Department of Computer Engineering

CS353 Term Project

CS353-7-MSDMS

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Design Report

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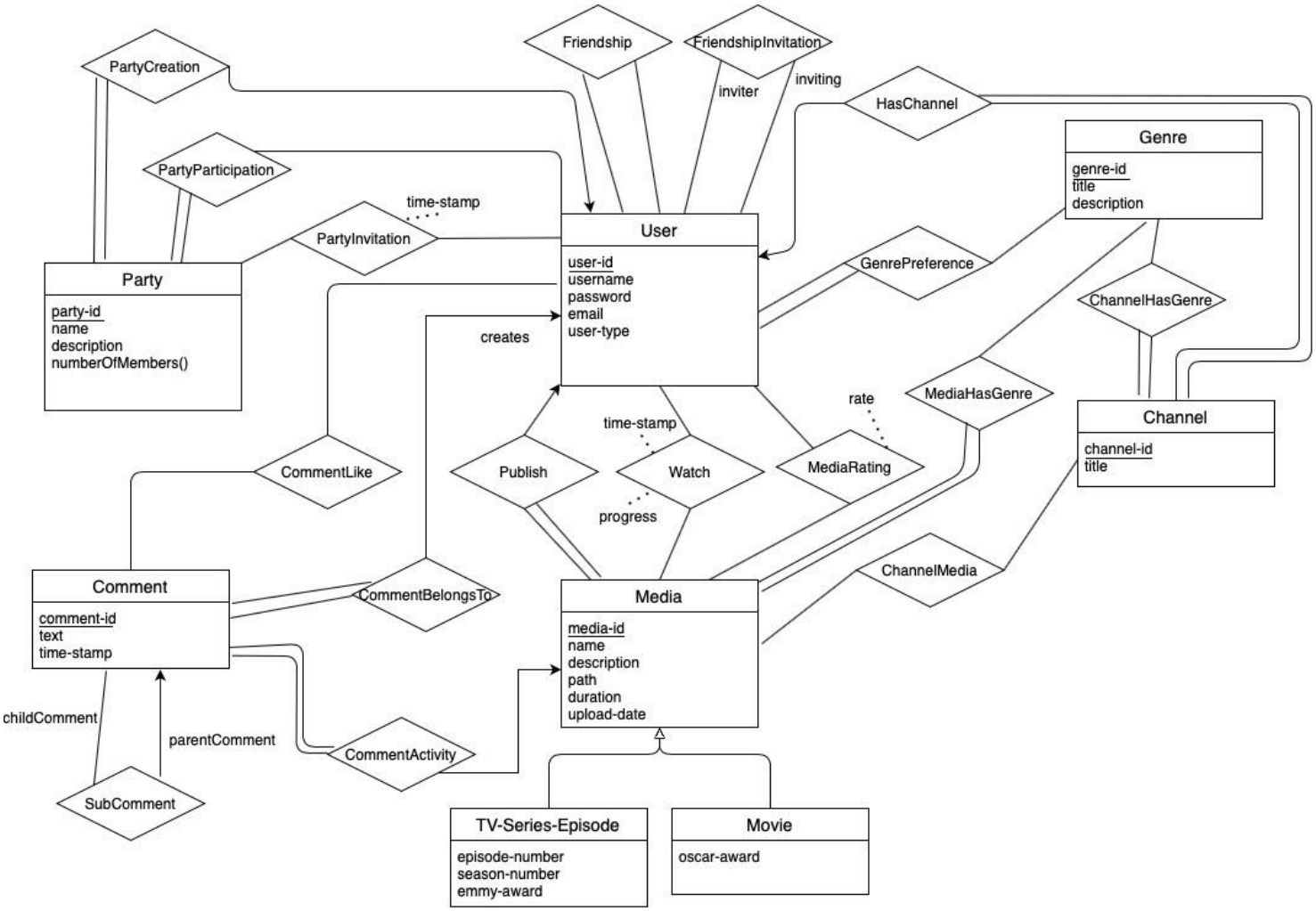
1. Database Design

1.1. Revised E/R Diagram



1.2. Table Schemas

Party(party-id, creator-id, name, description, numberOfMembers)
creator-id is foreign key referencing User(user-id)

User(user-id, password, email, username, user-type)

Genre(genre-id, title, description)

Comment(comment-id, user-id, media-id text, time-stamp)
user-id is foreign key referencing User(user-id)
media-id is foreign key referencing Media(media-id)

Media(media-id, publish-user-id, name, description, path, duration, upload-date)
publish-user-id is foreign key referencing User(user-id)

TV-Series-Episode(media-id, episode-number, season-number, emmy-award)
media-id is foreign key referencing Media(media-id)

Movie(media-id, oscar-award)
media-id is foreign key referencing Media(media-id)

Channel(channel-id, user-id, title)
user-id is foreign key referencing User(user-id)

CommentLike(user-id, comment-id)
user-id is foreign key referencing User(user-id)
comment-id is foreign key referencing Comment(comment-id)

SubComment(child-id, parent-id)
parent-id is foreign key referencing Comment(comment-id)
child-id is foreign key referencing Comment(comment-id)

GenrePreference(user-id, genre-id)
user-id is foreign key referencing User(user-id)
genre-id is foreign key referencing Genre(genre-id)

MediaHasGenre(media-id, genre-id)
media-id is foreign key referencing Media(media-id)
genre-id is foreign key referencing Genre(genre-id)

ChannelHasGenre(channel-id, genre-id)
channel-id foreign key referencing Channel(channel-id)
genre-id is foreign key referencing Genre(genre-id)

ChannelMedia(media-id, channel-id)
media-id is foreign key referencing Media(media-id)
channel-id foreign key referencing Channel(channel-id)

Watch(user-id, media-id, progress, time-stamp)
user-id is foreign key referencing User(user-id)
media-id is foreign key referencing Media(media-id)

MediaRating(user-id, media-id, rate)
user-id is foreign key referencing User(user-id)
media-id is foreign key referencing Media(media-id)

PartyParticipation(party-id, user-id)
party-id is foreign key referencing Party(party-id)
user-id is foreign key referencing User(user-id)

PartyInvitation(party-id, user-id, time-stamp)
party-id is foreign key referencing Party(party-id)
user-id is foreign key referencing User(user-id)

Friendship(friend1-id, friend2-id)
friend1-id is foreign key referencing User(user-id)
friend2-id is foreign key referencing User(user-id)

FriendshipInvitation(inviter-id, invited-id)
inviter-id is foreign key referencing User(user-id)
invited-id is foreign key referencing User(user-id)

