Bilkent University

CS 353

Database Design

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Media Services Database Management System

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Group No: 10

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Contents

1. Introduction

The Media service of the data management system is used to provide the various services throughout the people who are using this system. There are various factors involved in this processing such as a large number of users are included in this and they enrolled in this system by using their specific personal credentials. The customers who are using this system can create their channel here after creating their specific channel they can modify according to their requirements. The user can send feedback on the particular movie. They can also leaving likes and comments to this platform. They can specified their preference for these genres and also used for classification purpose. According to the user genres the users get recommendation for their activities so they can more explore their media files in the data management. The home page of the media service data management system contains all channels list includes both movies and serials. The movies similar to the old which recommend in the terms of genres. The watch status is saved as in the media file that whenever the user left their watched status is it is whenever they will visit again from their they will start their previous activity. The watch button and wait button UI contain the feature such as whatever they are watching left is become as it that specific time and in the finish UI the media which are completed are stored there. These two UI simply gives the easy recommendation for next action of user. The user should able to click finish and three times watch action should be there for users. As like the movies the serials page will be works same for finish and watch activities of UI. The user can list all media files uploaded and then perform searching, sorting and filtering on the same screen. Live stream and donation features are in the system. Users can create livestream and other users can join and donate to the livestream. Also, the users can update their balance. This application plays a more

important role as we are compared with other services which are available in our day to day life.

2. Description

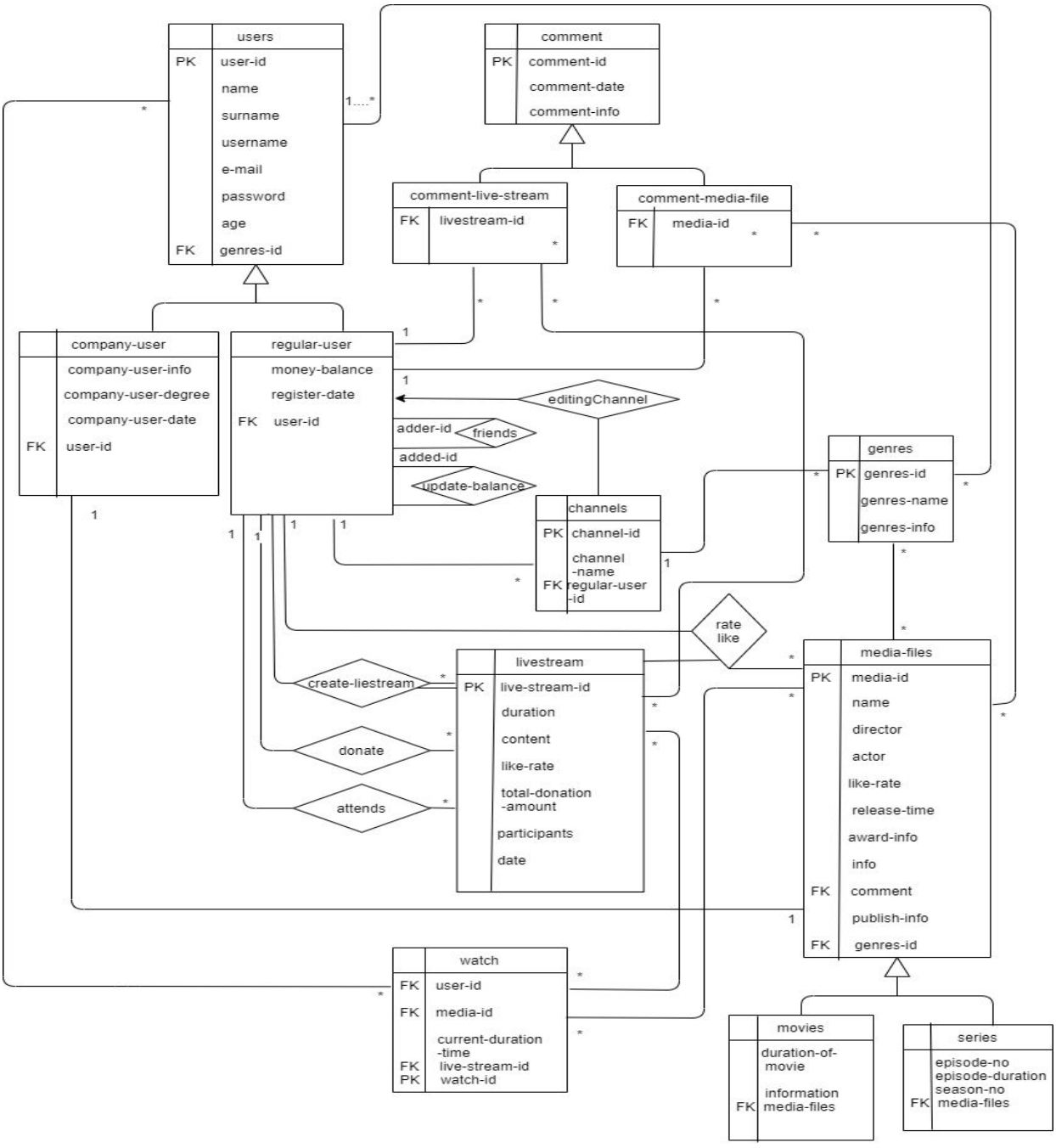
In this project, the data management system is implemented where the admin can provide the media files which contain the movies and series related data. There are various users enrolled in this system by using their specific personal credentials. The user can create their channel here after creating their specific channel they can modify according to their requirements. The user can send feedback on the particular movie. They can also leave likes and comments on this platform. They can specify their preference for these genres and also used for classification purposes. According to the user genres the users get recommendation for their activities so they can more explore their media files in the data management. When users create their channels they all display on the main page of the media file. The main page should contain many more channels which are created by users who are using this system. There are many genres chosen for each channel. The users created list will display on the main page so it will be easy for users to move from one channel to another according to their preference. The standard user leaves feedback on media so it will be helpful for admin to make changes and provide service to all users according to their convenience.

