

CPSC 304 Project Cover Page

University of British Columbia, Vancouver

Department of Computer Science

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Group Number: 102

Name	Student Number	CS Alias (Userid)	Preferred Email Address
William Chow	93966943	x3c4k	williamchow604@gmail.com
Simrit Nijjar	66234287	s9m3h	simritnijjar@outlook.com

By typing our names and student numbers in the above table, we certify that the work in the attached assignment was performed solely by those whose names and student IDs are included above. (In the case of Project Milestone 0, the main purpose of this page is for you to let us know your e-mail address, and then let us assign you to a TA for your project supervisor.)

In addition, we indicate that we are fully aware of the rules and consequences of plagiarism, as set forth by the Department of Computer Science and the University of British Columbia

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Database Initialization Script

Can be found on our GitHub repo at the following link

https://github.students.cs.ubc.ca/CPSC304-2023W-T1/project_i2o5k_s9m3h_x3c4k/blob/main/sql/createStreamingServiceDatabase.sql

Project Description

A Streaming Service application that allows users to register and log into their accounts. Once logged in, user's are able to subscribe to different streaming services and view media offered in each. The user is also able to create many watch lists and add any media they like to it.

Schema Changes

- We added passwordHash and passwordSalt attributes to StreamingUser table so that user's can log in with a password. We have two password attributes because we have also added some security to the passwords using hashing.
- Most ID attributes were switched from `INT` to `VARCHAR(255)` and were set to default to `UUID()`. This was done to ensure randomly generated IDs for all relevant objects and make it harder for a user to stumble upon a page they shouldn't have had access to.

General Changes

- Project backend language was switched from PHP to TypeScript, using Express.js and node.js
- Project database server was switched to a local instance of MySQL

Schema Information

Copy of Schema

- `StreamingUser(userID , userName, email, birthday, passwordHash, passwordSalt)`
- `Age(birthday , age)`
- `StreamingService(serviceName , company)`
- `Studio(studioName , headquarter, creationDate)`
- `Subscription(serviceName , tier , duration, totalCost)`
- `Cost(duration , totalCost , monthlyCost)`
- `SubscribesTo(userID , serviceName , tier)`
- `Media(mediaID , mediaName, rating, studioName , serviceName)`
- `WatchHistory(userID , mediaID , dateAdded)`
- `WatchList(listID , listName, userID)`
- `AddToList(listID , mediaID)`

- Genre(genreName , mediaID)
- TVShow(mediaID , numberOfSeasons)
- Season(mediaID , seasonNumber , episodeCount)
- Movie(mediaID , version , length)

Database Contents

StreamingUser

userID	userName	email	birthday	passwordHash	passwordSalt
NULL	NULL	NULL	NULL	NULL	NULL

Age

birthday	age
NULL	NULL

StreamingService

serviceName	company
Crunchyroll	Sony
Disney Plus	Disney
Max	HBO
Netflix	Netflix
Prime Video	Amazon
NULL	NULL

Studio

studioName	headquarter	creationDate
20th Century Studios	Los Angeles, USA	1935-05-31
Cartoon Network	California, USA	2010-01-30
Columbia Pictures	California, USA	1924-01-10
CoMix Wave Films	Tokyo, Japan	1970-01-01
HBO	Maryland, USA	1980-05-11
MAPPA	Tokyo, Japan	1972-02-12
MGM Television	California, USA	1956-06-30
Sony Pictures	California, USA	1987-09-21
Toei Animation	Tokyo, Japan	1960-05-20
Tomorrow Studios	California, USA	2014-01-01
Universal Pictures	California, USA	1912-03-15
Warner Bros	California, USA	1923-04-04
NULL	NULL	NULL

Subscription

	serviceName	tier	duration	totalCost
	Prime Video	Standard	1	9.99
	Netflix	Standard	1	12.99
	Prime Video	Premium	1	15.99
	Netflix	Premium	1	20.99
	Max	Standard	2	40
	Max	Premium	2	60
	Disney Plus	Standard	3	33
	Disney Plus	Premium	6	90
	Crunchyroll	Standard	12	120
	Crunchyroll	Premium	12	180
	NULL	NULL	NULL	NULL

Cost

	duration	totalCost	monthlyCost
	1	9.99	9.99
	1	12.99	12.99
	1	15.99	15.99
	1	20.99	20.99
	2	40	20
	2	60	30
	3	33	11
	6	90	15
	12	120	10
	12	180	15
	NULL	NULL	NULL

SubscribesTo

userID	serviceName	tier
NULL	NULL	NULL

Media

mediaID	mediaName	rating	studioName	serviceName	
9	The Queen's Gambit	8.5	Sony Pictures	Netflix	
8	ONE PIECE	8.4	Tomorrow Studios	Netflix	
7	Wednesday	8.1	MGM Television	Netflix	
6	Breaking Bad	9.5	Sony Pictures	Netflix	
50	SpongeBob SquarePants	8.2	Cartoon Network	Prime Video	
5	Cloudy with a Chance of Meatballs 2	6.3	Sony Pictures	Netflix	
49	Hell's Kitchen	7.2	MGM Television	Prime Video	
48	Fellow Travelers	7.5	MGM Television	Prime Video	
47	The Boys	8.7	Sony Pictures	Prime Video	
46	Invincible	8.7	Sony Pictures	Prime Video	
45	Jurassic Park	8.2	Sony Pictures	Prime Video	
44	Twilight	5.3	Universal Pictures	Prime Video	
43	Top Gun: Maverick	8.3	20th Century Studios	Prime Video	
42	Terrifier 2	6.1	Tomorrow Studios	Prime Video	
41	Interstellar	8.7	Universal Pictures	Prime Video	
40	Hawkeye	7.5	Sony Pictures	Disney Plus	
4	Kingsman: The Secret Service	7.7	20th Century Studios	Netflix	
39	Marvel's Iron Fist	6.4	Sony Pictures	Disney Plus	
38	Marvel's Agents of S.H.I.E.L.D	7.5	Columbia Pictures	Disney Plus	
37	Marvel's Daredevil	8.6	Sony Pictures	Disney Plus	
36	Loki	8.2	Warner Bros	Disney Plus	
35	Ant-Man and the Wasp: Quantumania	6.1	Sony Pictures	Disney Plus	
34	Venom	6.6	Sony Pictures	Disney Plus	
33	Avatar: The Way of Water	7.6	20th Century Studios	Disney Plus	
32	Guardians of the Galaxy Vol. 3	7.9	Sony Pictures	Disney Plus	
31	Home Alone	7.7	Columbia Pictures	Disney Plus	
30	Death Note	8.9	Toei Animation	Crunchyroll	
3	Hotel Transylvania 2	6.6	Sony Pictures	Netflix	
29	Chainsaw Man	8.4	MAPPA	Crunchyroll	
28	Hunter x Hunter	9	CoMix Wave Films	Crunchyroll	
27	Jujutsu Kaisen	8.6	MAPPA	Crunchyroll	
26	Attack on Titan	9	MAPPA	Crunchyroll	
25	Your Name	8.4	CoMix Wave Films	Crunchyroll	
24	One Piece Film Red	6.7	Toei Animation	Crunchyroll	
23	Demon Slayer The movie: Mugen T...	8.2	MAPPA	Crunchyroll	
22	Jujutsu Kaisen 0	10	MAPPA	Crunchyroll	
21	Fullmetal Alchemist the Movie: Con...	7.3	Toei Animation	Crunchyroll	
20	Watchmen	5.8	Columbia Pictures	Max	
2	The Social Network	7.8	Columbia Pictures	Netflix	
19	Adventure Time	9.5	Cartoon Network	Max	
18	Game of Thrones	8.9	20th Century Studios	Max	
17	Friends	6.9	Universal Pictures	Max	
16	Rick and Morty	8.5	Sony Pictures	Max	
15	Coraline	8	MGM Television	Max	
14	The Polar Express	6.8	Warner Bros	Max	
13	The Nun II	5.6	HBO	Max	
12	Elf	7.1	Sony Pictures	Max	
11	Justice League	7.9	Warner Bros	Max	
10	Arcane	9	Universal Pictures	Netflix	
1	Spider-Man: Across the Spider-Verse	8.7	Sony Pictures	Netflix	
NULL	NULL	NULL	NULL	NULL	