1.3. Table Schemas SQL

```
CREATE TABLE  Party (
        party-id VARCHAR(32) NOT NULL,
        creator-id VARCHAR (32) NOT NULL,
        name VARCHAR(64) NOT NULL,
        description VARCHAR(256),
        numberOfMembers INT(10),
        PRIMARY KEY(party-id)
        FOREIGN KEY(creator-id) REFERENCES User( user-id) on delete cascade )
ENGINE=INNODB;

CREATE TABLE  User (
        user-id VARCHAR(32) NOT NULL,
        full-name VARCHAR (64),
        password VARCHAR (64) NOT NULL,
        email VARCHAR(128) NOT NULL,
        username VARCHAR(50) NOT NULL,
        user-type VARCHAR(20) NOT NULL,
        PRIMARY KEY(user-id) )
ENGINE=INNODB;

CREATE TABLE  Genre (
        genre-id VARCHAR(32) NOT NULL,
        title VARCHAR(64) NOT NULL,
        description VARCHAR(128),
        PRIMARY KEY(genre-id) )
ENGINE=INNODB;

CREATE TABLE  Comment (
        comment-id VARCHAR(32) NOT NULL,
        user-id VARCHAR(32) NOT NULL,
        Media-id VARCHAR(32) NOT NULL,
        time-stamp TIMESTAMP,
        PRIMARY KEY(comment-id)
        FOREIGN KEY(user-id) REFERENCES User(user-id)
        FOREIGN KEY(media-id) REFERENCES Media(media-id) )
ENGINE=INNODB;

CREATE TABLE  Media (
        media-id VARCHAR(32) NOT NULL,
```

```
        publish-user-id VARCHAR(32) NOT NULL,
        name VARCHAR(64) NOT NULL,
        description VARCHAR(256),
        path VARCHAR(256) NOT NULL,
        duration INT(10) NOT NULL,
        upload-date DATE NOT NULL,
        PRIMARY KEY(media-id)
        FOREIGN KEY(publish-user-id) REFERENCES User(user-id) on delete cascade )
        ENGINE=INNODB;

CREATE TABLE  TV-Series-Episode (
        media-id VARCHAR(32) NOT NULL,
        episode-number INT NOT NULL,
        season-number INT NOT NULL,
        emmy-award DATE,
        PRIMARY KEY(media-id)
        FOREIGN KEY(media-id) REFERENCES Media(media-id) on delete cascade )
ENGINE=INNODB;

CREATE TABLE Movie (
        media-id VARCHAR(32) NOT NULL,
        Oscar-award DATE,
        PRIMARY KEY(media-id)
        FOREIGN KEY(media-id) REFERENCES Media(media-id) on delete cascade )
ENGINE=INNODB;

CREATE TABLE Channel(
        channel-id VARCHAR(32) NOT NULL,
        user-id VARCHAR(32) NOT NULL,
        title VARCHAR(64),
        PRIMARY KEY(channel-id)
        FOREIGN KEY(user-id) REFERENCES User(user-id) )
ENGINE=INNODB;

CREATE TABLE  CommentLike (
         user-id VARCHAR(32) NOT NULL,
         comment-id VARCHAR (32) NOT NULL,
        PRIMARY KEY( user-id, comment-id)
        FOREIGN KEY(user-id) REFERENCES User(user-id)
        FOREIGN KEY(comment-id) REFERENCES Comment(comment-id)
) ENGINE=INNODB;
```

```
CREATE TABLE  SubComment(
        parent-id VARCHAR(32) NOT NULL,
        child-id VARCHAR(32) NOT NULL,
        PRIMARY KEY(parent-id, current-id)
        FOREIGN KEY(parent-id) REFERENCES Comment(comment-id)
        FOREIGN KEY(child-id) REFERENCES Comment(comment-id)
) ENGINE=INNODB;

CREATE TABLE  GenrePreference(
        user-id VARCHAR(32) NOT NULL,
        genre-id VARCHAR(32) NOT NULL,
        PRIMARY KEY(user-id, genre-id)
        FOREIGN KEY(user-id) REFERENCES User(user-id)
        FOREIGN KEY(genre-id) REFERENCES Genre(genre-id)
) ENGINE=INNODB;

CREATE TABLE  MediaHasGenre(
        media-id VARCHAR(32) NOT NULL,
        genre-id VARCHAR(32) NOT NULL,
        PRIMARY KEY(media-id, genre-id)
        FOREIGN KEY(media-id) REFERENCES Media(media-id)
        FOREIGN KEY(genre-id) REFERENCES Genre(genre-id)
) ENGINE=INNODB;

CREATE TABLE  ChannelHasGenre(
        channel-id VARCHAR(32) NOT NULL,
        genre-id VARCHAR(32) NOT NULL,
        PRIMARY KEY(channel-id, genre-id)
        FOREIGN KEY(channel-id) REFERENCES Channel(channel-id)
        FOREIGN KEY(genre-id) REFERENCES Genre(genre-id)
) ENGINE=INNODB;

CREATE TABLE  ChannelMedia(
        media-id VARCHAR(32) NOT NULL,
        channel-id VARCHAR(32) NOT NULL,
        PRIMARY KEY(media-id, channel-id)
        FOREIGN KEY(media-id) REFERENCES Media(media-id)
        FOREIGN KEY(channel-id) REFERENCES Channel(channel-id)
) ENGINE=INNODB;
```

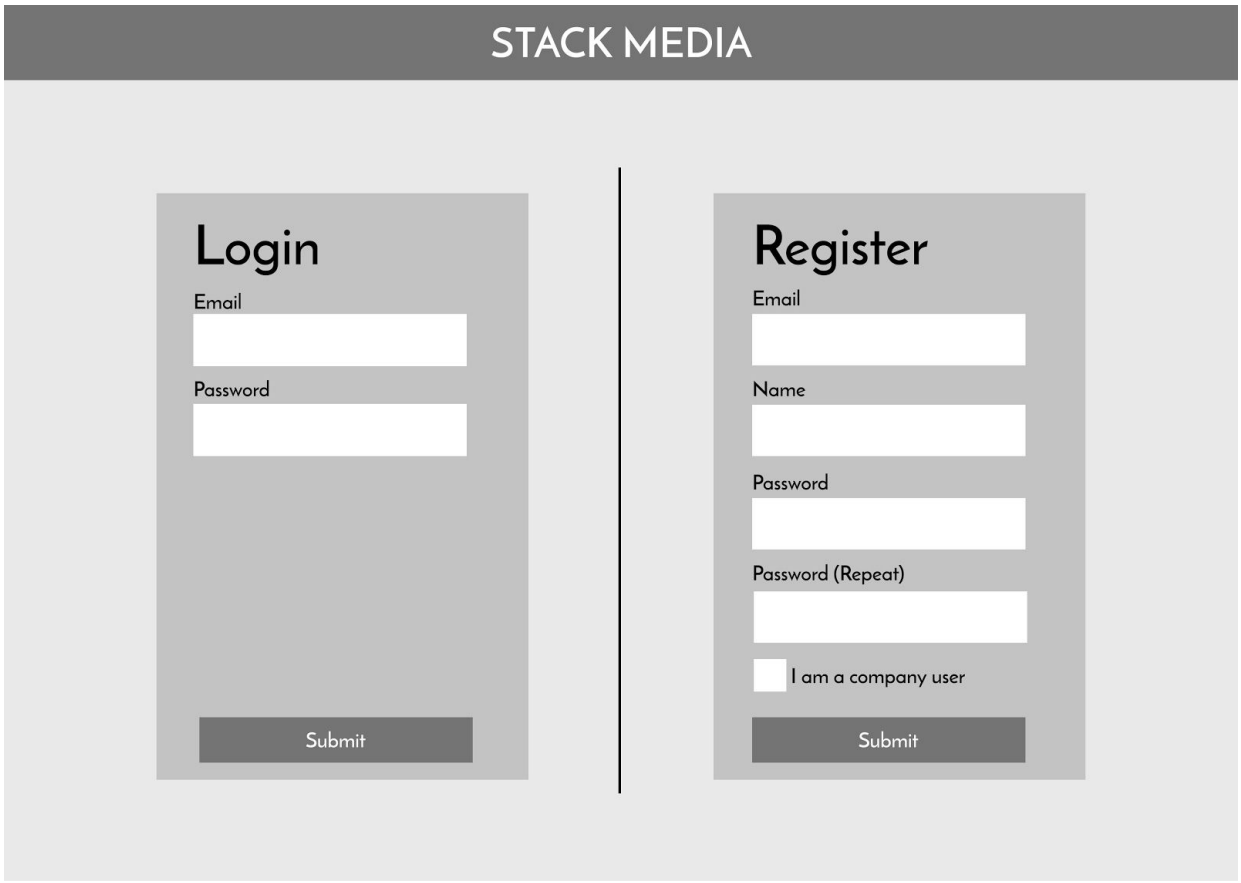
```
CREATE TABLE  Watch(
        user-id VARCHAR(32) NOT NULL,
        media-id VARCHAR(32) NOT NULL,
        Progress INT NOT NULL,
        time-stamp TIMESTAMP NOT NULL,
        PRIMARY KEY(user-id , media-id)
        FOREIGN KEY(user-id) REFERENCES User(user-id)
        FOREIGN KEY(media-id) REFERENCES Media(media-id)
) ENGINE=INNODB;

CREATE TABLE  MediaRating(
        user-id VARCHAR(32) NOT NULL,
        media-id VARCHAR(32) NOT NULL,
        rate INT NOT NULL,
        PRIMARY KEY(user-id , media-id)
        FOREIGN KEY(user-id) REFERENCES User(user-id)
        FOREIGN KEY(media-id) REFERENCES Media(media-id)
) ENGINE=INNODB;

CREATE TABLE  PartyParticipation(
        party-id VARCHAR(32) NOT NULL,
        user-id VARCHAR(32) NOT NULL,
        PRIMARY KEY(party-id, user-id)
        FOREIGN KEY(party-id) REFERENCES Party(party-id)
        FOREIGN KEY(user-id) REFERENCES User(user-id)
) ENGINE=INNODB;

CREATE TABLE  PartyInvitation(
        party-id VARCHAR(32) NOT NULL,
        user-id VARCHAR(32) NOT NULL,
        time-stamp TIMESTAMP NOT NULL,
        PRIMARY KEY(party-id, user-id)
        FOREIGN KEY(party-id) REFERENCES Party(party-id)
        FOREIGN KEY(user-id) REFERENCES User(user-id)
) ENGINE=INNODB;

CREATE TABLE  Friendship(
        friend1-id VARCHAR(32) NOT NULL,
        Friend2-id VARCHAR(32) NOT NULL,
        PRIMARY KEY(friend1-id, friend2-id)
        FOREIGN KEY(friend1-id) REFERENCES User( user-id)
        FOREIGN KEY(friend2-id) REFERENCES User( user-id)
) ENGINE=INNODB;
```

```
CREATE TABLE  FriendshipInvitation(
        Inviter-id VARCHAR(32) NOT NULL,
        Invited-id VARCHAR(32) NOT NULL,
        PRIMARY KEY(Inviter-id, Invited-id )
        FOREIGN KEY(Inviter-id) REFERENCES User( user-id)
        FOREIGN KEY(invited-id) REFERENCES User( user-id)
) ENGINE=INNODB;
```

2. UI Design and Corresponding SQL Statements

Our general UI design was inspired by Youtube, Spotify and Netflix.