The main page which contains all channels list includes both movies and serials. The movies are similar to the old which are recommended in the terms of genres. The watch status is saved as in the media file that whenever the user leaves their watched status it is whenever they will visit again. There are two UI providers here such as watch and wait means whatever they are watching is left as it that specific time and in the finish UI the media which are completed are stored there. These two UI simply give the easy recommendation for the next action of the user. As like the movies the serials page will work the same for finish and watch activities of UI. The user also jumps to the next episode according to their preference. In this data management system project the standard user can leave the comments and these comments can display on their profile page. This information of the comments is displayed according to the date and time. The display format

for the comments is from recent to latest. When a user creates their profile the overall activities are displayed under their profile page such as a list of similar media files in the terms of genres.

The users who register themselves in the data management system can rate from 1 to 10 scales for specific media files. The user can leave a many more comments for the media files. The media file will be published in the system by different company users and producers of the media who are registered in the system. The company user should order episodes and other serials correctly. The user can list all media files uploaded and then perform searching, sorting and filtering on the same screen. These applications play a crucial role for many users who are using these data management systems.

2.1 ER diagram of media services data management system:



2.2 The changes made in ER diagram:

- A relation between Genres and media-files is in the many to many relationship that is many categories of the list can fetch the many media files information.
- New attributes added in the media-files for the better performance and flexibility.
- Fixing minor issues.

3. Relational schema

3.1 users:

Relational Model:

user (user-id, name, surname, username, e-mail, password, age)

Keys:

Primary-key: user-id

Foreign-key: None

Normal Forms: BCNF

3.2 company-user:

company-user(company-user-info, company-user-degree, company-user-date, user-id)

Key:

Primary-key: None

Foreign-key: user-id

Normal-form: BCNF

3.3 regular-users:

Relational Model:

regular-user (money-balance, registered-date, user-id)

Keys:

Primary-key: None

Foreign-key: user-id

Normal Forms: BCNF

3.4 media-files:

Relational Model:

media-files(media-id, name, director, actor, like-rate, release-date, award-info, info, comment)

Keys:

Primary-key: media-id

Foreign-key: comment

Normal Forms: BCNF

3.5 movies:

Relational Model:

movies(movies-id, information, duration-movie, media-file)

Keys:

Primary-key: movie-id

Foreign-key: media-file

Normal Form: BCNF

3.6 series:

Relational Model:

series (episode-id, episode-no ,season-number, episode-duration, media-files)

Keys:

Primary-key: episode-id
Foreign-key: media-files

Normal Form: BCNF

3.7 channels:

Relational Model:

channels(channel-id, channel-name, regular-user-id)