WatchHistory

userID	mediaID	dateAdded	
NULL	NULL	NULL	

WatchList

listID	listName	userID	
NULL	NULL	NULL	

AddToList

listID	mediaID	
NULL	NULL	

Genre

genreName	medialD
Action	1
Adventure	1
Animation	1
Action	10
Adventure	10
Animation	10
Action	11
Adventure	11
Fantasy	11
Action	12
Comedy	12
Horror	13
Mystery	13
Thriller	13
Adventure	14
Comedy	14
Animation	15
Drama	15
Fantasy	15
Adventure	16
Animation	16
Comedy	16
Science-Fi...	16
Comedy	17
Romance	17
Drama	18
Fantasy	18
Science-Fi...	18
Adventure	19
Animation	19
Comedy	19
Biography	2
Drama	2
Crime	20
Drama	20
Science-Fi...	20
Animation	21
Drama	21
Fantasy	21
Action	22
Adventure	22
Animation	22
Fantasy	22
Action	23
Adventure	23

genreName	medialD
Animation	23
Fantasy	23
Thriller	23
Action	24
Adventure	24
Animation	24
Fantasy	24
Animation	25
Drama	25
Fantasy	25
Romance	25
Action	26
Adventure	26
Animation	26
Horror	26
Science-Fi...	26
Action	27
Adventure	27
Animation	27
Thriller	27
Action	28
Adventure	28
Animation	28
Comedy	28
Science-Fi...	28
Action	29
Adventure	29
Animation	29
Mystery	29
Science-Fi...	29
Thriller	29
Adventure	3
Animation	3
Comedy	3
Animation	30
Crime	30
Drama	30
Mystery	30
Science-Fi...	30
Thriller	30
Comedy	31
Family	31
Kids	31
Action	32
Adventure	32

genreName	medialD
Comedy	32
Science-Fi...	32
Action	33
Adventure	33
Fantasy	33
Science-Fi...	33
Action	34
Adventure	34
Science-Fi...	34
Action	35
Adventure	35
Comedy	35
Science-Fi...	35
Action	36
Adventure	36
Drama	36
Fantasy	36
Science-Fi...	36
Action	37
Adventure	37
Crime	37
Drama	37
Fantasy	37
Science-Fi...	37
Action	38
Adventure	38
Drama	38
Mystery	38
Science-Fi...	38
Thriller	38
Action	39
Adventure	39
Crime	39
Drama	39
Fantasy	39
Science-Fi...	39
Action	4
Adventure	4
Comedy	4
Action	40
Adventure	40
Comedy	40
Crime	40
Drama	40
Science-Fi...	40

genreName	medialD
Horror	42
Mystery	42
Thriller	42
Action	43
Adventure	43
Drama	43
Drama	44
Fantasy	44
Romance	44
Action	45
Adventure	45
Mystery	45
Science-Fi...	45
Thriller	45
Action	46
Adventure	46
Animation	46
Mystery	46
Science-Fi...	46
Thriller	46
Action	47
Adventure	47
Comedy	47
Crime	47
Drama	47
Science-Fi...	47
Drama	48
Romance	48
Reality TV	49
Adventure	5
Animation	5
Comedy	5
Animation	50
Comedy	50
Family	50
Fantasy	50
Kids	50
Science-Fi...	50
Crime	6
Drama	6
Thriller	6
Comedy	7
Crime	7
Fantasy	7
Action	8

TVShow

medialD	numberOfSeasons	
10	1	
16	6	
17	3	
18	4	
19	10	
20	1	
26	4	
27	2	
28	1	
29	1	
30	1	
36	2	
37	3	
38	7	
39	2	
40	1	
46	2	
47	3	
48	1	
49	5	
50	6	
6	5	
7	1	
8	1	
9	1	
NULL	NULL	

Season

mediaID	seasonNumber	episodeCount
10	1	9
16	1	11
16	2	10
16	3	10
16	4	10
16	5	10
16	6	5
17	1	10
17	2	9
17	3	10
18	1	15
18	2	15
18	3	14
18	4	20
19	1	13
19	2	13
19	3	13
19	4	13
19	5	13
19	6	13
19	7	13
19	8	13
19	9	13
19	10	13
20	1	9
26	1	25
26	2	12
26	3	22
26	4	30
27	1	24
27	2	12
28	1	46
29	1	12
30	1	37
36	1	6
36	2	6
37	1	13
37	2	13
37	3	13

mediaID	seasonNumber	episodeCount
37	3	13
38	1	22
38	2	22
38	3	22
38	4	22
38	5	22
38	6	13
38	7	13
39	1	13
39	2	10
40	1	6
46	1	8
46	2	4
47	1	8
47	2	8
47	3	8
48	1	5
49	1	8
49	2	8
49	3	8
49	4	8
49	5	8
50	1	20
50	2	20
50	3	20
50	4	20
50	5	20
50	6	20
6	1	7
6	2	13
6	3	13
6	4	13
6	5	16
7	1	8
8	1	8

Movie

mediaID	version	length
1	Theatrical Release	140
11	Zack Snyder's Cut	242
12	Theatrical Release	97
13	Theatrical Release	110
14	Directors Cut	98
15	Home Video	100
2	Theatrical Release	120
21	Directors Cut	105
22	Theatrical Release	105
23	Theatrical Release	117
24	Home Video	115
25	Theatrical Release	106
3	Theatrical Release	149
31	Special edition	103
32	Anniversary edition	150
33	Theatrical Release	192
34	Theatrical Release	112
35	Theatrical Release	125
4	Theatrical Release	129
41	Directors Cut	189
42	Theatrical Release	138
43	Theatrical Release	131
44	Anniversary edition	122
45	Theatrical Release	127
5	Theatrical Release	95
NULL	NULL	NULL

Queries

INSERT Operation

File

```
/backend/dynamic/DynamicAddRoute.ts
```

Line Number

```
21
```

File

```
/frontend/src/components/media/AddToWatchList.tsx
```

Line Number

```
43
```

Query

```
INSERT INTO addToList(listID, mediaID) VALUES(${listID}, ${mediaID})
```

DELETE Operation

File

```
/backend/Server.ts
```

Line Number

279

Query

```
DELETE FROM Streaminguser
WHERE userID = ${id}
```

UPDATE Operation

File

/backend/Server.ts

Line Number

262

Query

```
UPDATE Streaminguser
SET email = ${newEmail}
WHERE userID = ${id}
```

Selection

File

/backend/dynamic/DynamicGetMedia.ts

Line Number

32

Query

The following is a sample of a completed query after user input

```
SELECT m.mediaID,
       m.mediaName,
       m.rating,
       m.studioName,
       m.serviceName,
```

```

        d.version, d.length,
        GROUP_CONCAT(g.genreName) AS genres
FROM Media m
    JOIN Movie d
        ON m.mediaID = d.mediaID
    JOIN Genre g
        ON m.mediaID = g.mediaID
WHERE (serviceName = "Crunchyroll" OR serviceName = "Disney Plus") AND (mediaName LIKE "%")
GROUP BY m.mediaID,
    m.mediaName,
    m.rating,
    m.studioName,
    m.serviceName,
    d.version, d.length

```

Projection

File

`/backend/Server.ts`

Line Number

220

Query

```

SELECT  l.listID,
        m.mediaID,
        ${filteredColumns}
FROM AddToList l
    JOIN Media m
        ON l.mediaID = m.mediaID
WHERE l.listID = ?