2.1 Login Page UI



Login/Register Page

In this page, the user can login to the system or he/she can register by specifying his/her information along with the user type.

2.2 Login Page UI Corresponding SQL Statements

- **Login**

```
SELECT
        *
FROM
        User
WHERE
        email = emailUIText AND password = passwordUIText
```

- **Register**

First check if the user already exists in the system

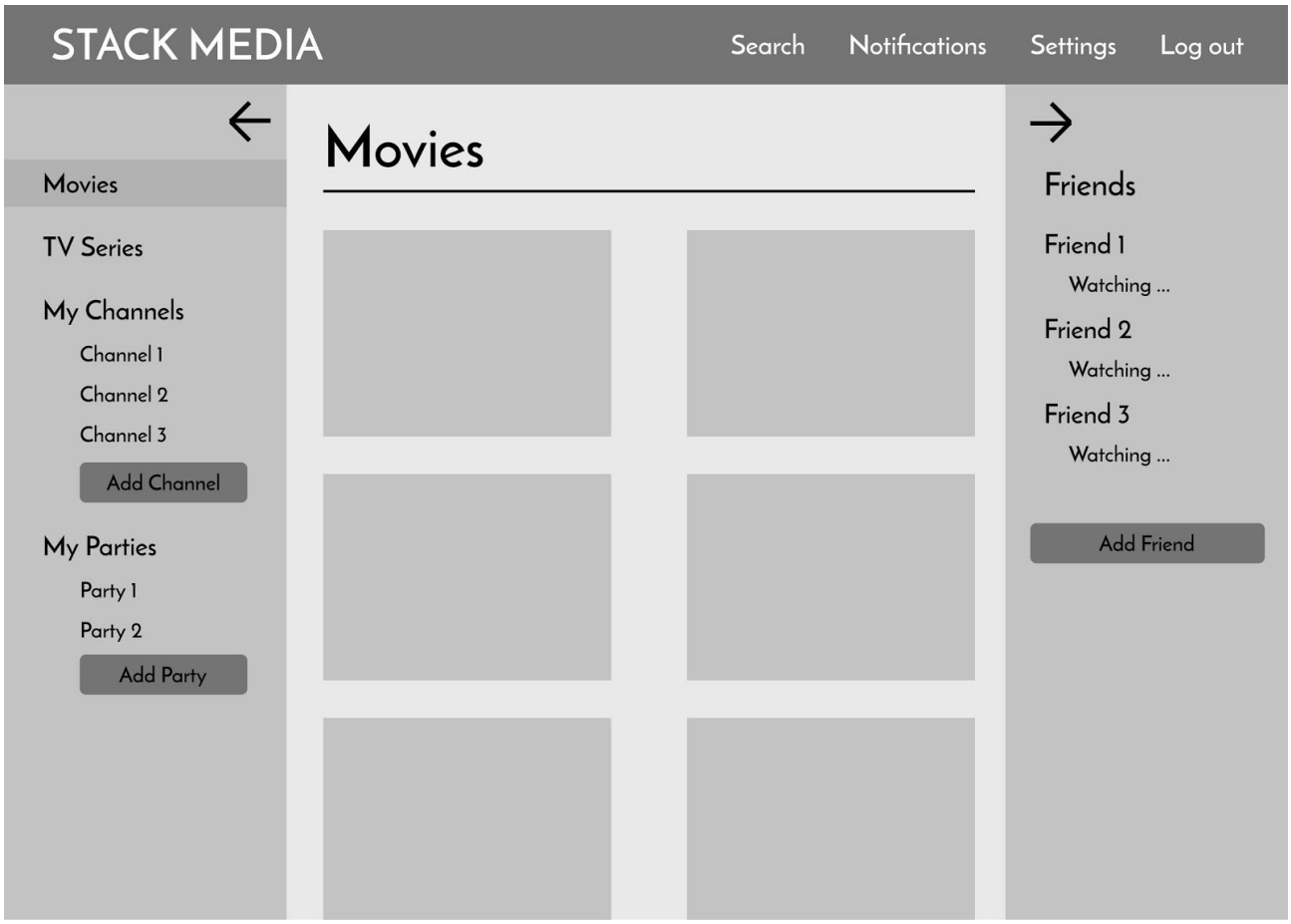
```
SELECT
        *
FROM
        User
WHERE
        email = emailUIText OR name = nameUIText
```

if the query is empty

```
INSERT INTO User
VALUES ( getNextUserID(), nameUIText, passwordUIText, isCompanyUserRadioInput)
```

getNextUserID() is server function, returns unique id.

2.3 Movies Page UI



Movies Page

In this page, movies are presented to the user according to his/her genre preferences. The user can choose a movie and start watching.

2.4 Movies Page UI Corresponding SQL Statements

- **Finding channels of the client**

```
SELECT
        title AS channelName
        channel-id
FROM
        User INNER JOIN Channel ON Channel.user-id = User.user-id
```

- **Displaying all movies based on genre preference**

```
SELECT
        M.*
FROM
        Media M INNER JOIN MediaHasGenre MHG ON M.media-id = MHG.media-id
WHERE
        MHG.genre-id in (
        SELECT
                genre-id
        FROM
                GenrePreference
        WHERE
                user-id = clientID
)
```

- **Adding new party**

```
INSERT INTO
        Party
VALUES
        (party-id, main-user-id, desired-name, desired-description, 0)
```

- **Sending friend request**

```
INSERT INTO
        FriendshipInvitation
VALUES
        (main-user-id, wanted-friend-id)
```

- **Friend activities**

```
SELECT
        F.friend2-id, M.name
FROM
        Friendship F, Watch W, Media M
```

```
WHERE
        F.friend1-id = main-user-id and Watch.user-id = F.friend2-id and
        W.media-id = M.media-id
```

- **Deleting a party**

```
DELETE FROM
        Party
WHERE
        creator-id = main-user-id and party-id = deleted-party-id
```

- **Removing a friend**

```
DELETE FROM
        Friendship
WHERE
        friend1-id = main-user-id and friend2-id = deleted-friend-id
```

- **Accepting friend request through notifications**

```
DELETE FROM
        FriendshipInvitation
WHERE
        invited-id = main-user-id and inviter-id = rejected-friend-id

INSERT INTO
        Friendship
VALUES
        (main-user-id, accepted-friend-id)
```

- **Rejecting friend request through notifications**

```
DELETE FROM
        FriendshipInvitation
WHERE
        invited-id = main-user-id and inviter-id = rejected-friend-id
```

- **Accepting party invitation through notifications**

```
DELETE FROM
        PartyInvitation
WHERE
        user-id = user-id-variable and party-id = party-id-variable

INSERT INTO
        PartyParticipation
VALUES
        (party-id-variable, user-id,variable)
```

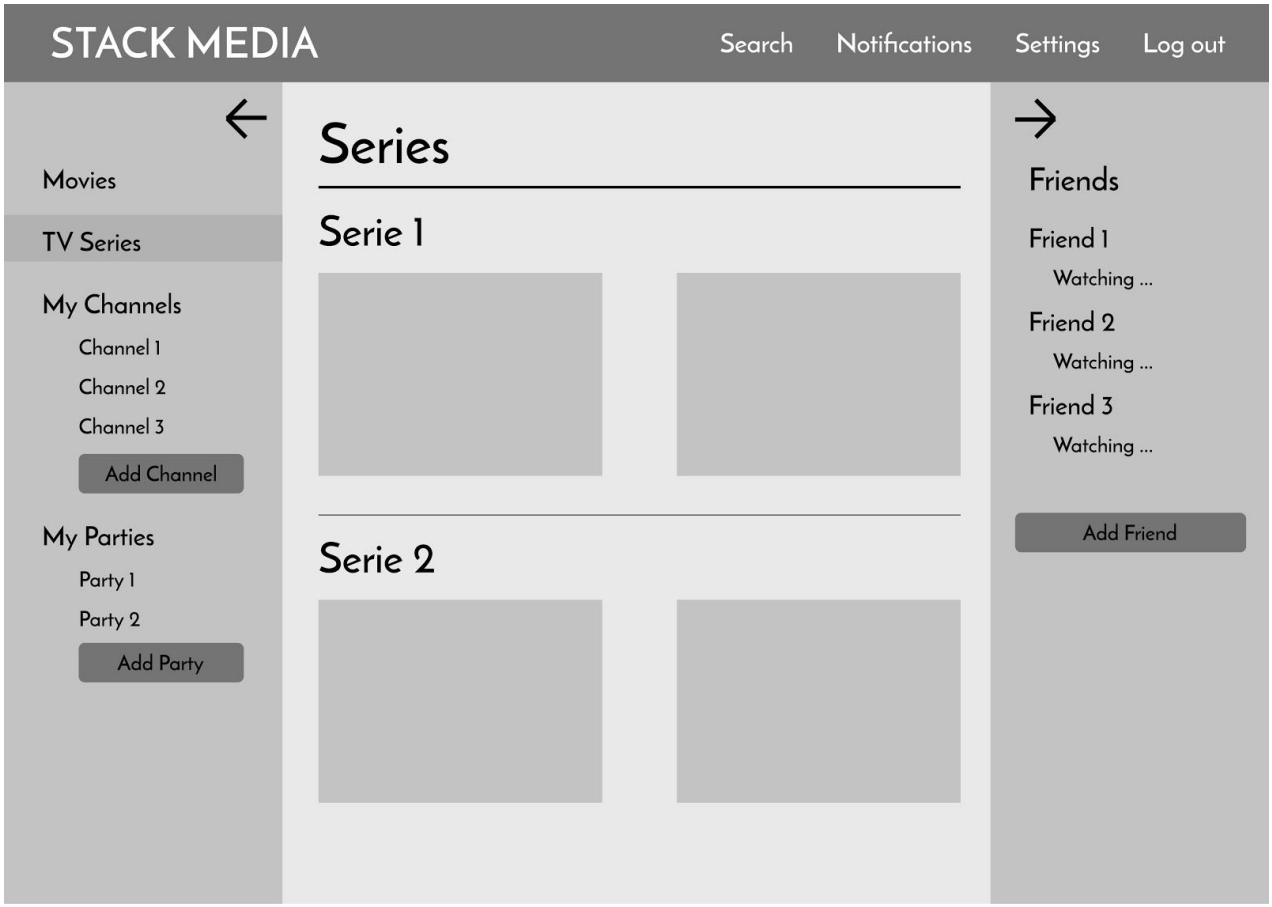
- **Rejecting party invitation through notifications**

```
DELETE FROM
        PartyInvitation
WHERE
        user-id = user-id-variable and party-id = party-id-variable
```