Keys:

Primary Key: channel-id

Foreign Key: regular-user-id

Normal Form: BCNF

3.8 comment:

Relational Model:

comment (comment-id, comment-date, comment-info)

Keys:

Primary Keys: comment-id

Foreign Key: None

Normal Form: BCNF

3.9 comment-live-stream:

Relational Model:

Comment-live-stream(live-stream-id)
Keys:

Foreign-Key: live-stream-id

Primary Key: None

Normal Form: BCNF

3.10 comment-media-file:

Relational Model:

Comment-media-file(media-id)
Keys:

Foreign-Key: media-id

Primary Key: None

Normal Form: BCNF

3.11 watch:

Relational Model:

watch(user-id, media-id**,** current-duration, live-stream-id**)**
Keys:

Primary Key: None

Foreign Keys: user-id, media-id, live-stream-id

Normal Form: BCNF

3.12 genres:

Relational Model:

genres(genre-id, genre-name, genre-info)

Keys:

Primary Keys:
genre-id

Foreign Key: None

Normal Form: BCNF

3.13 live-stream:

Relational Model:

Live-stream (live-stream-id, duration, context, like-rate, total-donation-amount, participants, date e)

Keys:

Primary Keys: live-stream-id

Foreign Key: None

Normal Form: BCNF

4. Implementation

In this project, the data management system is used to implement the media service data management system where the admin can provide the media files which contain the movies and series related data. As we discuss, Admin can provide the media files which contain the movies and series related data. There are different and more numbers of users can be enrolled in this system by using their specific personal credentials such as unique id, it might be their e-mail-d and password etc. The user can create their channel here after creating their specific channel they can modify according to their requirements. The users can also leave likes and comments to this platform. They can specify their preference for these genres and also used for classification purposes. As per the requirements of the user genres the users get recommendation for their activities so they can more explore their media files in the data management. When users create their channels they all display on the main page of the media file. The main page of the system contains many more channels which are created by users who are using this system. There are many genres chosen for each channel. The users created list will display on the main page so it will be easy for users to move from one channel to another according to their preference. The standard user leaves feedback on media so it will be helpful for admin to make changes and provide service to all users according to their convenience. The media service data management system is developing in PHP language and MySQL database. As compared to the other language compatibility, PHP is the best choice for this project implementation. PHP is the server side scripting language which plays a crucial role while development of media files. Nowadays most of the application is designed by using this scripting language and for storing data activities MySQL is used. There are three methods used for the connection with PHP: MySQL, MySQLi and PDO. In our project the scripting language is connected with MySQL database. The database is created at the localhost that is PHPMyAdmin.

1. Project Environment:

The project environment plays the most crucial role while the development of the Media service data management system. The factors which affect the project are studied here such as internal and factors effects on the development of the system. The internal factors are under control of the media system that means the weakness and strength which comes out from the system effects on the internal system of the project. The proper development tools which give best end results are used for the development .In this project, PHP language is used for the programming purpose. The results which come out from the system are in the understandable format. Compared to the other languages the PHP gives best results. The connections within the system can be done with the MySQL database. The connection procedures are explained as below in the data connection process.

2. Frameworks used in the Media service data management system:

The development of the media service is designed with help of PHP language and framework which is used for Laravel which is a web application framework. They provide the most interactive and expressive framework for the implementation. In this project it can be used for the purpose of the sessions, routing, authentication and also used for caching.

The security of the media service application is maintained by using Laravel; it includes authentication and authorization system so that users can trust on the system and use it effectively. The most of the technical vulnerabilities can be fixed while development of the project with help of the Laravel framework.

3. Language:

PHP language which is used in this project is platform independent so we can use it on any platform. Compared to the other languages the PHP gives best results. The connections within the system can be done with the MySQL database and PHP language. The speed of PHP language is more as compared to other languages. On the bases of the specific features of the PHP it is the best choice for the development of the Media service data management system.