```

JOIN

File

`/backend/Server.ts`

Line Number

142

Query

```

SELECT  s.serviceName,
        s.tier,

```

```

        c.monthlyCost
FROM Subscription s
    CROSS JOIN Cost c
    ON s.duration = c.duration
    AND s.totalCost = c.totalCost
WHERE NOT EXISTS (
    SELECT *
    FROM SubscribesTo s1
    WHERE s1.userID = ${req.params.userID}
        AND s.serviceName = s1.serviceName
)
ORDER BY s.serviceName, monthlyCost

```

Aggregation With **GROUP BY**

File

/backend/Server.ts

Line Number

300

Query

```

SELECT W.listID, W.listName, W.userID, COUNT(A.listID) AS numberOfMedia
FROM watchList W LEFT JOIN addToList A ON W.listID = A.listID
WHERE W.userID = '${homeUser?.id}'
GROUP BY W.listName, W.listID

```

Aggregation with **HAVING**

File

/backend/Server.ts

Line Number

324

Query

```

SELECT studioName, MIN(rating) as minRating, MAX(rating) as maxRating
FROM Media
WHERE rating >= ${minRating}
GROUP BY studioName
HAVING COUNT(*) > 1

```

Nested Aggregation with **GROUP BY**

File

`/backend/Server.ts`

Line Number

`309`

Query

```
SELECT M.studioName, ROUND(AVG(M.rating), 2) AS avgRating
FROM Media M
GROUP BY M.studioName
HAVING ${n} <=
    (SELECT COUNT(*) FROM Media M2 WHERE M.studioName = M2.studioName)
```

Division

File

Backend: `/backend/dynamic/DynamicGetMedia.ts`

Frontend: `/frontend/src/components/media/filters/Filters.tsx`

Line Number

Backend: `60-66`

Frontend: `108-109`

Query

```
SELECT m.mediaID,
       m.mediaName,
       m.rating,
       m.studioName,
       m.serviceName,
       d.version, d.length,
       GROUP_CONCAT(g.genreName) AS genres
FROM Media m
      JOIN Movie d
        ON m.mediaID = d.mediaID
      JOIN Genre g
        ON m.mediaID = g.mediaID
WHERE (serviceName = "Disney Plus") AND (mediaName LIKE "%") AND g.genreName IN ('Adventure','Action')
GROUP BY m.mediaID,
         m.mediaName,
         m.rating,
```



```
m.studioName,
m.serviceName,
d.version, d.length
HAVING COUNT (DISTINCT g.genreName) = 2;
```

User Interface Implementation

INSERT Operation

Before

User is on the Media page

MEDIA NAME	RATING	STUDIO NAME	SERVICE NAME	VERSION	LENGTH	GENRES
Spider-Man: Across the Spider-Verse	8.7	Sony Pictures	Netflix	Theatrical Release	140	Action,Adventure,Animation
Justice League	7.9	Warner Bros	Max	Zack Snyder's Cut	242	Action,Adventure,Fantasy
Elf	7.1	Sony Pictures	Max	Theatrical Release	97	Action,Comedy
The Nun II	5.6	HBO	Max	Theatrical Release	110	Horror,Mystery,Thriller
The Polar Express	6.8	Warner Bros	Max	Directors Cut	98	Adventure,Comedy

During

User selects a watch list from the dropdown and clicks on a media they want to “Add to Watchlist”

Movies Search						
Services:		Studios:		Genres:		
watch list 1 Add to Watchlist						
MEDIA NAME	RATING	STUDIO NAME	SERVICE NAME	VERSION	LENGTH	GENRES
Spider-Man: Across the Spider-Verse	8.7	Sony Pictures	Netflix	Theatrical Release	140	Action,Adventure,Animation
Justice League	7.9	Warner Bros	Max	Zack Snyder's Cut	242	Action,Adventure,Fantasy
Elf	7.1	Sony Pictures	Max	Theatrical Release	97	Action,Comedy
The Nun II	5.6	HBO	Max	Theatrical Release	110	Horror,Mystery,Thriller
The Polar Express	6.8	Warner Bros	Max	Directors Cut	98	Adventure,Comedy

After

The media is added and displayed in the watch list the user specified

watch list 1			
Select Columns: ▾			
MEDIA NAME	RATING	STUDIO NAME	SERVICE NAME
The Nun II	5.6	HBO	Max

DELETE Operation

Before

The StreamingUser table shows a single row

userID	userName	email	birthday	passwordHash
b7e638f3-9029-11ee-b011-00d861c8336d	sim	sim@gmail.com	2023-12-01	4eff03a70372f85eff24b8366ad3dbbf5771c6773..
NULL	NULL	NULL	NULL	NULL

During

Triggered by clicking **Yes** after clicking **Delete Account**

Update username

Enter a new username

Submit changes

Old password

Enter old password

Update password

Enter a new password

Submit changes

Update email

Enter new email

Submit changes

Delete Account

Delete Account

Are you sure you want to delete your account?

No

Yes

After

The `StreamingUser` table has no filled tuples

userID	userName	email	birthday	passwordHash
NULL	NULL	NULL	NULL	NULL

UPDATE Operation

Before

The `StreamingUser` table shows `admin@gmail.com`

userID	userName	email	birthday	passwordHash
b7e638f3-9029-11ee-b011-00d861c8336d	admin	admin@gmail.com	2023-12-01	4eff03a70372f85eff24b8366ad3dbbf5771c6773
NULL	NULL	NULL	NULL	NULL

During

Triggered by entering a new email and clicking `Submit changes`

Account Settings

Update username

Enter a new username

Submit changes

Old password

Enter old password

Update password

Enter a new password

Submit changes

Update email

bob@gmail.com

Submit changes

Delete Account

After

The `StreamingUser` table shows `bob@gmail.com` as the `email` attribute

userID	userName	email	birthday	passwordHash
b7e638f3-9029-11ee-b011-00d861c8336d	admin	bob@gmail.com	2023-12-01	4eff03a70372f85eff24b8366ad3dbbf5771c6773..
	NULL	NULL	NULL	NULL

Selection

Before

User is on the Media page

adminHomeMediaWatch ListsStudios

Media

Movies

Search

Services:

Studios:

Genres:

Create new list

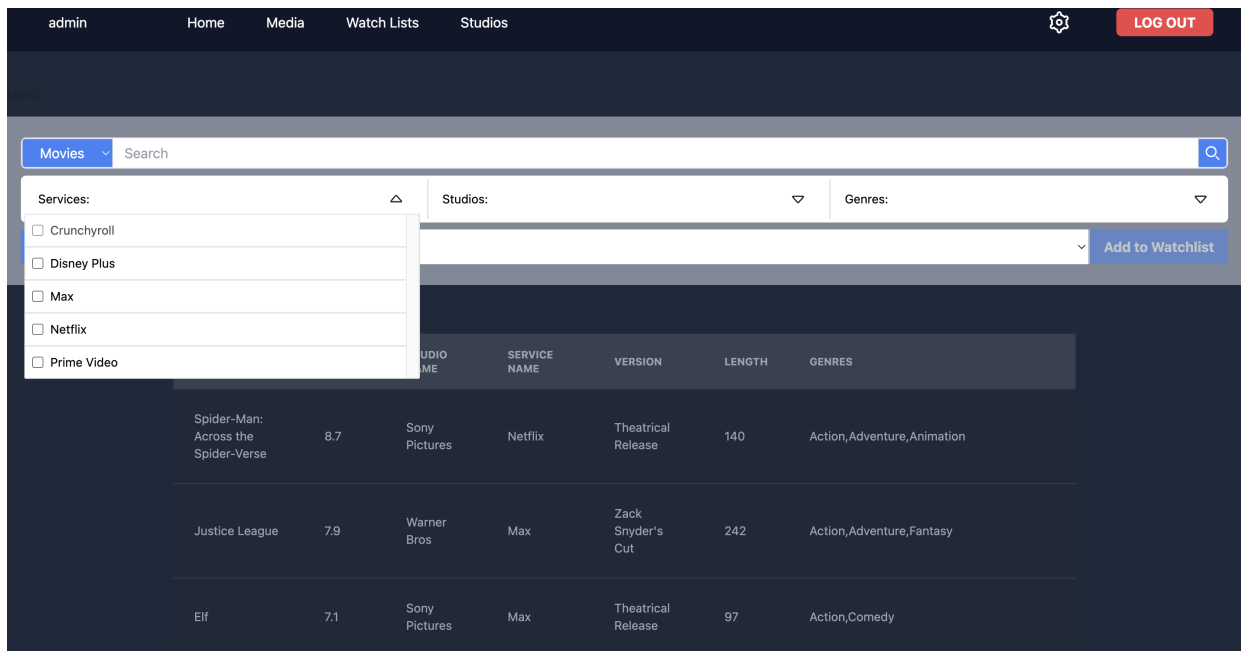
Create List

Add to Watchlist

MEDIA NAME	RATING	STUDIO NAME	SERVICE NAME	VERSION	LENGTH	GENRES
Spider-Man: Across the Spider-Verse	8.7	Sony Pictures	Netflix	Theatrical Release	140	Action,Adventure,Animation
Justice League	7.9	Warner Bros	Max	Zack Snyder's Cut	242	Action,Adventure,Fantasy
Elf	7.1	Sony Pictures	Max	Theatrical Release	97	Action,Comedy