- **Removing a channel**

```
DELETE FROM Channel
WHERE
        Channel.channel-id = selectedChannelID AND Channel.user-id = clientUserID
```

2.5 Series Page UI



Series Page

In this page, series are presented to the user according to his/her genre preferences. The user can choose a movie and start watching.

2.6 Series Page UI Corresponding SQL Statements

- **Finding channels of the client**

```
SELECT
        title AS channelName
        channel-id
FROM
        User INNER JOIN Channel ON Channel.user-id = User.user-id
```

- **Displaying all the tv-shows based on genre**

```
SELECT
        M.*
FROM
        Media M INNER JOIN MediaHasGenre MHG ON M.media-id = MHG.media-id
WHERE
        MHG.genre-id in (
        SELECT
                genre-id
        FROM
                GenrePreference
        WHERE
                user-id = clientID
)
```

- **Creating a new party**

```
INSERT INTO
        Party
VALUES
        (party-id, main-user-id, desired-name, desired-description, 0)
```

- **Sending a friend request**

```
INSERT INTO
        FriendshipInvitation
VALUES
        (main-user-id, wanted-friend-id)
```

- **Friend activities**

```
SELECT
        F.friend2-id, M.name
FROM
        Friendship F, Watch W, Media M
```

```
WHERE
        F.friend1-id = clientID and Watch.user-id = F.friend2-id and
        W.media-id = M.media-id
```

- **Removing a party**

```
DELETE FROM
        Party
WHERE
        creator-id = main-user-id and party-id = deleted-party-id
```

- **Removing a friend**

```
DELETE FROM
        Friendship
WHERE
        friend1-id = main-user-id and friend2-id = deleted-friend-id
```

- **Accepting a friend request through notifications**

```
DELETE FROM
        FriendshipInvitation
WHERE
        invited-id = main-user-id and inviter-id = rejected-friend-id

INSERT INTO
        Friendship
VALUES
        (main-user-id, accepted-friend-id)
```

- **Rejecting a friend request through notifications**

```
DELETE FROM
        FriendshipInvitation
WHERE
        invited-id = main-user-id and inviter-id = rejected-friend-id
```

- **Accepting a party invitation through notifications**

```
DELETE FROM
        PartyInvitation
WHERE
        user-id = user-id-variable and party-id = party-id-variable

INSERT INTO
        PartyParticipation
VALUES
        (party-id-variable, user-id,variable)
```

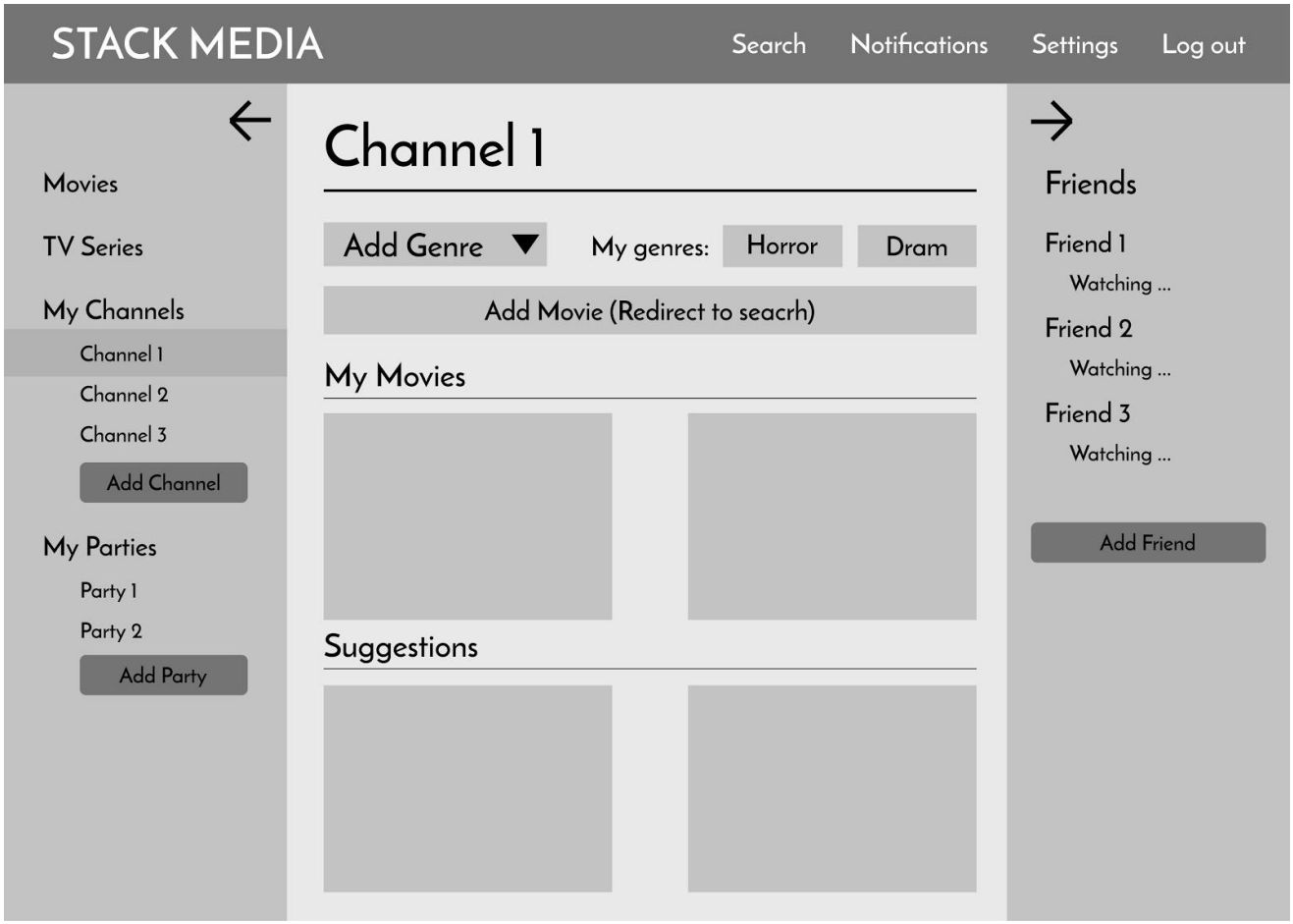
- **Rejecting a party invitation through notifications**

```
DELETE FROM
        PartyInvitation
WHERE
        user-id = user-id-variable and party-id = party-id-variable
```

- **Removing a channel**

```
DELETE FROM Channel
WHERE
        Channel.channel-id = selectedChannelID AND Channel.user-id = clientUserID
```

2.7 Channel Page UI



Channel Page

In this page, the user can pick add/delete genres for the channel, and add movies to the channel. Also he/she can see/watch added/suggested movies. Suggestions are handled by the system according to the selected genres.

