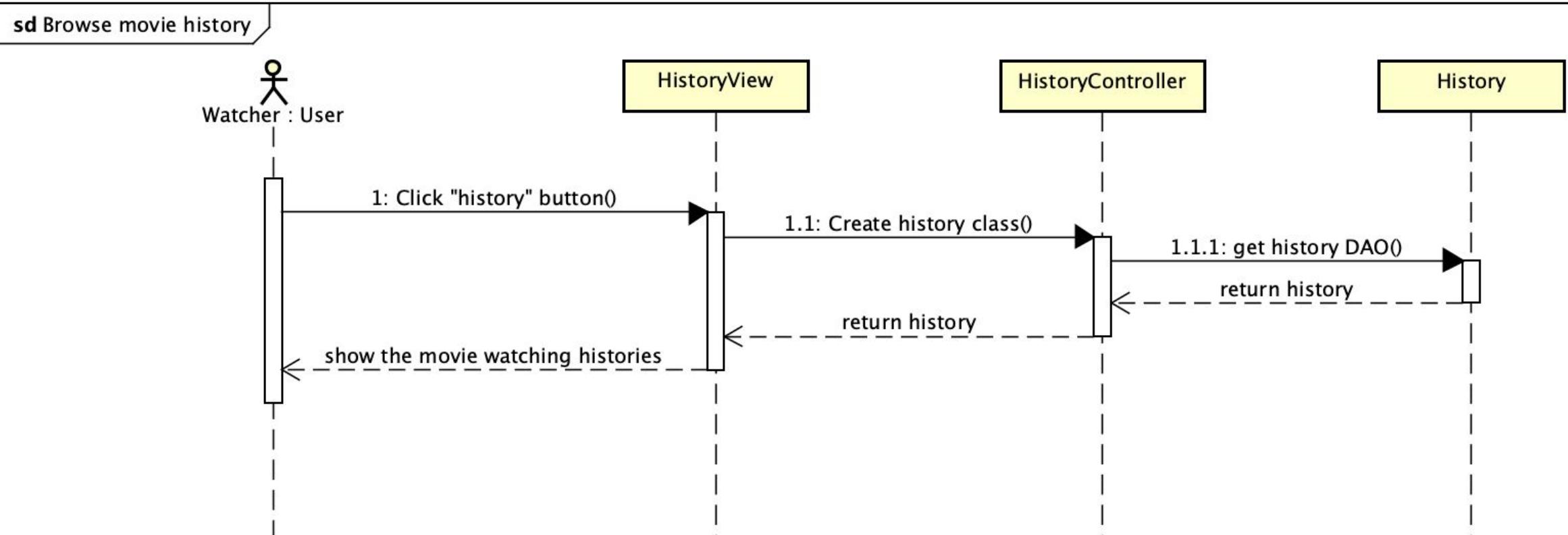
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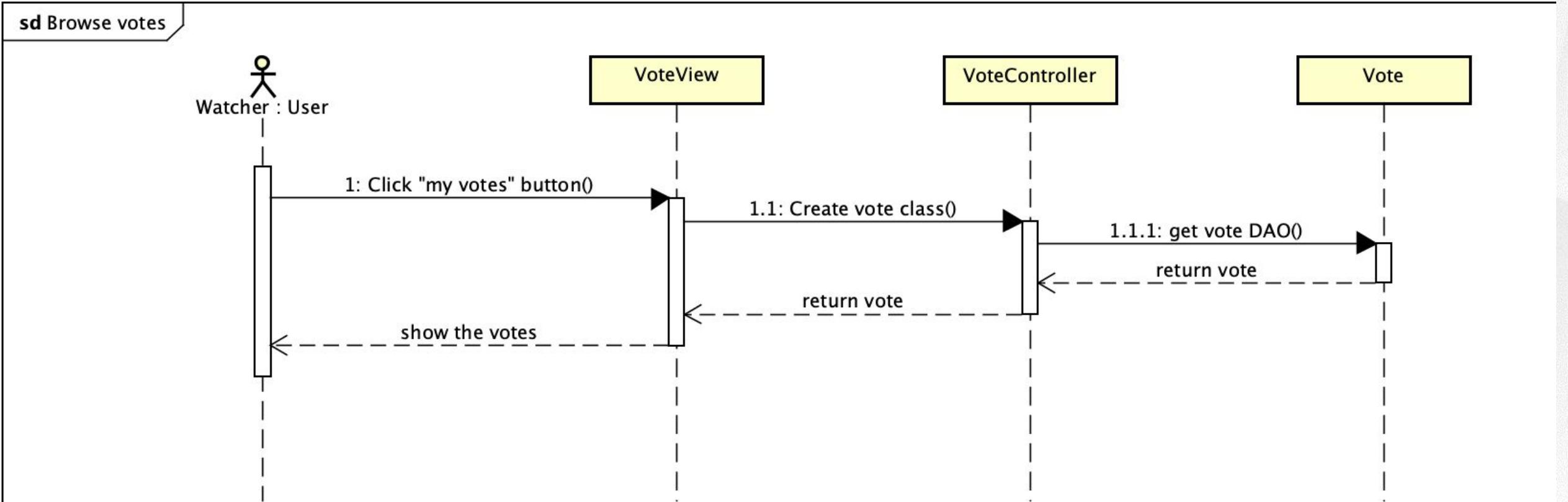
# Sequence Diagram