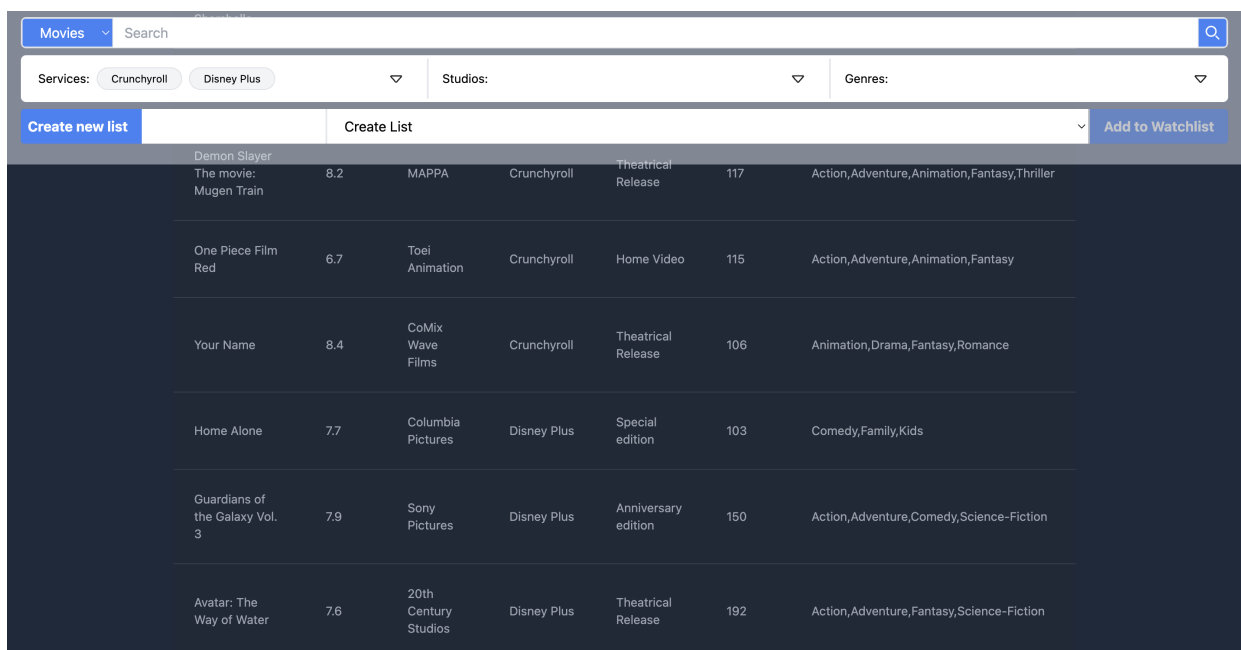
During

User selects one or more services, from the example, I will choose Crunchyroll and Disney plus



After

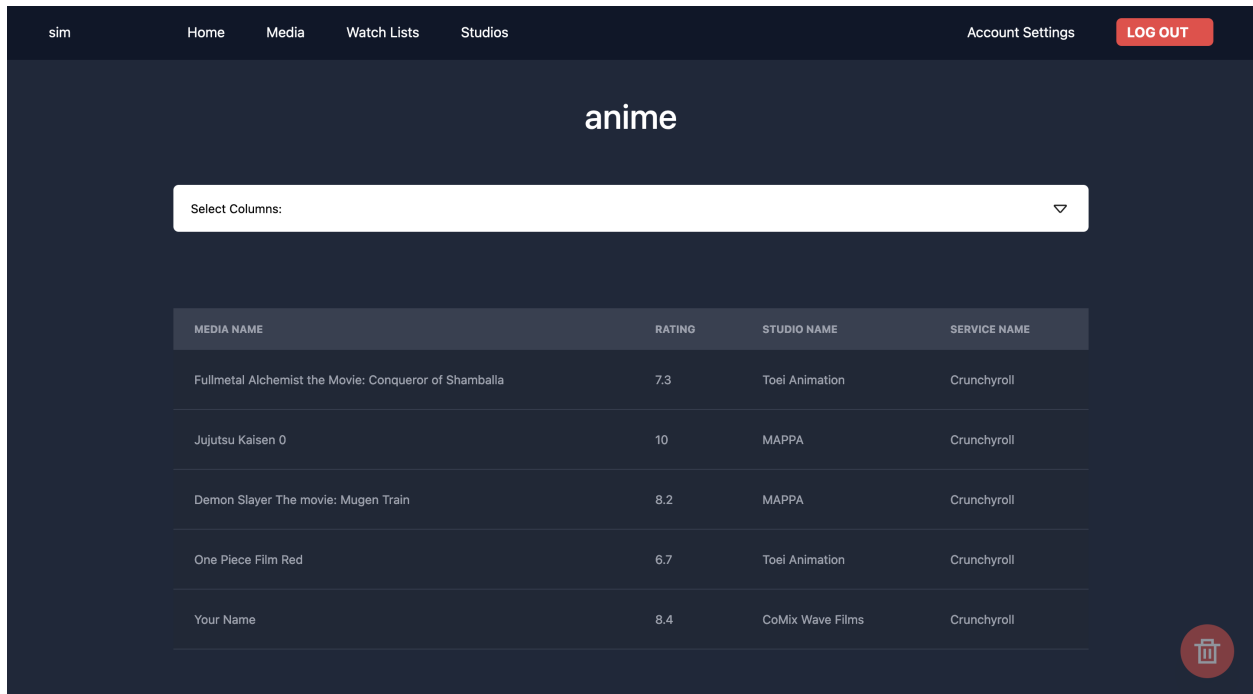
Table displays media from Crunchyroll or Disney plus



Projection

Before

The user is viewing one of their watchlists



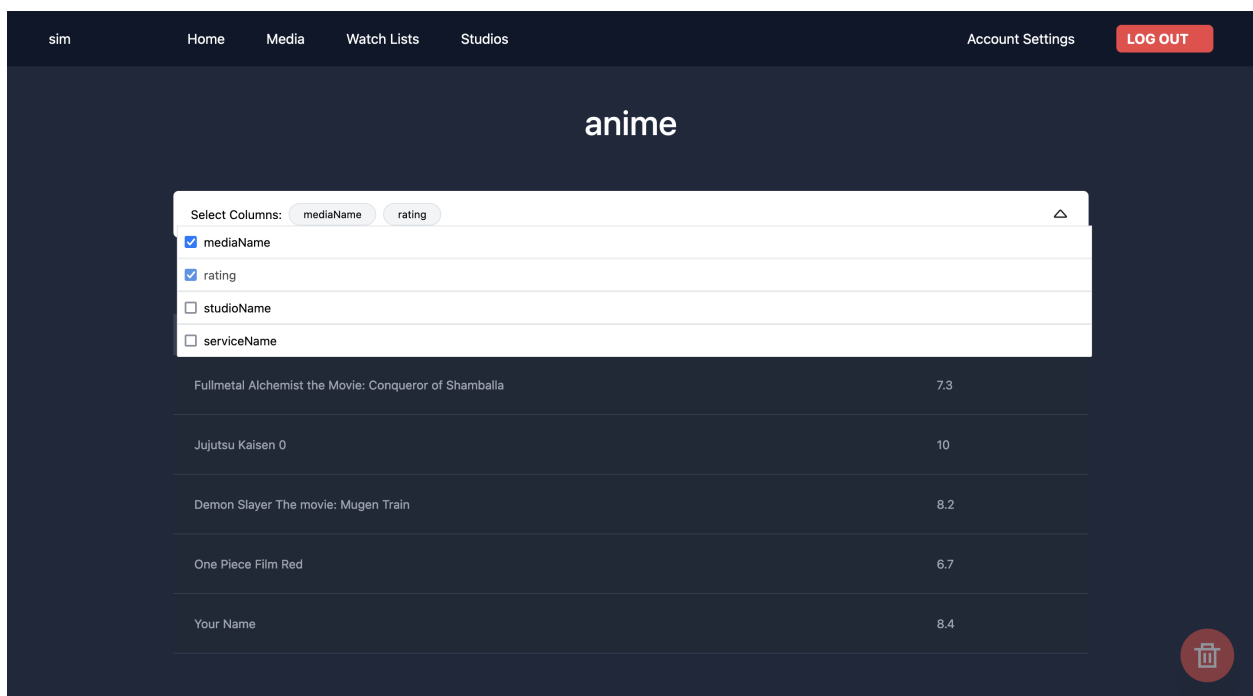
The screenshot shows a web application interface for viewing anime watchlists. The header includes navigation links: sim, Home, Media, Watch Lists, Studios, Account Settings, and a LOG OUT button. The main content area is titled "anime". Below the title is a "Select Columns:" dropdown menu. The table displays the following data:

MEDIA NAME	RATING	STUDIO NAME	SERVICE NAME
Fullmetal Alchemist the Movie: Conqueror of Shamballa	7.3	Toei Animation	Crunchyroll
Jujutsu Kaisen 0	10	MAPPA	Crunchyroll
Demon Slayer The movie: Mugen Train	8.2	MAPPA	Crunchyroll
One Piece Film Red	6.7	Toei Animation	Crunchyroll
Your Name	8.4	CoMix Wave Films	Crunchyroll

A trash icon is visible in the bottom right corner of the interface.