2.8 Channel Page UI Corresponding SQL Statements

- **Finding channels of the client**

```
SELECT
        title AS channelName
        channel-id
FROM
        User INNER JOIN Channel ON Channel.user-id = User.user-id
```

- **Finding every movie of a channel that belongs to the client**

```
SELECT
        Media.*
FROM
        Media INNER JOIN ChannelMedia ON Media.media-id = ChannelMedia.media-id
WHERE
        ChannelMedia.channel-id = curChannelID
```

(curChannelID is the channel selected on the menu)

- **Creating a new party**

```
INSERT INTO
        Party
VALUES
        (party-id, main-user-id, desired-name, desired-description, 0)
```

- **Sending a friend request**

```
INSERT INTO
        FriendshipInvitation
VALUES
        (main-user-id, wanted-friend-id)
```

- **Friend activities**

```
SELECT
        F.friend2-id, M.name
FROM
        Friendship F, Watch W, Media M
WHERE
        F.friend1-id = main-user-id and Watch.user-id = F.friend2-id and
        W.media-id = M.media-id
```

- **Removing a party**

```
DELETE FROM
```

```
    Party
WHERE
    creator-id = main-user-id and party-id = deleted-party-id
```

- **Removing a friend**

```
DELETE FROM
    Friendship
WHERE
    friend1-id = main-user-id and friend2-id = deleted-friend-id
```

- **Accepting a friend request through notifications**

```
DELETE FROM
    FriendshipInvitation
WHERE
    invited-id = main-user-id and inviter-id = rejected-friend-id

INSERT INTO
    Friendship
VALUES
    (main-user-id, accepted-friend-id)
```

- **Rejecting a friend request through notifications**

```
DELETE FROM
    FriendshipInvitation
WHERE
    invited-id = main-user-id and inviter-id = rejected-friend-id
```

- **Accepting a party invitation through notifications**

```
DELETE FROM
    PartyInvitation
WHERE
    user-id = user-id-variable and party-id = party-id-variable

INSERT INTO
    PartyParticipation
VALUES
    (party-id-variable, user-id,variable)
```

- **Rejecting a party invitation through notifications**

```
DELETE FROM
    PartyInvitation
WHERE
    user-id = user-id-variable and party-id = party-id-variable
```

- **Removing a channel**

```
DELETE FROM Channel
WHERE
        Channel.channel-id = selectedChannelID AND Channel.user-id = clientUserID
```

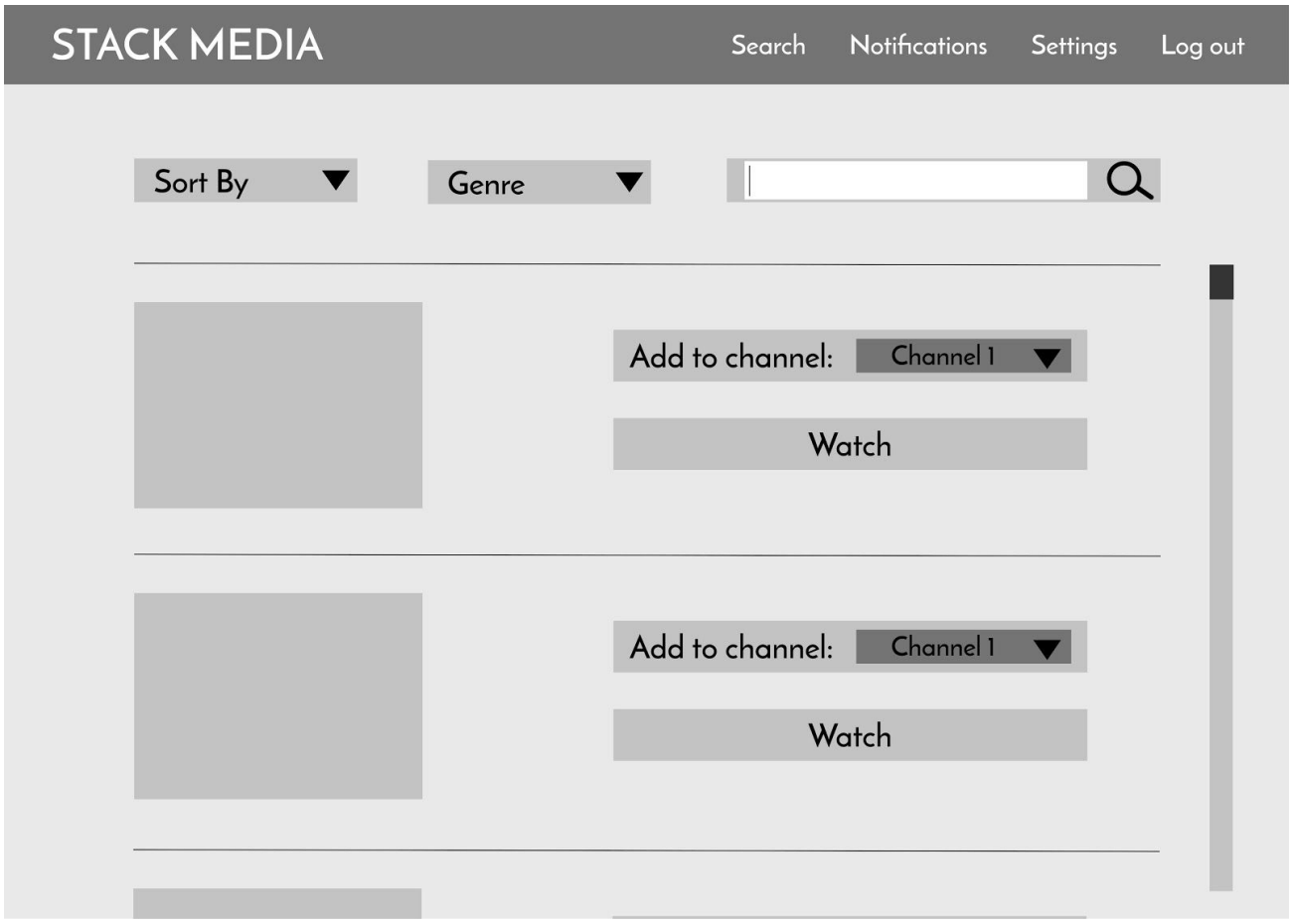
- **Finding suggested media based on channel genre**

```
SELECT
        M.*
FROM
        Media M INNER JOIN MediaHasGenre MHG ON MHG.media-id = M.media-id
WHERE
        MHG.genre-id in (
        SELECT
                genre-id
        FROM
                ChannelHasGenre
        WHERE
                channel-id = clientCurChannelID
)
```

- **Editing genre of a channel**

```
//deletion
DELETE FROM ChannelHasGenre
WHERE
        channel-id = curChannelID AND genre-id = genreIDToDelete

// to insert new genre
INSERT INTO ChannelHasGenre
VALUES( curChannelID, genreIDToAdd)
```

2.9 Search Page UI



Search Page - Standard User

In this page, the user can search for movies by specifying genre and a media name. Also he/she can sort the results. Next, he/she can add the media to channels or directly watch.

2.10 Search Page UI Corresponding SQL Statements

- **Searching media**

```
SELECT
        *
FROM
        Media M
WHERE
        DIFFERENCE( name, movieNameUIText) = 4 AND
        genreUISELECTION in (
                SELECT
                        Genre.title
```

```
            FROM
                HasGenre INNER JOIN Genre ON HasGenre.genre-id = Genre.genre-id
            WHERE
                M.media-id = HasGenre.media-id
    )
ORDER BY
    sortUISelection DESC
```

- **Adding media to a channel after searching**

```
INSERT INTO ChannelMedia
VALUES
    ( media-id,
    channel-id );
```

- **Getting every available genre**

```
SELECT
    genre-id,
    title
FROM
    Genre
```

- **Accepting a friend request through notifications**

```
DELETE FROM
    FriendshipInvitation
WHERE
    invited-id = main-user-id and inviter-id = rejected-friend-id

INSERT INTO
    Friendship
VALUES
    (main-user-id, accepted-friend-id)
```

- **Rejecting a friend request through notifications**

```
DELETE FROM
    FriendshipInvitation
WHERE
    invited-id = main-user-id and inviter-id = rejected-friend-id
```