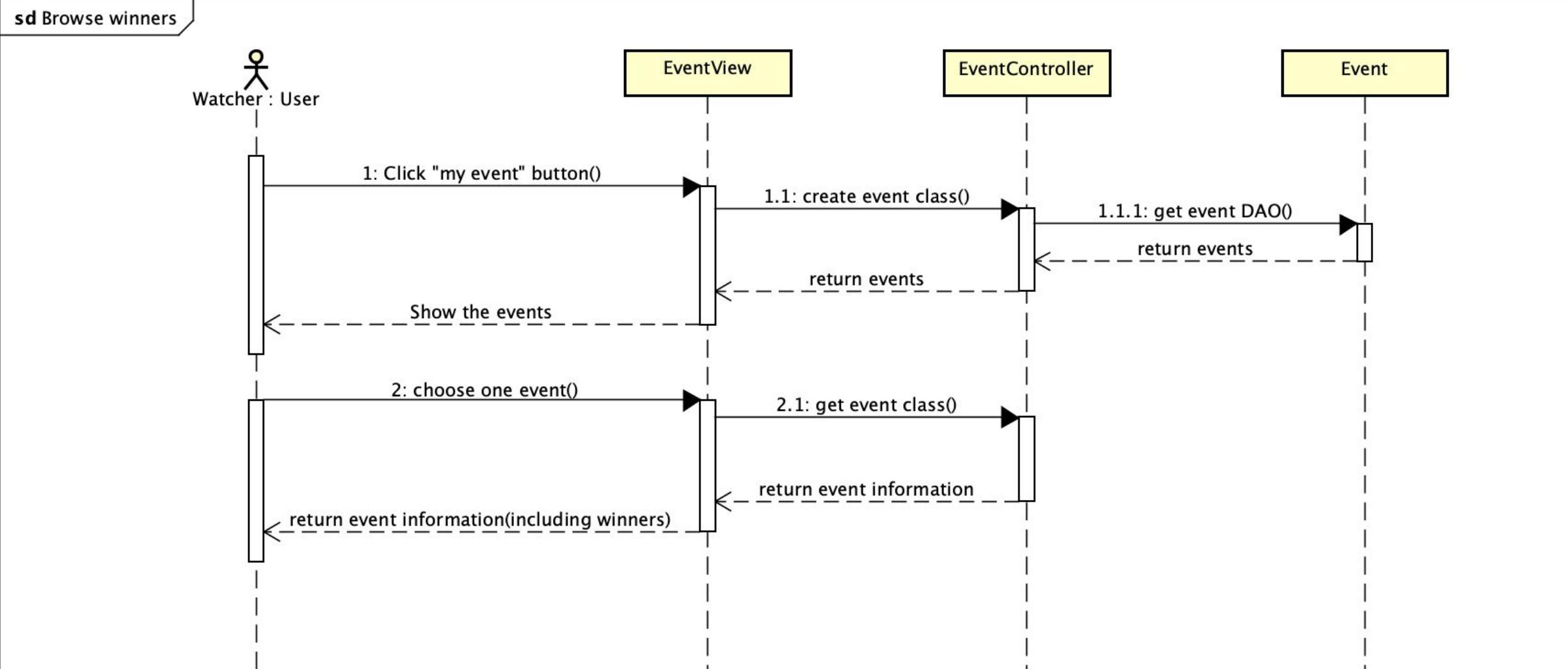
# Sequence Diagram



# Sequence Diagram



# Sequence Diagram



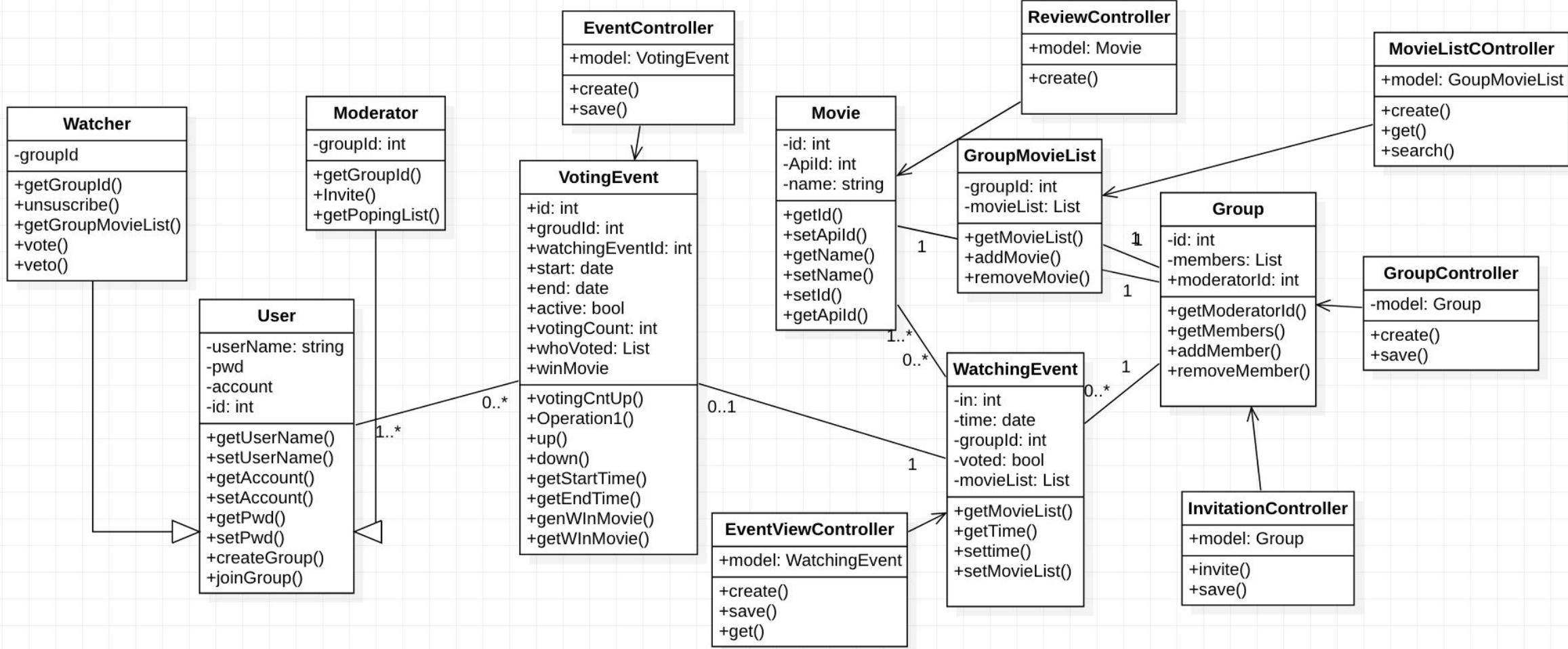
# 05

Part Five

# Class Diagram Model



# / / Class Diagram Model





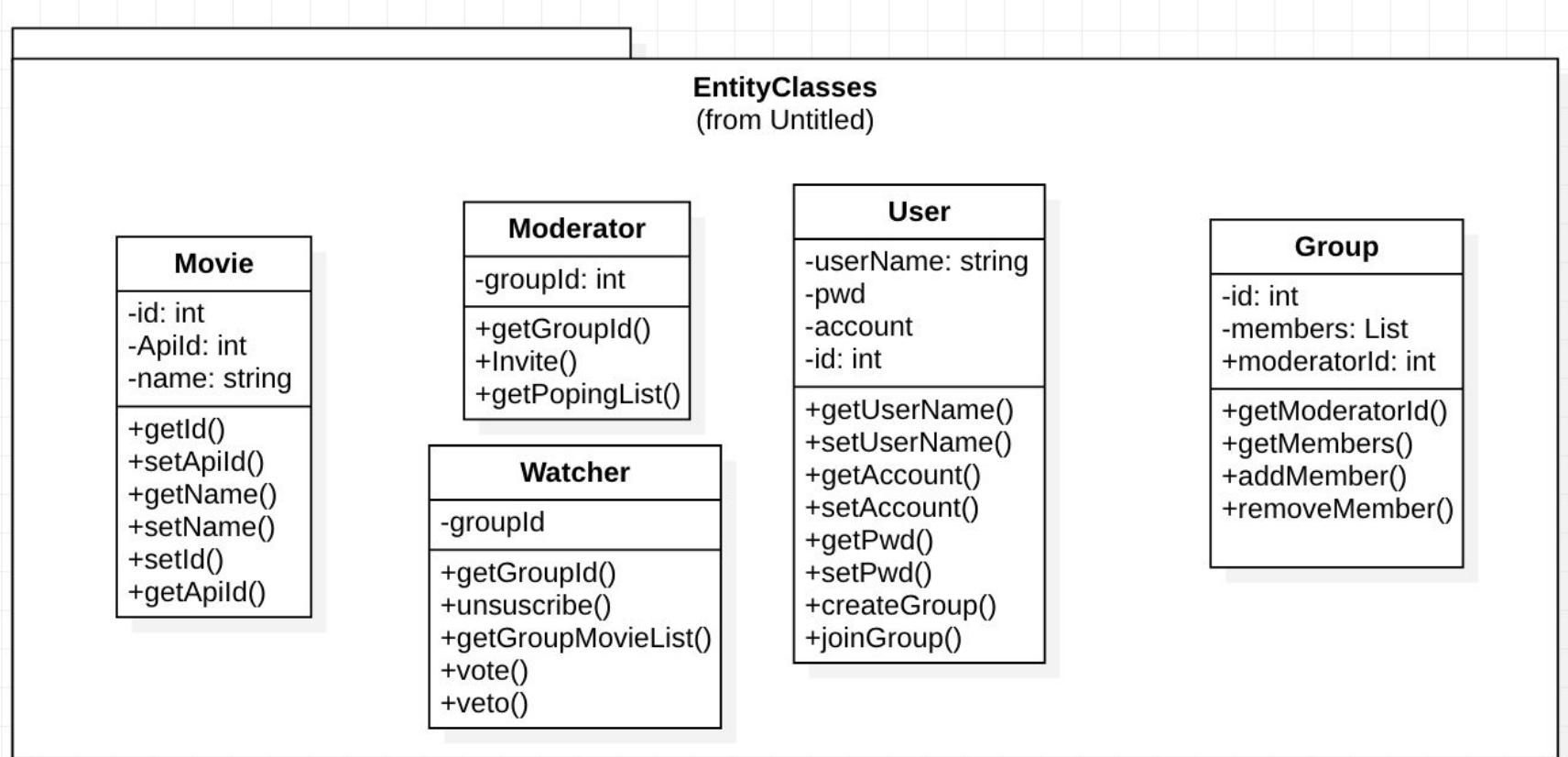
**06**

Part Six

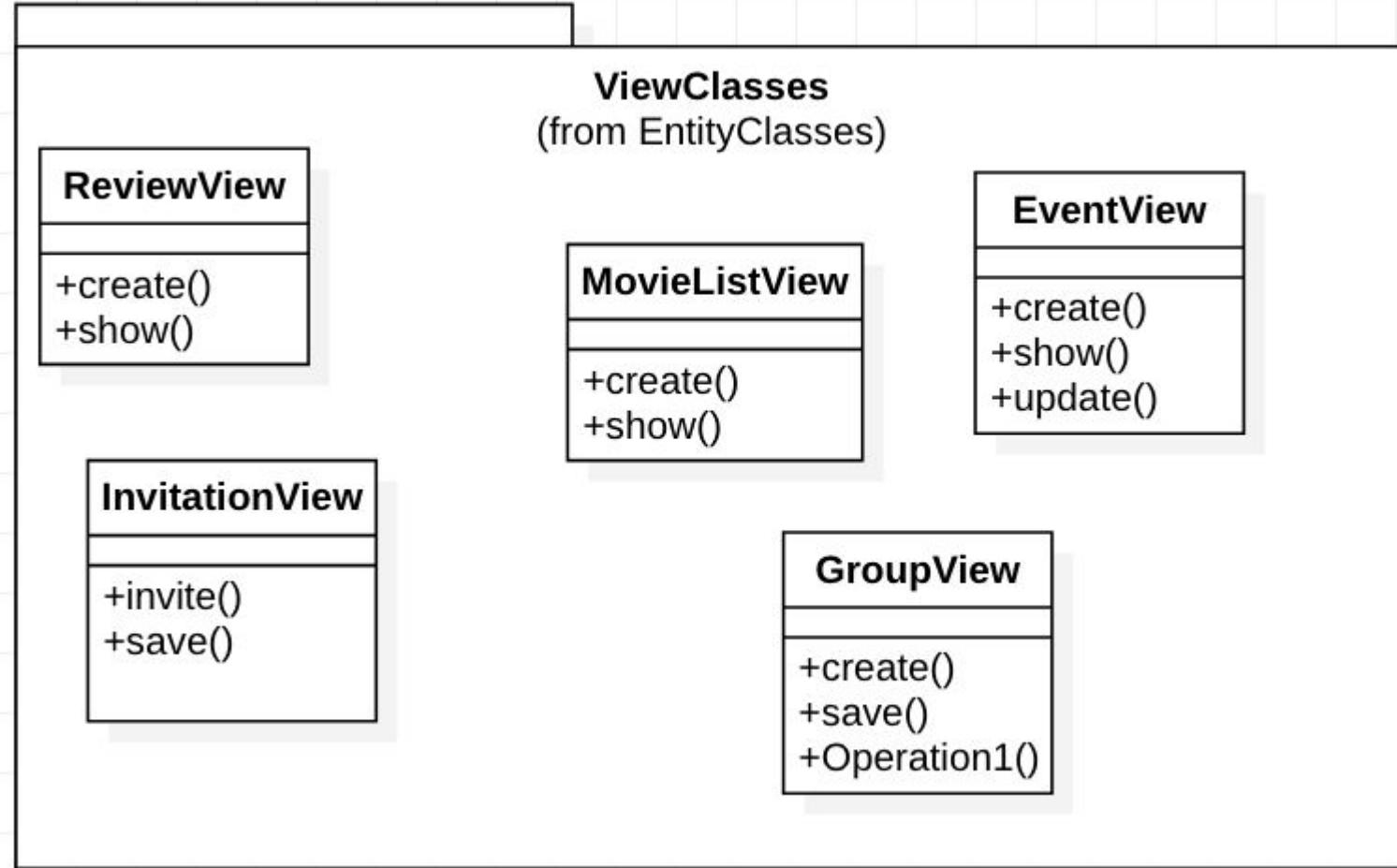
# UML Packages



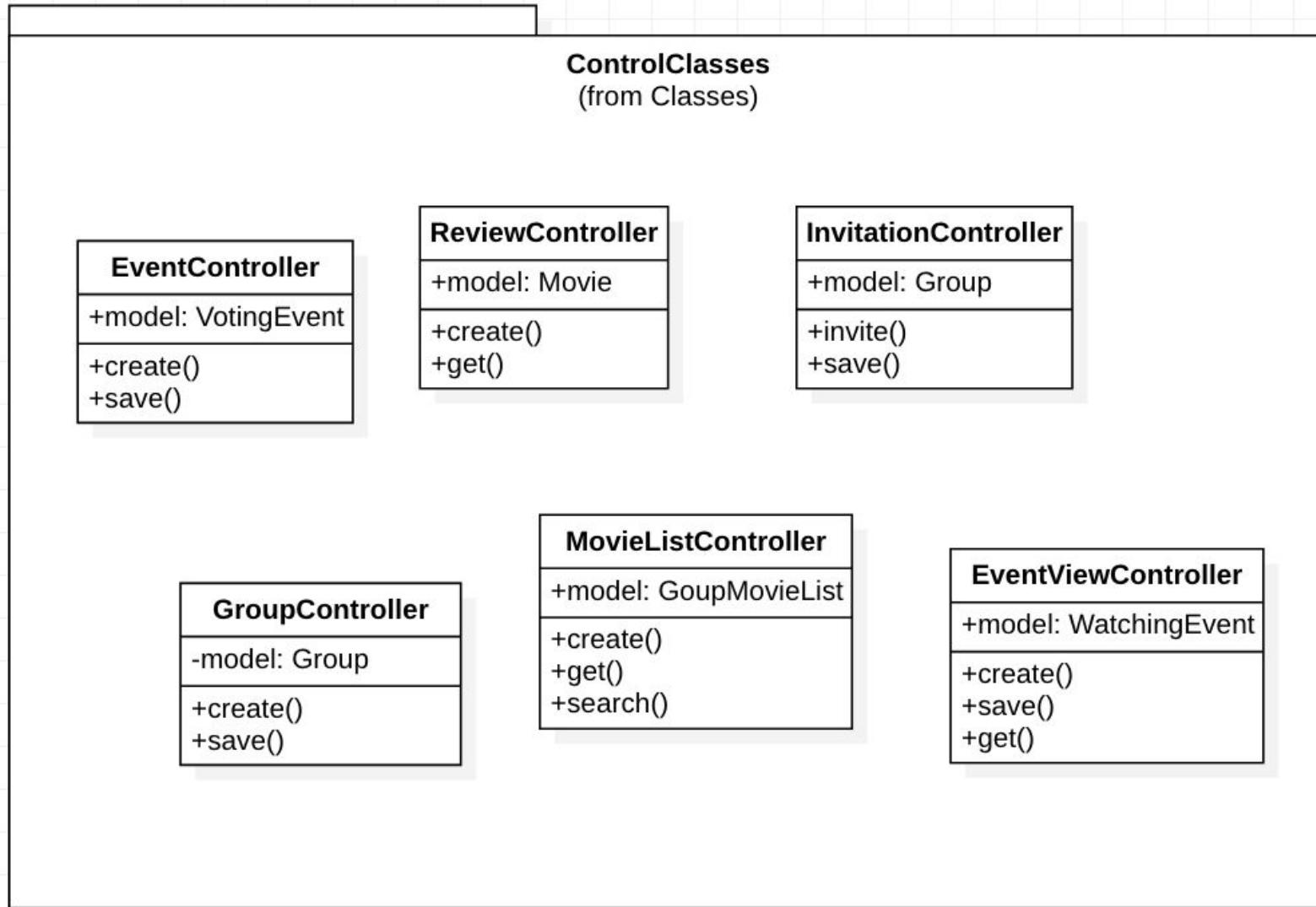
# / / / UML Packages



# / / / UML Packages



# UML Packages





# 07

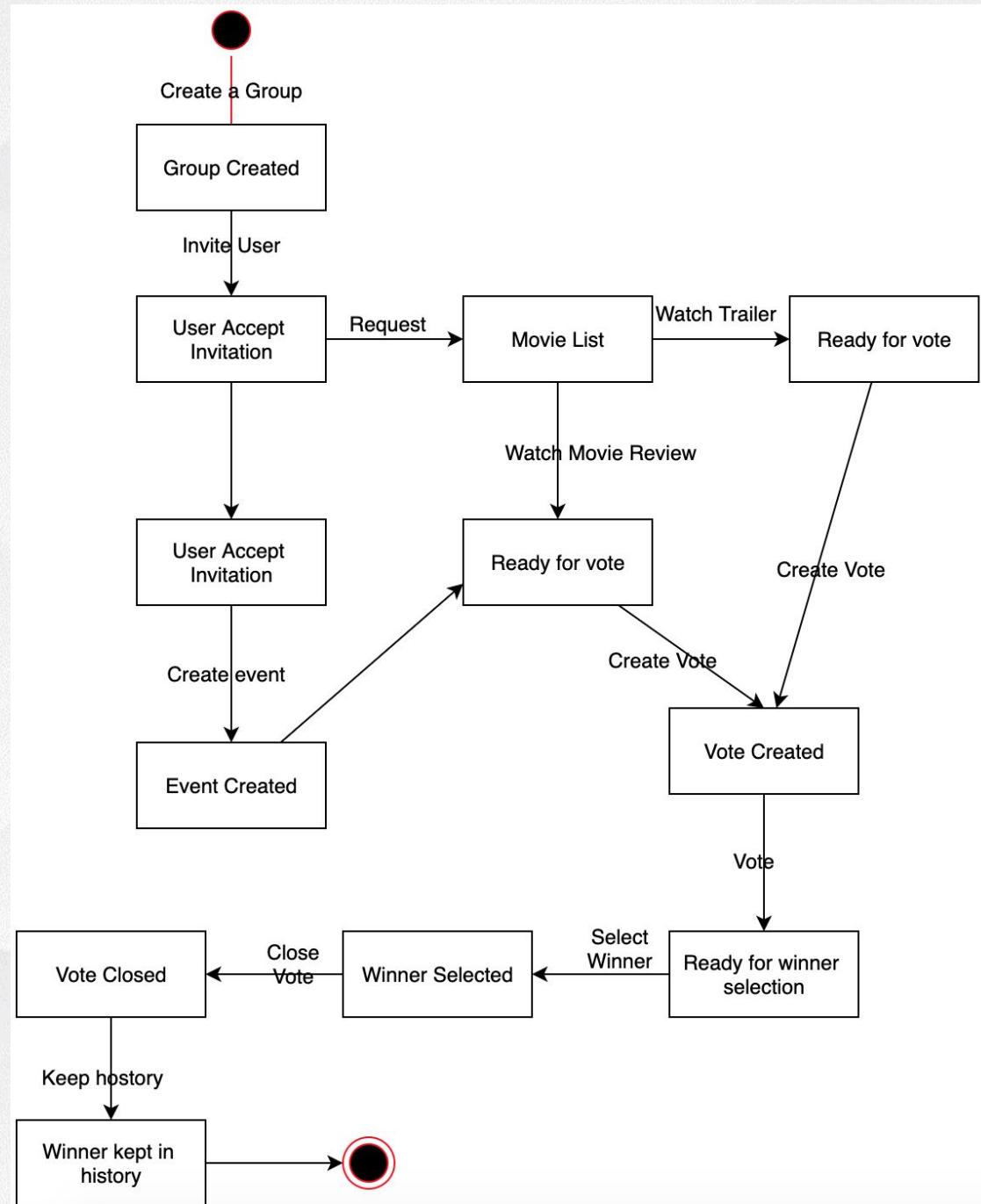
Part Seven



# State Diagram



# State Diagram



# 08

Part Seven

# Project Design



# Technology Behind Our Solution



Programming Language: PHP



Database: MySQL



Other useful tools:



Docker