During

The user selects attributes from the columns dropdown



The screenshot shows the same web application interface, but with the "Select Columns:" dropdown menu open. The dropdown menu lists the following attributes:

- ☒ mediaName
- ☒ rating
- ☐ studioName
- ☐ serviceName

The table below shows the same data as the previous screenshot, but with only the mediaName and rating columns visible:

Fullmetal Alchemist the Movie: Conqueror of Shamballa	7.3
Jujutsu Kaisen 0	10
Demon Slayer The movie: Mugen Train	8.2
One Piece Film Red	6.7
Your Name	8.4

A trash icon is visible in the bottom right corner of the interface.

After

Site displays table with attributes selected in the order the user selected

simHomeMediaWatch ListsStudiosAccount SettingsLOG OUT

anime

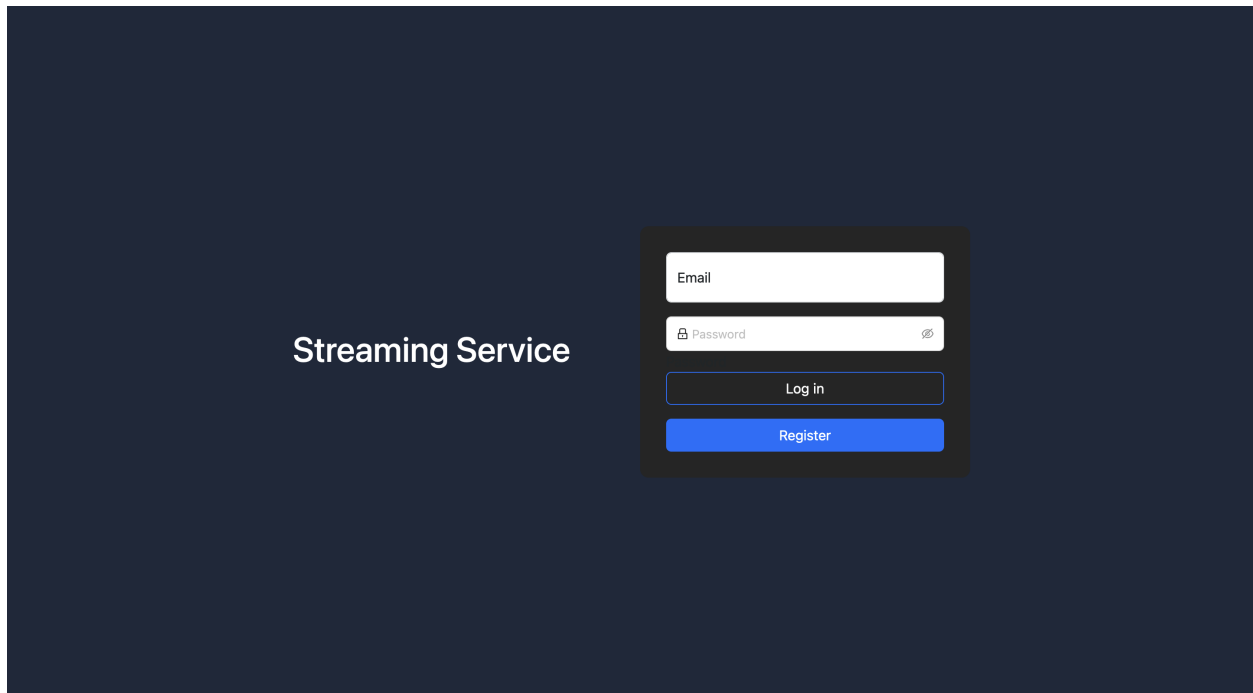
Select Columns:mediaNamerating

MEDIA NAME	RATING
Fullmetal Alchemist the Movie: Conqueror of Shamballa	7.3
Jujutsu Kaisen 0	10
Demon Slayer The movie: Mugen Train	8.2
One Piece Film Red	6.7
Your Name	8.4