- **Accepting a party invitation through notifications**

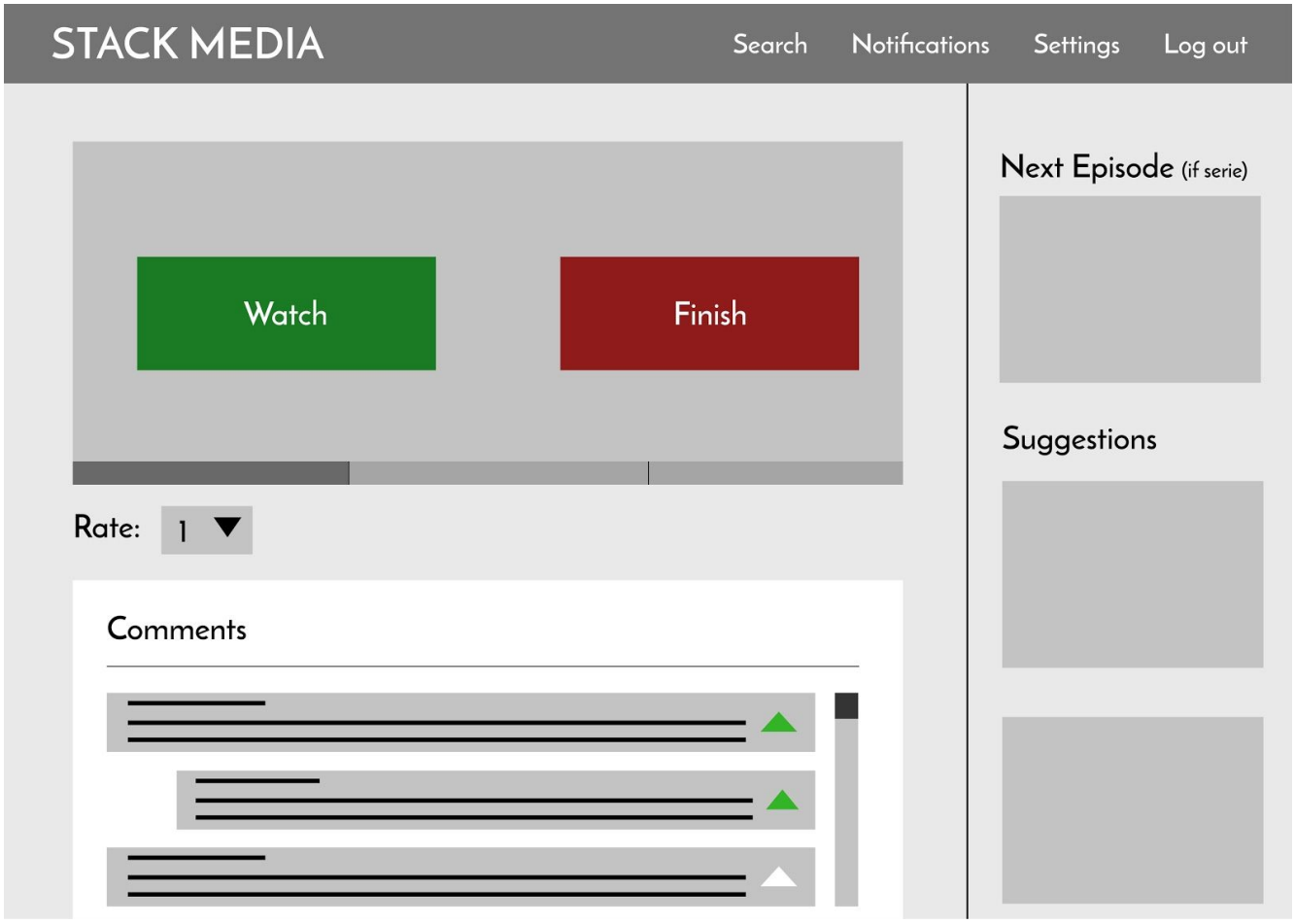
```
DELETE FROM
    PartyInvitation
WHERE
    user-id = user-id-variable and party-id = party-id-variable
```

```
INSERT INTO
        PartyParticipation
VALUES
        (party-id-variable, user-id,variable)
```

- **Rejecting a party invitation through notifications**

```
DELETE FROM
        PartyInvitation
WHERE
        user-id = user-id-variable and party-id = party-id-variable
```

2.11 Watch Page UI



Watch Page

In this page, the user can watch a media by using the watch and finish buttons, also he/she can rate the media and leave a comment. At the right side, the system suggests the user to watch similar media and presents the next episode if this is a series.

2.12 Watch Page UI Corresponding SQL Statements

- **Accepting a friend request through notifications**

```
DELETE FROM
        FriendshipInvitation
WHERE
        invited-id = main-user-id and inviter-id = rejected-friend-id

INSERT INTO
        Friendship
VALUES
        (main-user-id, accepted-friend-id)
```

- **Rejecting a friend request through notifications**

```
DELETE FROM
        FriendshipInvitation
WHERE
        invited-id = main-user-id and inviter-id = rejected-friend-id
```

- **Accepting a party invitation through notifications**

```
DELETE FROM
        PartyInvitation
WHERE
        user-id = user-id-variable and party-id = party-id-variable

INSERT INTO
        PartyParticipation
VALUES
        (party-id-variable, user-id,variable)
```

- **Rejecting a party invitation through notifications**

```
DELETE FROM
        PartyInvitation
WHERE
        user-id = user-id-variable and party-id = party-id-variable
```

- **Rating of the media in display**

```
SELECT
        M.media-id
        AVG(rate)
FROM
```

```
        Media M INNER JOIN MediaRating ON M.media-id = MediaRating.media-id
GROUP BY
        M.media-id
```

- **Comments belonging to the media in display**

```
SELECT
        C.*
FROM
        Comment C
WHERE
        media-id = curMediaID
ORDER BY
        time-stamp DESC
```

- **Comments of a comment**

(by DB design, we only allow a comment to have only a single parent as of in Youtube. This is a design limitation we have made. We do think that a Reddit style of comment threads are unreadable and messy.)

```
SELECT
        C.*
FROM
        Comment C
WHERE
        comment-id in (
        SELECT
                child-id
        FROM
                SubComment
        WHERE
                parent-id = selectedCommentID
)
```

- **Media suggestions based on media genre that is in display**

```
SELECT
        M.name
FROM
        GenrePreference GP, HasGenre HG, Media M
WHERE
        GP.user-id = main-user-id and GP.genre-id = HG.genre-id and
        HG.media-id = M.media-id
```

- **Leaving a rating to the media in display**

Check if user has rating

```
SELECT
        *
FROM
        MediaRating
WHERE
        Media-id = curMediaID AND user-id = clientID
```

If there is not a rating by the user before

```
INSERT INTO MediaRating
VALUES
        ( clientUserID,
        curMovieID,
        selectedRating );
```

If there is a rating by the client

```
UPDATE MediaRating
SET rating = selectedRating
WHERE
        media-id = curMediaID AND user-id = clientID
```

- **Getting watch progress of a client for the media in display**

```
SELECT
        progress
FROM
        Watch
WHERE
        media-id = curMediaID AND user-id = clientUserID
```

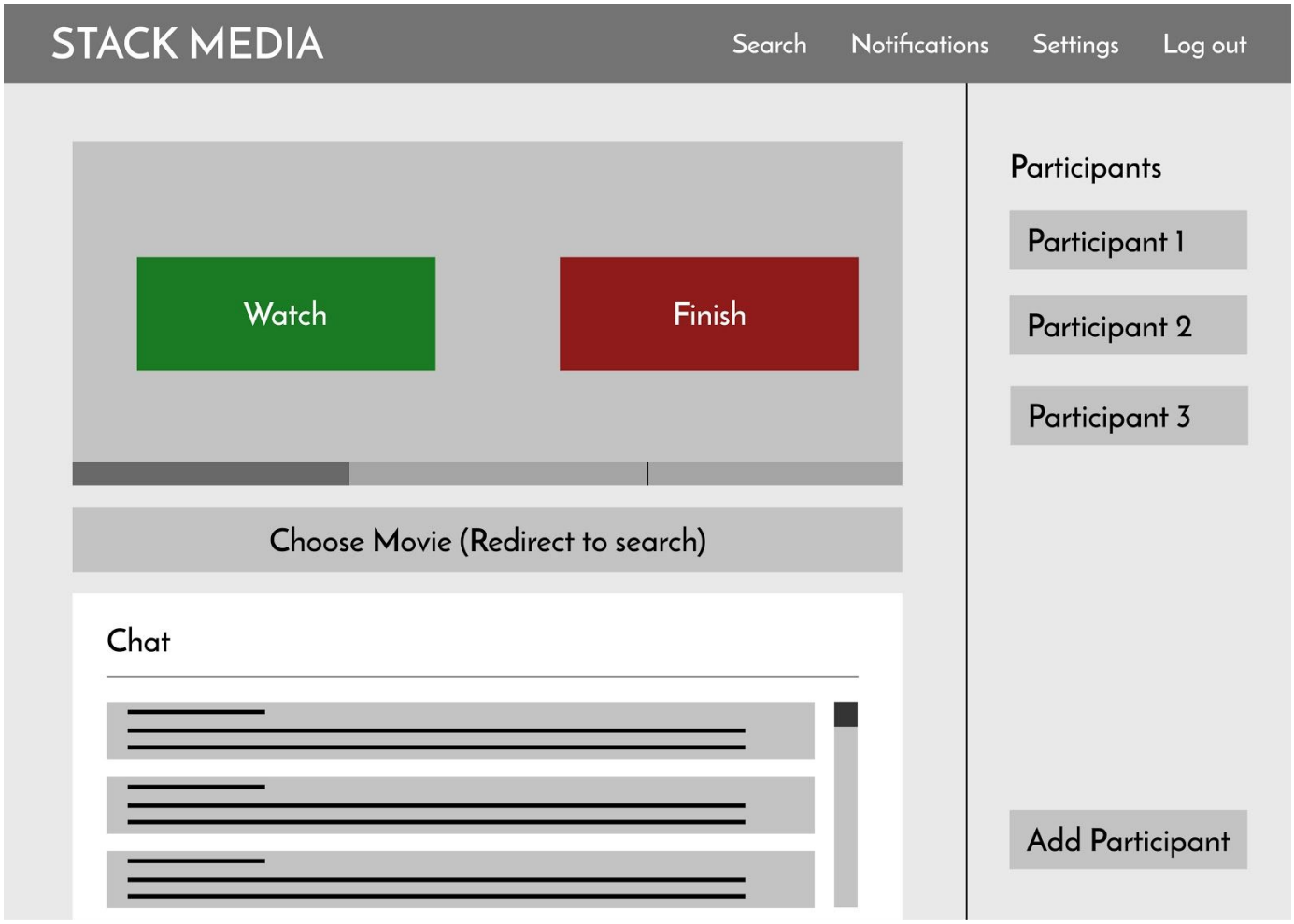
- **Watch button press to simulate watch action**

```
UPDATE Watch
SET progress = cachedProgress + 1, time-stamp = TIMESTAMP()
WHERE
        Media-id = curMediaID AND user-id = clientUserID
```

- **Finish button press to simulate finish action**

```
UPDATE Watch
SET progress = cachedProgress + 1, time-stamp = TIMESTAMP()
WHERE
        Media-id = curMediaID AND user-id = clientUserID
```

2.13 Party Page UI



Party Page

In this page, the creator of the party can select a movie and make the participants watch by using watch and finish buttons. The creator can also add/delete participants to the party. At the bottom, there is a chat for all participants.