A set of platform as a service products that uses OS-level virtualization to deliver software in packages called containers.



phpMyAdmin

A free software tool written in PHP, intended to handle the administration of MySQL over the Web.



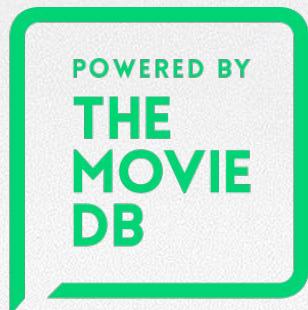
Nginx

Famous web server which can also be used as a reverse proxy, load balancer, mail proxy and HTTP cache. In our project, we used it as a web server.

# Technology Behind Our Solution



## Movie Resource API



The Movie Database (TMDb)

# Database Design



Table	Action	Rows	Type	Collation	Size	Overhead
groups		7	InnoDB	utf8_general_ci	32.0 KiB	-
group_list		3	InnoDB	utf8_general_ci	32.0 KiB	-
member		5	InnoDB	utf8_general_ci	32.0 KiB	-
movies		340	InnoDB	utf8_general_ci	288.0 KiB	-
notification		21	InnoDB	utf8_general_ci	16.0 KiB	-
vote_history		9	InnoDB	utf8_general_ci	32.0 KiB	-
voting_event		29	InnoDB	utf8_general_ci	16.0 KiB	-
7 tables	Sum	414	InnoDB	utf8_general_ci	448.0 KiB	0 B

# Screenshots

The screenshot shows a web application interface titled "My Groups". The top navigation bar includes "Starter" and a menu icon. Below the title, there are two main sections: "Create Group" and "Join a group". The "Create Group" section has a form with "Enter group name" and a "Create group" button. The "Join a group" section has fields for "Enter group ID" and "Enter group password", followed by a "Join group" button. In the center, there is a modal dialog box with a smiley face icon and the text: "send