4. Database connection Process:

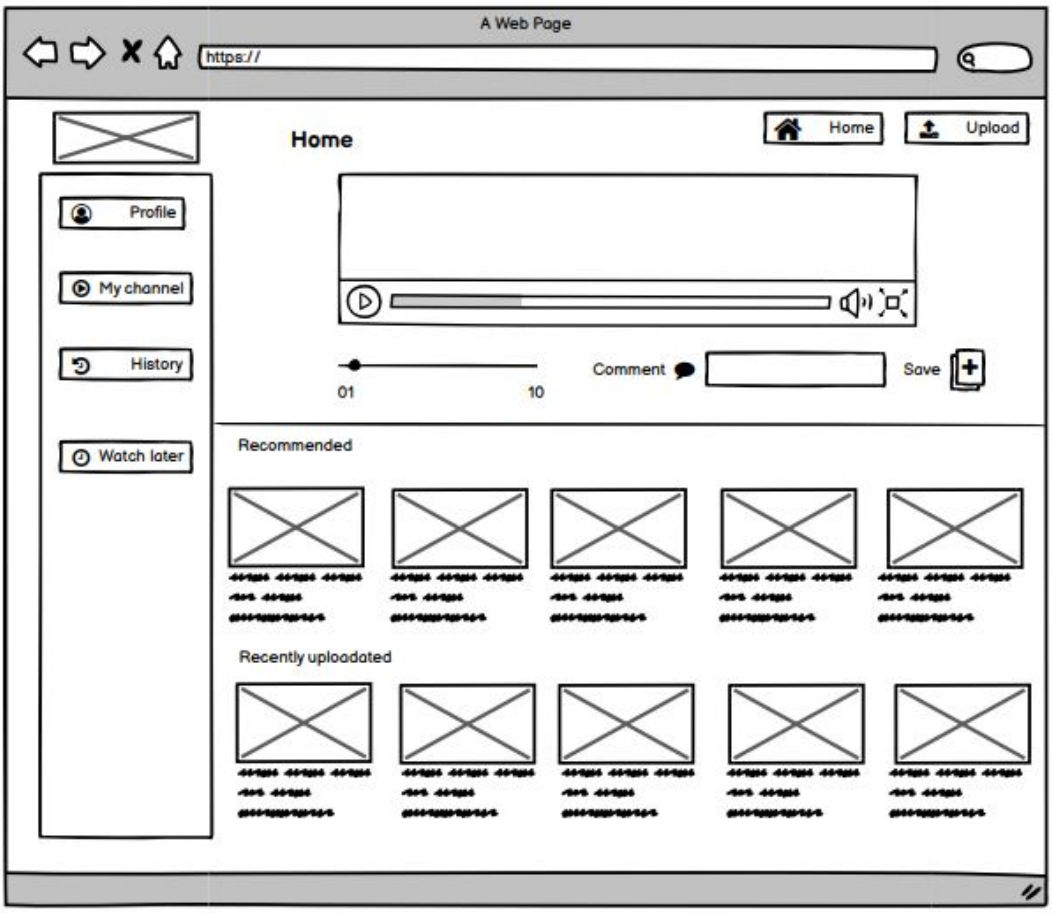
- The admin does not need to write code for database connection every time, it is the most difficult way to manage so we include it by using PHP custom function.
- By calling its function they can easily use it in our code for the database connection with PHP. PHP language which is used in this project is platform independent so we can use it on any platform.
- The speed of PHP language is more as compared with ASP.NET and other languages. It is widely used all over the world and many more people used it efficiently. MySQL is an open source platform for relational database management systems. It is mostly RDBMS used by many developers. There are many web based applications based on MySQL.
- The data is stored in different tables and relations in RDBMS with the help of primary key and foreign key as we discussed above. RDBMS enables you to implement databases with tables, columns and indexes. It can update the indexes automatically, explain SQL queries and combine information from various tables.
- As we know MySQL is open source so there is nothing to pay for it. The various categories of channel can be selected by standard users from media files. The standard users can update their balance and add friends form these media service data management systems. As it is one of the services so it is more important to do changes and various updates according to the users feedback. The feedback form user's plays a more crucial role for the development purpose of media service.
- It is a control panel where you can manage the database that is created. Whenever the admin gets to the browser then they must browse localhost/PHPMyAdmin. According to the requirements admin creates the tables for the media service. After creating the database at localhost, the project folder must be stored in the htdocs folder from where you can access the folder in your destination source code destination. After completing the coding part the folder contains the database file which is having .php extension.