2.14 Party Page UI Corresponding SQL Statements

- **Adding a participant to the party**

```
INSERT INTO
        PartyParticipation
VALUES
        (party-id-variable, user-id,variable)
```

- **Removing a participant from the party**

```
DELETE FROM
        PartyParticipation
WHERE
        user-id = user-id-variable and party-id = party-id-variable
```

- **Accepting a friend request through notifications**

```
DELETE FROM
        FriendshipInvitation
WHERE
        invited-id = main-user-id and inviter-id = rejected-friend-id

INSERT INTO
        Friendship
VALUES
        (main-user-id, accepted-friend-id)
```

- **Rejecting a friend request through notifications**

```
DELETE FROM
        FriendshipInvitation
WHERE
        invited-id = main-user-id and inviter-id = rejected-friend-id
```

- **Accepting a party invitation through notifications**

```
DELETE FROM
        PartyInvitation
WHERE
        user-id == user-id-variable and party-id == party-id-variable

INSERT INTO
        PartyParticipation
VALUES
        (party-id-variable, user-id,variable)
```

- **Rejecting a party invitation through notifications**

```
DELETE FROM
        PartyInvitation
WHERE
        user-id == user-id-variable and party-id == party-id-variable
```

- **Getting watch progress for the current client**

```
SELECT
```

```
        progress
FROM
        Watch
WHERE
        media-id = curMediaID AND user-id = clientUserID
```

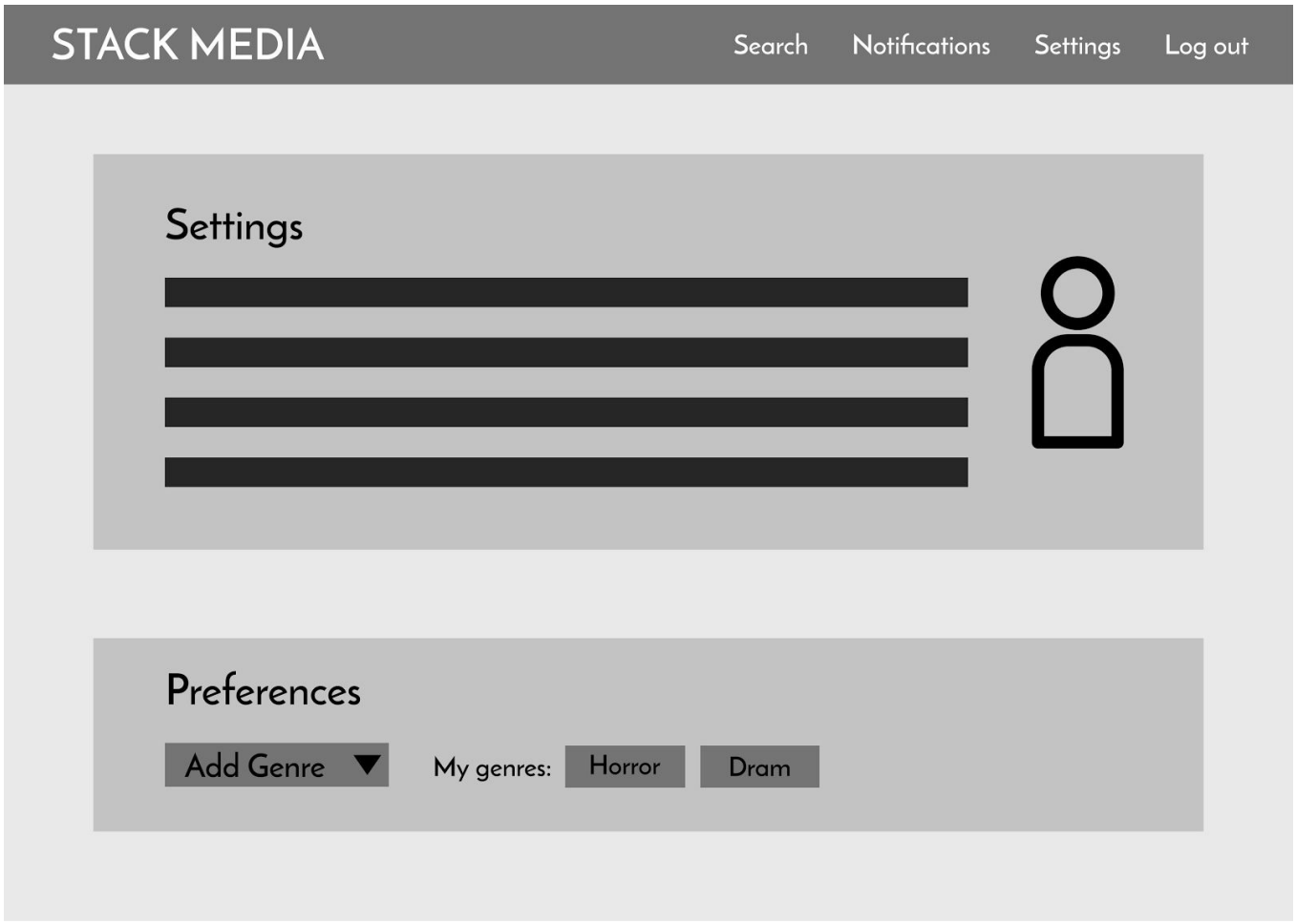
- **Watch button press to simulate watch action**

```
UPDATE Watch
SET progress = cachedProgress + 1, time-stamp = TIMESTAMP()
WHERE
        Media-id = curMediaID AND user-id = clientUserID
```

- **Finish button press to simulate finish action**

```
UPDATE Watch
SET progress = cachedProgress + 1, time-stamp = TIMESTAMP()
WHERE
        Media-id = curMediaID AND user-id = clientUserID
```

2.15 Settings Page UI



Settings Page

In this page, the user can see/change his/her settings, and also add/delete genres for specialized suggestions.

2.16 Settings Page UI Corresponding SQL Statements

- **Accepting a friend request through notifications**

```
DELETE FROM
        FriendshipInvitation
WHERE
        invited-id = main-user-id and inviter-id = rejected-friend-id

INSERT INTO
        Friendship
```

```
VALUES
        (main-user-id, accepted-friend-id)
```

- **Refusing a friend request through notifications**

```
DELETE FROM
        FriendshipInvitation
WHERE
        invited-id = main-user-id and inviter-id = rejected-friend-id
```

- **Accepting a party invitation through notifications**

```
DELETE FROM
        PartyInvitation
WHERE
        user-id = user-id-variable and party-id = party-id-variable

INSERT INTO
        PartyParticipation
VALUES
        (party-id-variable, user-id,variable)
```

- **Refusing a party invitation through notifications**

```
DELETE FROM
        PartyInvitation
WHERE
        user-id = user-id-variable and party-id = party-id-variable
```