group id **12** and password **1482D4** to your friends to invite them." It contains an "ok" button and a close "X" button. At the bottom of the page, there are footer links for "Copyright © Your Website 2019", "Privacy Policy · Terms & Conditions", and a log out link.

Starter

CORE

My Groups

Create Group

Enter group name

Create group

Join a group

Enter group ID

Enter group password

Join group

test

1

Invite

Events

12

1482D4

ok

X

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# Screenshots

The screenshot shows a web application interface titled "My Groups". The top navigation bar includes "Starter" and a menu icon. A sidebar on the left labeled "CORE" contains a "My Groups" section with a group icon. The main content area features two forms: "Create Group" (with fields for group name and a blue "Create group" button) and "Join a group" (with fields for group ID and password). Below these forms is a list item for "group11" with "Unsubscribe" and "Events" buttons. A modal window titled "New MSG" displays the message: "A new Watching Event is created, check it out here! [link](#) X". The footer includes copyright information ("Copyright © Your Website 2019"), a log out link ("Logged in as: test4 log out"), and links for "Privacy Policy · Terms & Conditions".

Starter

CORE

My Groups

Create Group

Enter group name

Create group

Join a group

Enter group ID

Enter group password

Join group

group11

New MSG

A new Watching Event is created, check it out here! [link](#) X

Unsubscribe

Events

Copyright © Your Website 2019

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[Privacy Policy](#) · [Terms & Conditions](#)

# Screenshots



Starter

CORE

My Groups

## group11

group11

Voting Event

Event 2020-04-14 17:27:17 is on progress!

[Close this event](#)

Voting Event History

2020-04-14 17:21:12

2020-04-14 17:19:26

Retrieve Movies

[Retrieve](#) [Clear All Movies](#)



**MUD**

Mud

Two boys find a fugitive hiding out on an island in the Mississippi River and form a pact to help him.

[Detail](#) [Like](#)



Naruto the Movie: Le

Naruto, Shikamaru, and Sakura are executing their mission of delivering a lost pet to a certain village.