5. A problem occurs during implementation and its solutions:

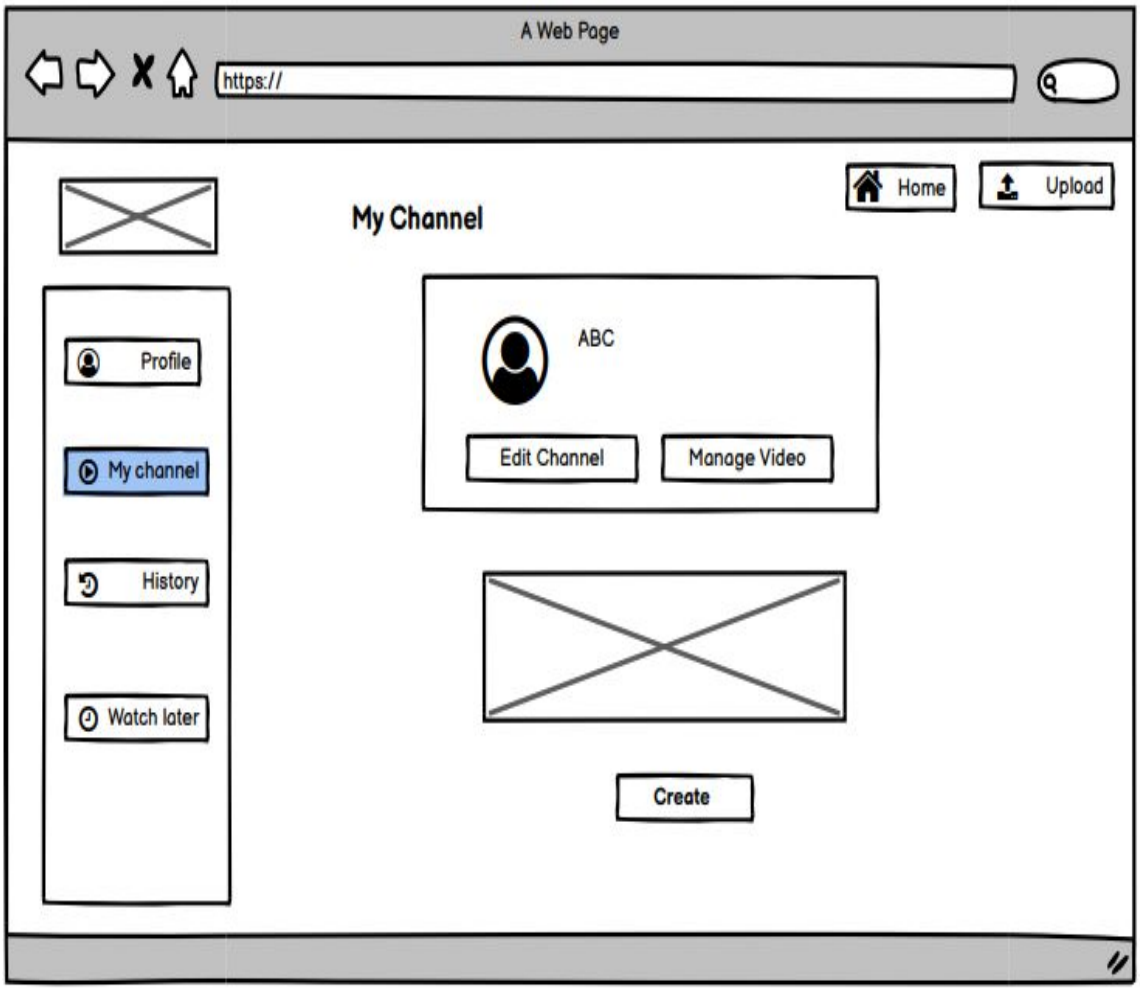
- During the implementation process the data which is fetched from the database is not properly retrieved which does not give any output on the screen. The code which is implemented in this was checked from their initial stage to the final one. The attributes which are used in the specific classes are really matched with the database and in code. By checking the connection activity with one another it gives the solution of our issue, after using proper attributes name we achieve our final end results.
- The design of the UI is created more attractive than the previous design. The previous design module does not give the proper idea about project implementation so to achieve more flexibility while designing here we use the new UI interface which is best as compared with the other.

6. Advance DB features:

The Advanced database system which is used in this project is a combination of the various functionalities such as query language, system features which are supportable for project and for further processing.



In the above UI the users can see the home page after they do login and registration processing. The RDBMS is used for the implementation of the home page that it gives better results and also gives expected UI for users. The data types which are used in this project, support various modules.