JOIN

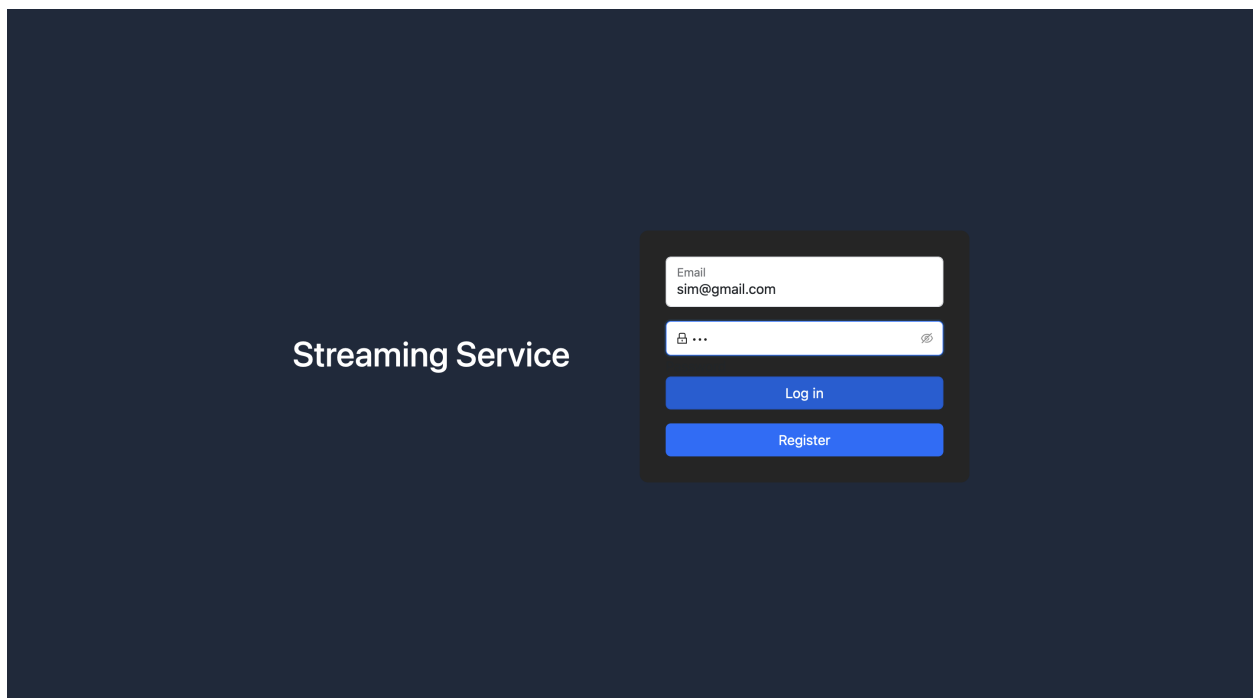
Before

The user is on the login page



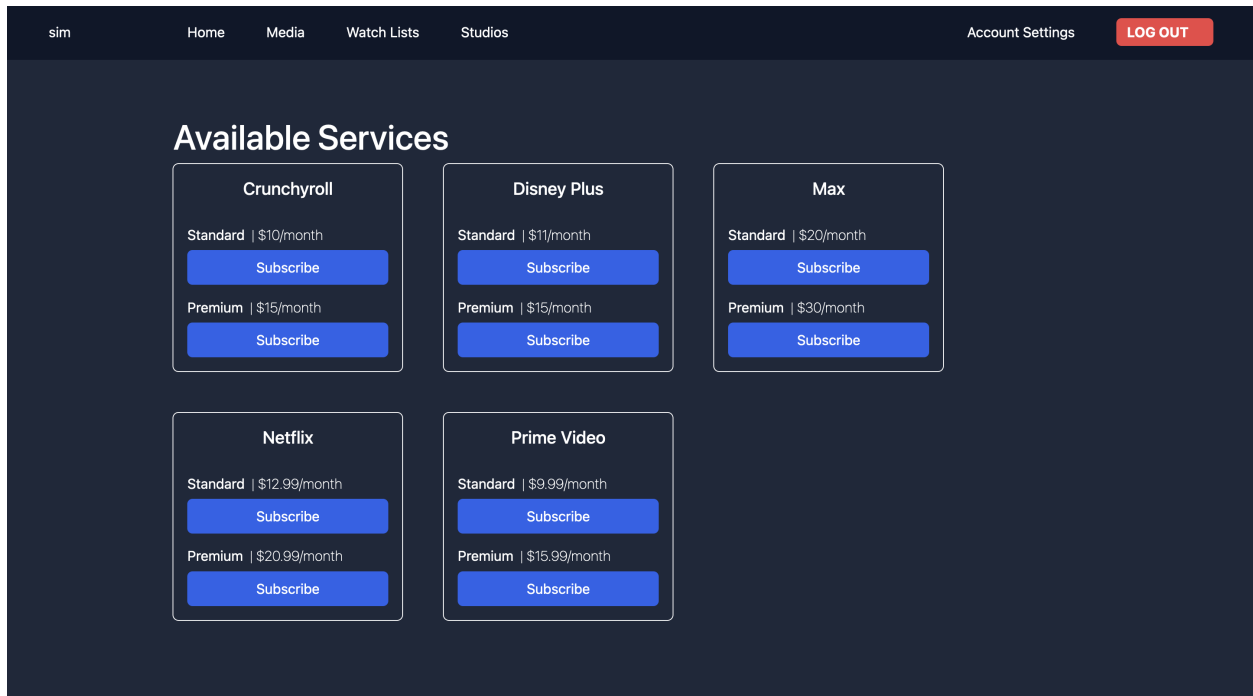
During

The user enters valid credentials and clicks log in



After

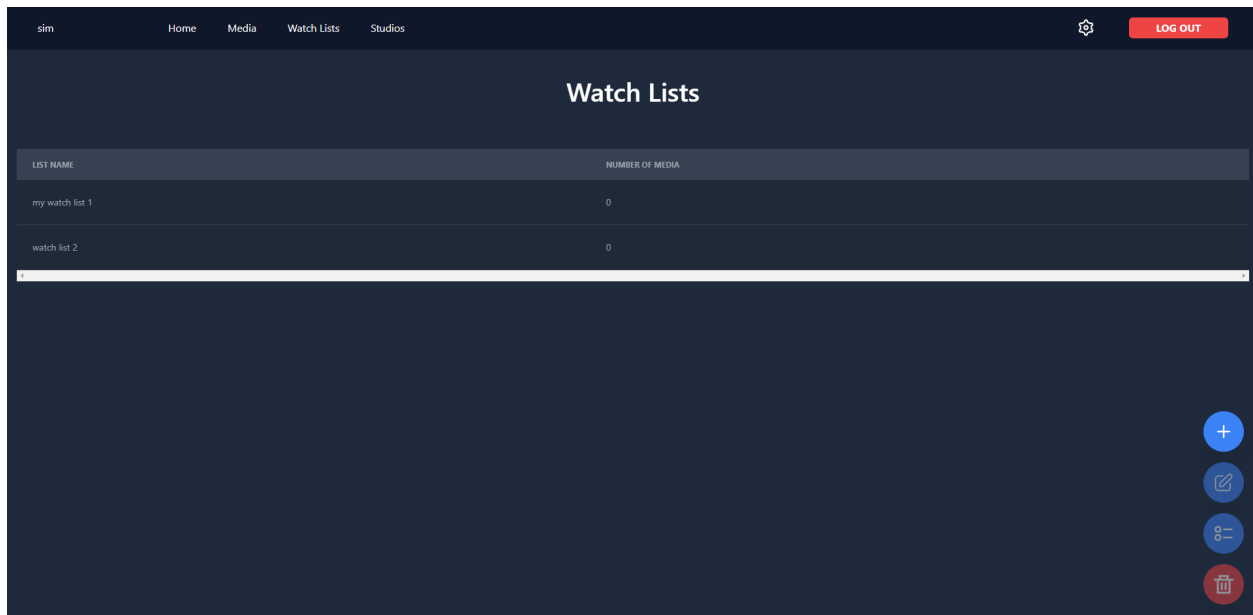
The site shows the user all the subscriptions associated with their `userID`



Aggregation With `GROUP BY`

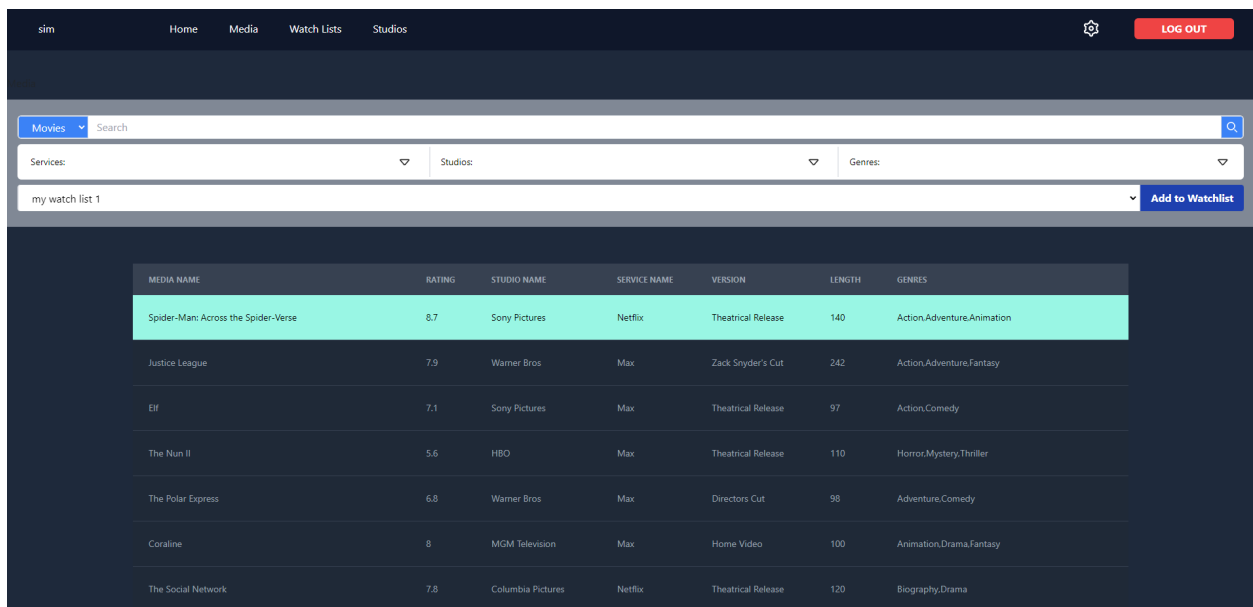
Before

The table displays each watch list name with the number of media inside each, initially at 0 for both worklists