[Detail](#) [Like](#)



Clear and Present Da

CIA Analyst Jack Ryan is drawn into an illegal war fought by the US government against a Colombian d

[Detail](#) [Like](#)



DANGAL



Logged in as: test [log out](#)

# Screenshots

Starter    ≡

CORE

My Groups

## group11

group11

Voting Event

Create Voting Event

Retrieve Movies

Retrieve Clear All Movies

MUD, Official Theatrical Trailer

Mud

Watch later Share

Clear and Present Da

CIA Analyst Jack Ryan is drawn into an illegal war fought by the US government against a Colombian d

The King of Comedy

Aspiring comic Rupert Pupkin attempts to achieve success in show business by stalking his idol

The Scorpion King 3:

Since his triumphant rise to power in the original blockbuster "The Scorpion King", Mathewus' Kinoko

Stitch! The Movie

The continuing adventures of Lilo, a little Hawaiian girl, and Stitch, the galaxy's most wanted extr

Dangal

Dangal is an extraordinary true story based on the life of Mahavir Singh and his two daughters, Geet

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# Screenshots



Starter

CORE

My Groups

group11

group11

Voting Event

Create Voting Event

Retrieve Movies

Retrieve Clear All Movies

Two boys find a fugitive hiding out on an island in the Mississippi River and form a pact to help him reunite with his lover and escape.

Overview

Reviews

Wuchak

To love or not love in Arkansas along the Mississippi RELEASED IN 2012-2013 and written & directed by Jeff Nichols, "Mud" is a southern gothic crime drama taking place in Arkansas along the Mississippi River where two boys discover a fugitive named Mud (Matthew McConaughey) hiding out on an island and decide to help him evade the authorities & vigilantes that are on his trail in hope of reuniting him with his true love, Juniper (Reese Witherspoon). This is a film about authentic Southern people and the code by which they live. Urbanized types usually refer to them as "rednecks." While some of them may be "white trash," most of them are not. They're independent of the government, hardworking and respectful citizens, not to mention rooted in

The Scorpion King 3:

Since his triumphant rise to power in the original blockbuster "The Scorpion King", Mathew Kino

Stitch! The Movie

The continuing adventures of Lilo, a little Hawaiian girl, and Stitch, the galaxy's most wanted extr

Dangal

Dangal is an extraordinary true story based on the life of Mahavir Singh and his two daughters, Geet

Clear and Present Da

CIA Analyst Jack Ryan is drawn into an illegal war fought by the US government against a Colombian d

Detail

The King of Comedy

Aspiring comic Rupert Pupkin attempts to achieve success in show business by stalking his idol



# Screenshots

The screenshot shows a web-based application for managing movie voting events. At the top, there's a navigation bar with 'Starter' and a menu icon. Below it, a header bar displays 'group11' and 'group11'. On the left, a sidebar titled 'CORE' contains 'My Groups' and a 'Voting Event' section with a 'Create Voting Event' button. Another sidebar titled 'Retrieve Movies' has 'Retrieve' and 'Clear All Movies' buttons. The main content area features a 'Voting Event History' grid with two rows. The top row, labeled 'Naruto the Movie: Legend of the Stone of Gelel', is highlighted in pink. The bottom row, labeled 'Mud', is highlighted in orange. A horizontal scale at the bottom of the grid ranges from 0 to 1.0. To the right of the grid, there's a movie poster for 'Clear and Present Danger' featuring Harrison Ford. Below the poster, a summary text reads: 'CIA Analyst Jack Ryan is drawn into an illegal war fought by the US government against a Colombian d...' with a 'Detail' button. At the bottom, there are four movie cards: 'The Scorpion King 3:', 'Stitch! The Movie', 'Dangal', and 'The King of Comedy'.

Starter

group11

group11

Voting Event

Create Voting Event

Retrieve Movies

Retrieve Clear All Movies

Naruto the Movie: Legend of the Stone of Gelel

Mud

0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0

Clear and Present Danger  
CIA Analyst Jack Ryan is drawn into an illegal war fought by the US government against a Colombian d...  
[Detail](#)

The Scorpion King 3:  
Since his triumphant rise to power in the original blockbuster "The

Stitch! The Movie  
The continuing adventures of Lilo, a little Hawaiian girl, and Stitch.

Dangal  
Dangal is an extraordinary true story based on the life of Mahavir

The King of Comedy  
Aspiring comic Rupert Pupkin attempts to achieve success in

Logged in as: test [log out](#)

# Demonstration



# Question Time



# Thanks