In this output screen, the multimedia data types are used for the implementation. The data requirements are analyzed here for further processing; it also defines the relationship between edit channel and managed video.

Work Allocation of the Project

All members of the group contributed the proposal, the design report and all parts of the coding project.

Furkan : Furkan drew ER diagram and relational schema in the reports.In coding part, he did signing in signing up part. He wrote codes of adding and removing channels,creating

livestream and livestream connection of webcam. Database tables and sql codes are done by him.

Erkin: Erkin created and upgraded the relational models. Database server and connection installments are done by him. He wrote codes of adding media files into selected channels in both the front end and back end part. He also creates the high level sql statements.

Suleyman: Suleyman contributed the front end design and sql queries in the system. Comment and rating part of the project are done by him.

Enes: Enes designed the main UI part of the project. He worked on adding and removing media-files.He helped the sql codes in reports and the coding part of the project. He contributed comment and rating part of the system.

5. Sample Output Report

1. Application & GUI

Validation Messages

Code:

```
if (empty($chanelImage) || empty($chanell)) {
    $messge             = "Please Select Chanel Image or Chanel Logo";
    $_SESSION['chanel'] = $messge;
    echo "<script type='text/javascript'>window.location.href='create_channel';</script>";
} else {
```

Output:

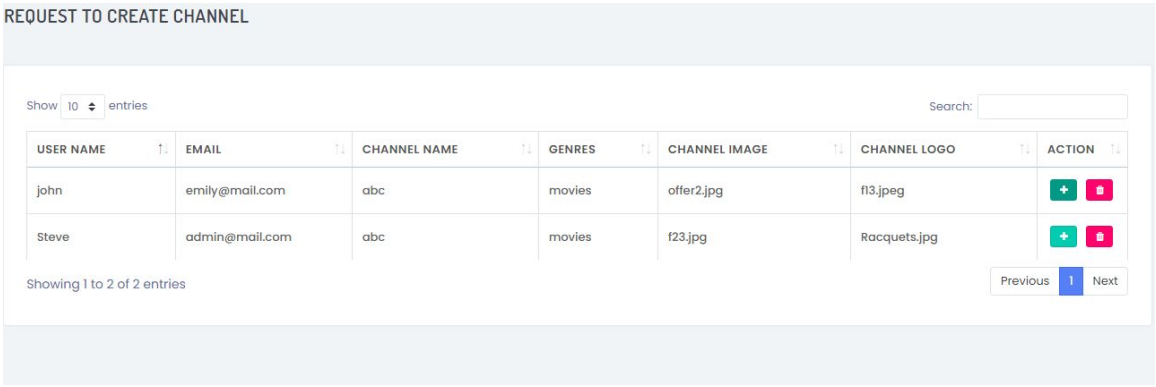
2. Data Retrieval

Using JOIN Query

Code

```php
<?php
   $select="SELECT t1.firstName,t1.userId, t2.userName, t2.userEmail, t2.chanelName, t2.geners, t2.
       chanelImage, t2.chanelDesc, t2.chanelLogo FROM `user` AS t1 JOIN `channel` AS t2 ON t1.userId = t2
       .userId";
    $sel_res = $connect->query($select);
    while($rowch = $sel_res->fetch_assoc()){
    $userid = $rowch['userId'];
   ?>
<tr>
   <td><?php echo $rowch['firstName'] ?></td>
   <td><?php echo $rowch['userEmail'] ?></td>
   <td><?php echo $rowch['chanelName'] ?></td>
   <td><?php echo $rowch['geners'] ?></td>
   <td><?php echo $rowch['chanelImage'] ?></td>
   <td><?php echo $rowch['chanelLogo'] ?></td>
   <td>
```