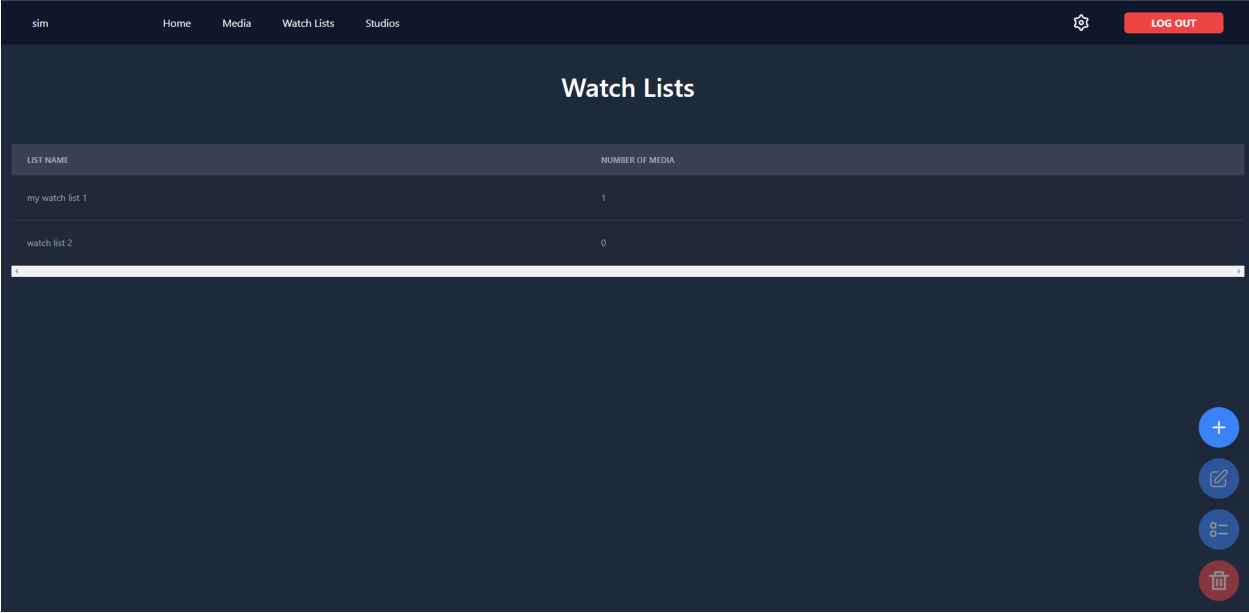
During

On the media page, I select media to add to “my watch list 1”, in the example I will insert Spider-Man



After

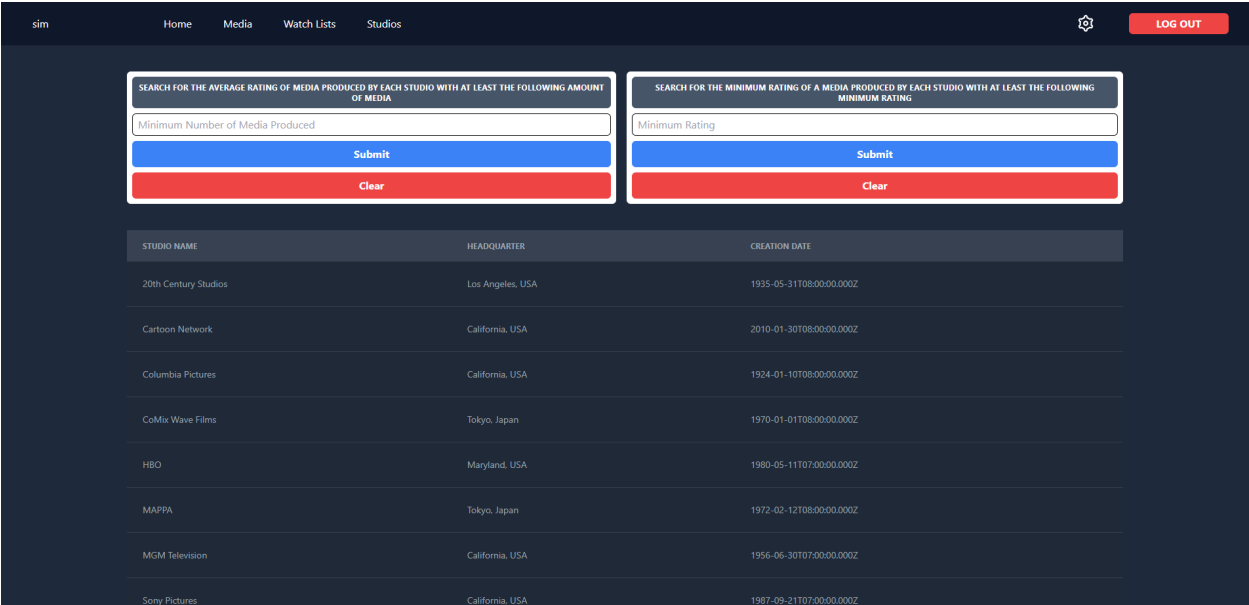
Back on the media page, the tables now show “my watch list 1” with one media added



Aggregation with **HAVING**

Before

On the studios page the default tables show the studio's and their information



During

On the Studio tab (right form) enter the minimum rating of any number, for this example I chose 8, and click submit

sim

HomeMediaWatch ListsStudios

LOG OUT

SEARCH FOR THE AVERAGE RATING OF MEDIA PRODUCED BY EACH STUDIO WITH AT LEAST THE FOLLOWING AMOUNT OF MEDIA

Minimum Number of Media Produced

Submit

Clear

SEARCH FOR THE MINIMUM RATING OF A MEDIA PRODUCED BY EACH STUDIO WITH AT LEAST THE FOLLOWING MINIMUM RATING

8

Submit

Clear

STUDIO NAME	HEADQUARTER	CREATION DATE
20th Century Studios	Los Angeles, USA	1935-05-31T08:00:00.000Z
Cartoon Network	California, USA	2010-01-30T08:00:00.000Z
Columbia Pictures	California, USA	1924-01-10T08:00:00.000Z
CoMix Wave Films	Tokyo, Japan	1970-01-01T08:00:00.000Z
HBO	Maryland, USA	1980-05-11T07:00:00.000Z
MAPPA	Tokyo, Japan	1972-02-12T08:00:00.000Z
MGM Television	California, USA	1956-06-30T07:00:00.000Z
Sony Pictures	California, USA	1987-09-21T07:00:00.000Z

After

Tables display the average rating for each studio with at least 8 media's inside

sim

HomeMediaWatch ListsStudios

LOG OUT

SEARCH FOR THE AVERAGE RATING OF MEDIA PRODUCED BY EACH STUDIO WITH AT LEAST THE FOLLOWING AMOUNT OF MEDIA

Minimum Number of Media Produced

Submit

Clear

SEARCH FOR THE MINIMUM RATING OF A MEDIA PRODUCED BY EACH STUDIO WITH AT LEAST THE FOLLOWING MINIMUM RATING

8

Submit

Clear

STUDIO NAME	MIN RATING	MAX RATING
20th Century Studios	8.3	8.9
Cartoon Network	8.2	9.5
CoMix Wave Films	8.4	9
MAPPA	8.2	10
MGM Television	8	8.1
Sony Pictures	8.2	9.5
Universal Pictures	8.7	9

Nested Aggregation with **GROUP BY**

Before

On the studios page the default tables show the studio's and their information

STUDIO NAME	HEADQUARTER	CREATION DATE
20th Century Studios	Los Angeles, USA	1935-05-31T08:00:00.000Z
Cartoon Network	California, USA	2010-01-30T08:00:00.000Z
Columbia Pictures	California, USA	1924-01-10T08:00:00.000Z
CoMix Wave Films	Tokyo, Japan	1970-01-01T08:00:00.000Z
HBO	Maryland, USA	1980-05-11T07:00:00.000Z
MAPPA	Tokyo, Japan	1972-02-12T08:00:00.000Z
MGM Television	California, USA	1955-06-30T07:00:00.000Z
Sony Pictures	California, USA	1987-09-21T07:00:00.000Z

During

On the Studio tab (left form) enter a minimum rating of any number, for this example I chose 5, and click submit

sim

HomeMediaWatch ListsStudios

LOG OUT

SEARCH FOR THE AVERAGE RATING OF MEDIA PRODUCED BY EACH STUDIO WITH AT LEAST THE FOLLOWING AMOUNT OF MEDIA

5

Submit

Clear

SEARCH FOR THE MINIMUM RATING OF A MEDIA PRODUCED BY EACH STUDIO WITH AT LEAST THE FOLLOWING MINIMUM RATING

Minimum Rating

Submit

Clear

STUDIO NAME	HEADQUARTER	CREATION DATE
20th Century Studios	Los Angeles, USA	1935-05-31T08:00:00.000Z
Cartoon Network	California, USA	2010-01-30T08:00:00.000Z
Columbia Pictures	California, USA	1924-01-10T08:00:00.000Z
CoMix Wave Films	Tokyo, Japan	1970-01-01T08:00:00.000Z
HBO	Maryland, USA	1980-05-11T07:00:00.000Z
MAPPA	Tokyo, Japan	1972-02-12T08:00:00.000Z
MGM Television	California, USA	1956-06-30T07:00:00.000Z
Sony Pictures	California, USA	1987-09-24T07:00:00.000Z