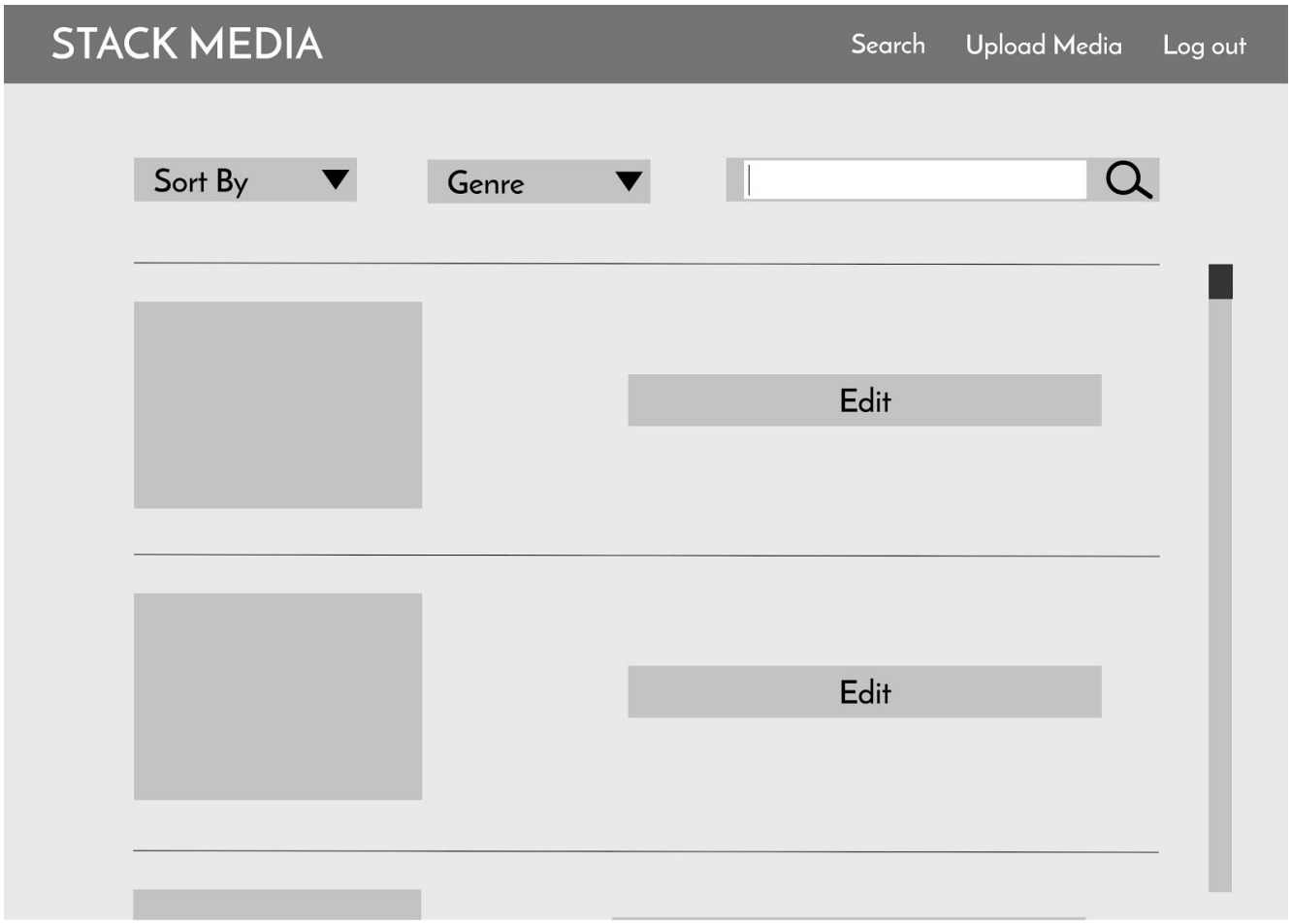
- **Adding genre preference for suggestions**

```
INSERT INTO GenrePreference
VALUES
        ( curUserID,
        genreID );
```

- **Removing a genre preference for suggestions**

```
DELETE FROM GenrePreference
WHERE
        user-id = clientUserID AND genre-id = selectedGenreID
```

2.17 Search Page Company UI



Search Page - Company User

In this page, the user can search for movies by specifying genre and a movie name. Also he/she can sort the results. Next, he/she can edit the media (the button redirects to Upload/Edit Media Page).

2.18 Search Page Company UI Corresponding SQL Statements

- **Searching media**

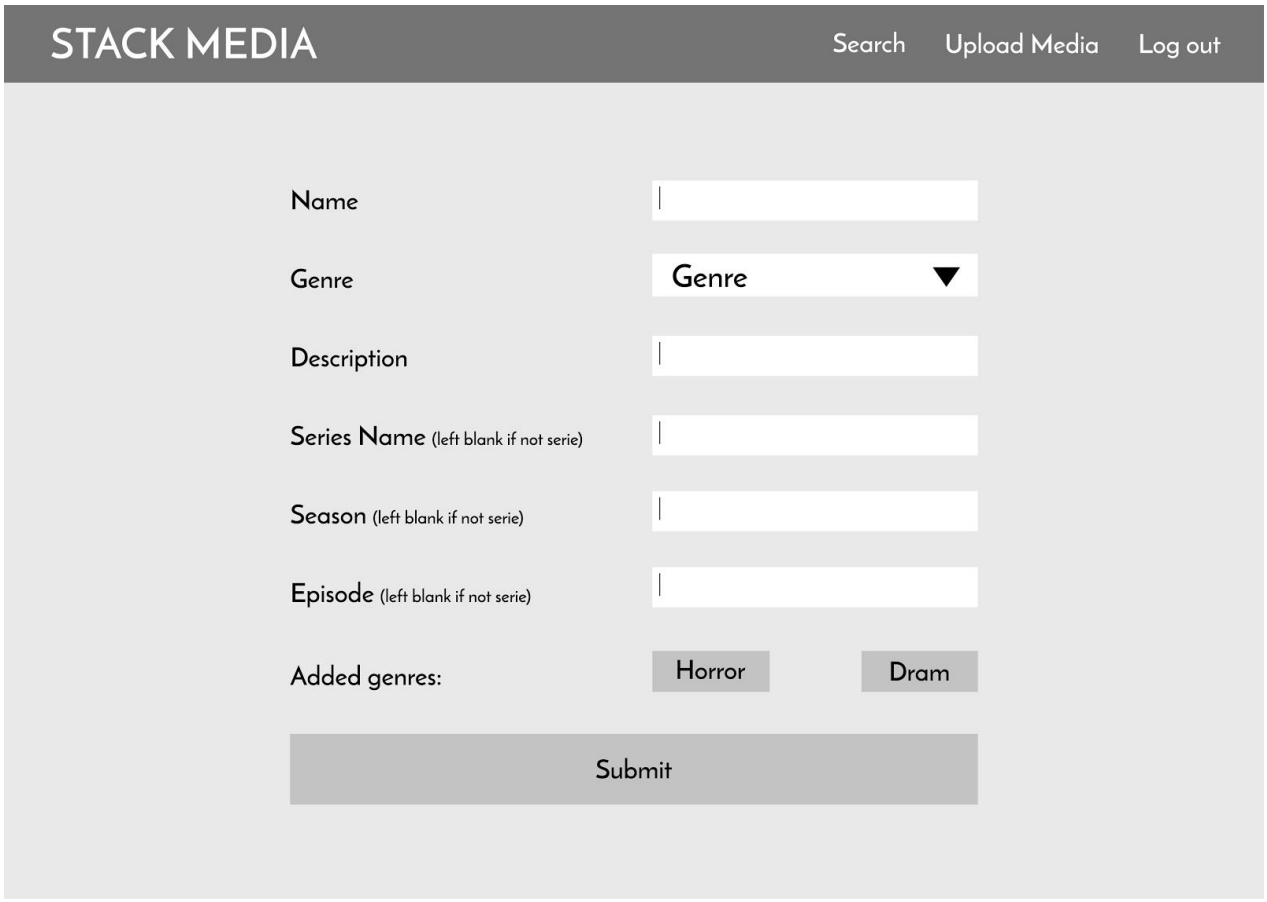
```
SELECT
        *
FROM
        Media M
WHERE
        DIFFERENCE( name, movieNameUIText) = 4 AND
        genreUISELECTION in (
                SELECT
```

```
            Genre.title
        FROM
            HasGenre INNER JOIN Genre ON HasGenre.genre-id = Genre.genre-id
        WHERE
            M.media-id = HasGenre.media-id
    )
ORDER BY
    sortUISelection DESC
```

- **Editing an existing media**

```
// updating
UPDATE Media
SET
    name = nameArg,
    description =descArg,
    path = mediaLinkArg,
    duration = durationArg
WHERE
    Media.media-id = selectedMediaID

// deleting
DELETE FROM Media
WHERE
    Media.media-id = selectedMediaID
```

2.19 Upload/Edit Media Company Page UI



Upload/Edit Media Page

The company user can upload a new media by specifying its attributes, and also he/she can edit the attributes of a selected media (the edit button in the search page redirects here for edit).

2.20 Upload/Edit Media Company Page UI Corresponding SQL Statements

- **Uploading a media**

movie

```
INSERT INTO Media
VALUES
        ( getUniqueMediaID(),
        curUserID,
        NULL,
        mediaNameUIText,
        descriptionUIText,
        pathUIText,
```

durationUIText,
TIMESTAMP());

INSERT INTO Movie
VALUES
(movieID, NULL);
movieID is cached on the server.

tv-show
INSERT INTO Media
VALUES
(getUniqueMediaID(),
curUserID,
seriesUINameText,
mediaNameUIText,
descriptionUIText,
pathUIText,
durationUIText,
TIMESTAMP());

INSERT INTO TV-Series-Episode
VALUES
(mediaID,
episodeUIText,
seasonUIText,
NULL);