After

Tables display the average rating for each studio with at least 5 media's inside

sim

HomeMediaWatch ListsStudios

LOG OUT

SEARCH FOR THE AVERAGE RATING OF MEDIA PRODUCED BY EACH STUDIO WITH AT LEAST THE FOLLOWING AMOUNT OF MEDIA

5

Submit

Clear

SEARCH FOR THE MINIMUM RATING OF A MEDIA PRODUCED BY EACH STUDIO WITH AT LEAST THE FOLLOWING MINIMUM RATING

Minimum Rating

Submit

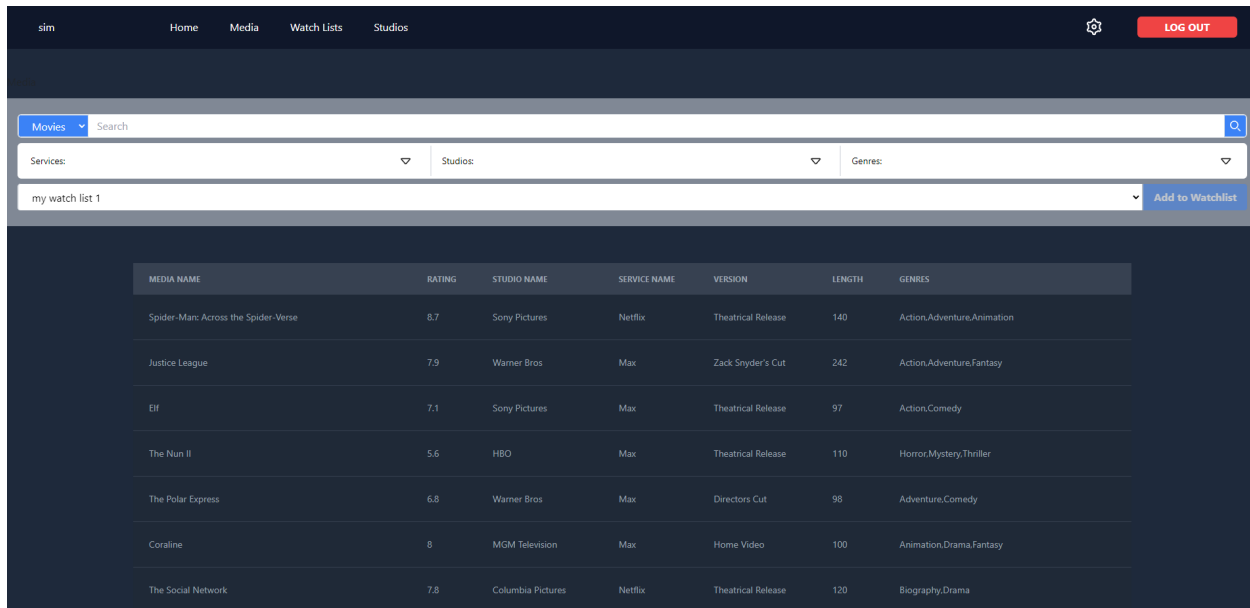
Clear

STUDIO NAME	AVG. RATING
MAPPA	8.84
Sony Pictures	7.74

Division

Before

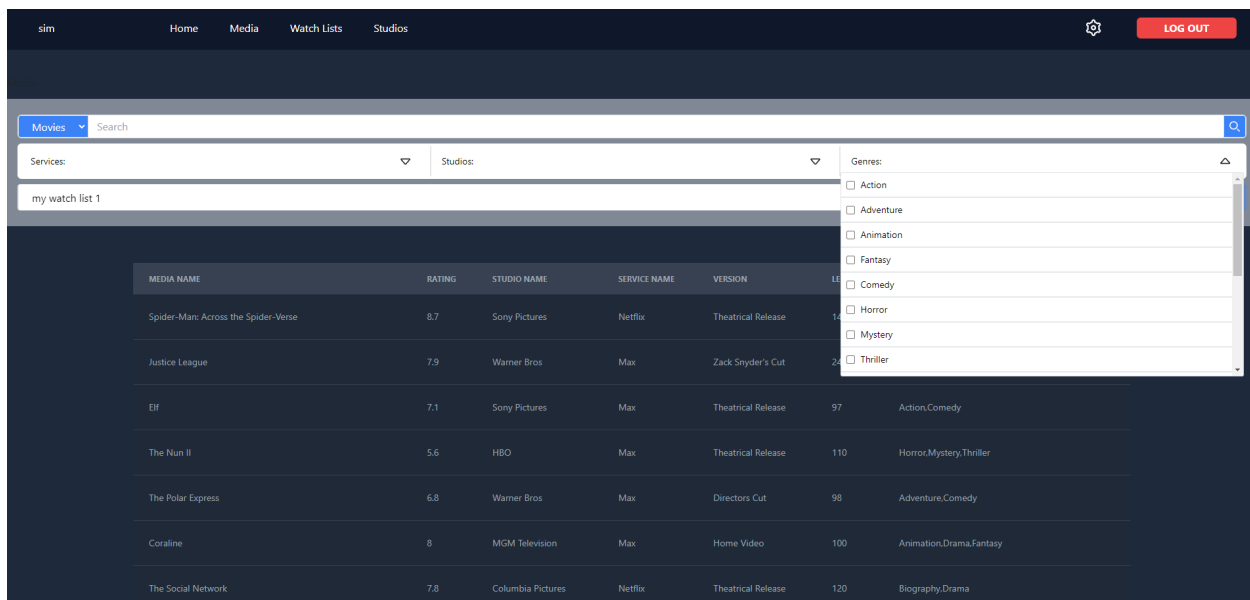
User is on the Media page which by default displays all the media available



MEDIA NAME	RATING	STUDIO NAME	SERVICE NAME	VERSION	LENGTH	GENRES
Spider-Man: Across the Spider-Verse	8.7	Sony Pictures	Netflix	Theatrical Release	140	Action,Adventure,Animation
Justice League	7.9	Warner Bros	Max	Zack Snyder's Cut	242	Action,Adventure,Fantasy
Elf	7.1	Sony Pictures	Max	Theatrical Release	97	Action,Comedy
The Nun II	5.6	HBO	Max	Theatrical Release	110	Horror,Mystery,Thriller
The Polar Express	6.8	Warner Bros	Max	Directors Cut	98	Adventure,Comedy
Coraline	8	MGM Television	Max	Home Video	100	Animation,Drama,Fantasy
The Social Network	7.8	Columbia Pictures	Netflix	Theatrical Release	120	Biography,Drama

During

On the “Genres” dropdown, I select “Action, Adventure, and Comedy”




MEDIA NAME	RATING	STUDIO NAME	SERVICE NAME	VERSION	LENGTH	GENRES
Spider-Man: Across the Spider-Verse	8.7	Sony Pictures	Netflix	Theatrical Release	140	Action,Adventure,Animation
Justice League	7.9	Warner Bros	Max	Zack Snyder's Cut	242	Action,Adventure,Fantasy
Elf	7.1	Sony Pictures	Max	Theatrical Release	97	Action,Comedy
The Nun II	5.6	HBO	Max	Theatrical Release	110	Horror,Mystery,Thriller
The Polar Express	6.8	Warner Bros	Max	Directors Cut	98	Adventure,Comedy
Coraline	8	MGM Television	Max	Home Video	100	Animation,Drama,Fantasy
The Social Network	7.8	Columbia Pictures	Netflix	Theatrical Release	120	Biography,Drama

After

The table displays media that only have those genres selected

sim

HomeMediaWatch ListsStudios




LOG OUT

Profile

Movies

Search



Services:

▼

Studios:

▼

Genres:

Action

Adventure

Comedy

▼

my watch list 1

▼

Add to Watchlist

MEDIA NAME	RATING	STUDIO NAME	SERVICE NAME	VERSION	LENGTH	GENRES
Guardians of the Galaxy Vol. 3	7.9	Sony Pictures	Disney Plus	Anniversary edition	150	Action,Adventure,Comedy
Ant-Man and the Wasp: Quantumania	6.1	Sony Pictures	Disney Plus	Theatrical Release	125	Action,Adventure,Comedy
Kingman: The Secret Service	7.7	20th Century Studios	Netflix	Theatrical Release	129	Action,Adventure,Comedy