Output



3. Data Modification:

1. Insert Data

Code

```php
include('config.php');

if (isset($_POST['create_chanel'])) {
    $userName    = $_POST['userName'];
    $userEmail   = $_POST['userEmail'];
    $chanelName  = $_POST['chanelName'];
    $geners      = $_POST['geners'];
    $chanelDesc  = $_POST['chanelDesc'];

    $chanell     = $_FILES['chanelLogo']['name'];
    $chaneltemp  = $_FILES['chanelLogo']['tmp_name'];
    $folder      = '../upload/';

    move_uploaded_file($chaneltemp, $folder . $chanell);

    $chanelImage    = $_FILES['chanelImage']['name'];
    $chanelImgtemp  = $_FILES['chanelImage']['tmp_name'];
    move_uploaded_file($chanelImage, $folder . $chanelImage);


    if (empty($chanelImage) || empty($chanell)) {
        $messge             = "Please Select Chanel Image or Chanel Logo";
        $_SESSION['chanel'] = $messge;
        echo "<script type='text/javascript'>window.location.href='create_channel';</script>";
    } else {
     $chanelInsert = "INSERT INTO channel (userId,userName,userEmail,chanelName,geners,chanelImage,chanelLogo,chanelDesc,status)
         VALUES ('$userId','$userName','$userEmail','$chanelName','$geners','$chanelImage','$chanell','$chanelDesc', '0')";
        $st1          = $conn->prepare($chanelInsert);
        $st1->bindvalue(":userName", $userName, PDO::PARAM_STR);
        $st1->bindvalue(":userId", $userId, PDO::PARAM_STR);
        $st1->bindvalue(":userEmail", $userEmail, PDO::PARAM_STR);
        $st1->bindvalue(":chanelName", $chanelName, PDO::PARAM_STR);
        $st1->bindvalue(":geners", $geners, PDO::PARAM_STR);
        $st1->bindvalue(":chanelImage", $chanelImage, PDO::PARAM_STR);
        $st1->bindvalue(":chanell", $chanell, PDO::PARAM_STR);
        $st1->bindvalue(":chanelDesc", $chanelDesc, PDO::PARAM_STR);
        $st1->bindvalue(":status", "0", PDO::PARAM_STR);
        $st1->execute();
        $smessge             = "Chanel Created Successfully";
```

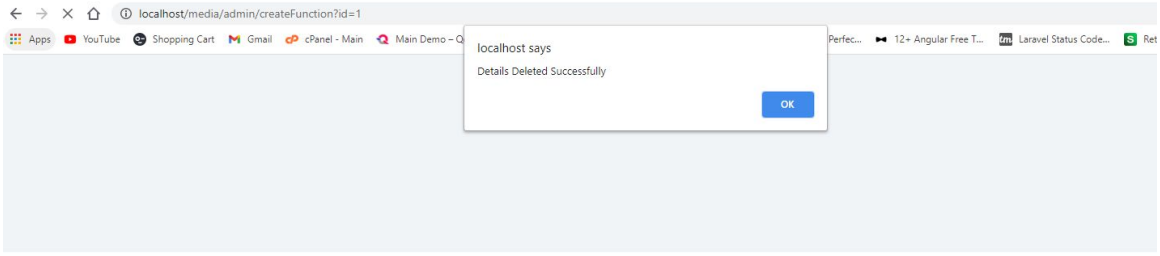
Output

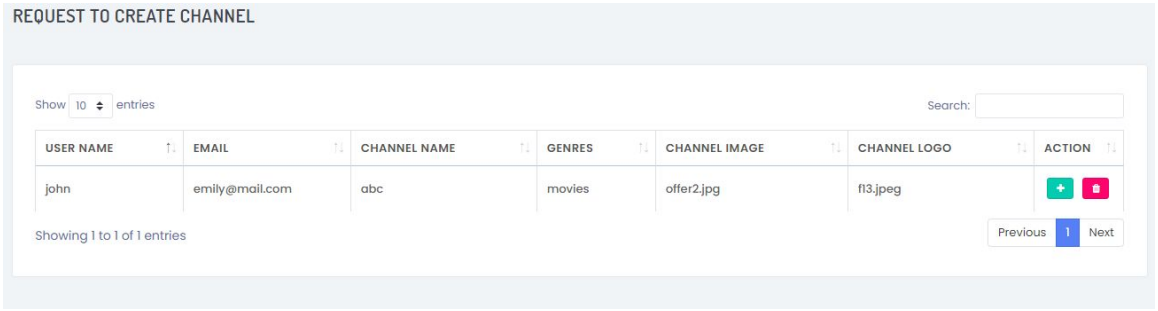
2. Delete Data

Code:

```
<a href="createFunction?id=<?php echo $userid; ?>"><button type="button" class="m-1 btn btn-sm
btn-danger"><i class="fa fa-trash" aria-hidden="true"></i></button></a>
```

Output:

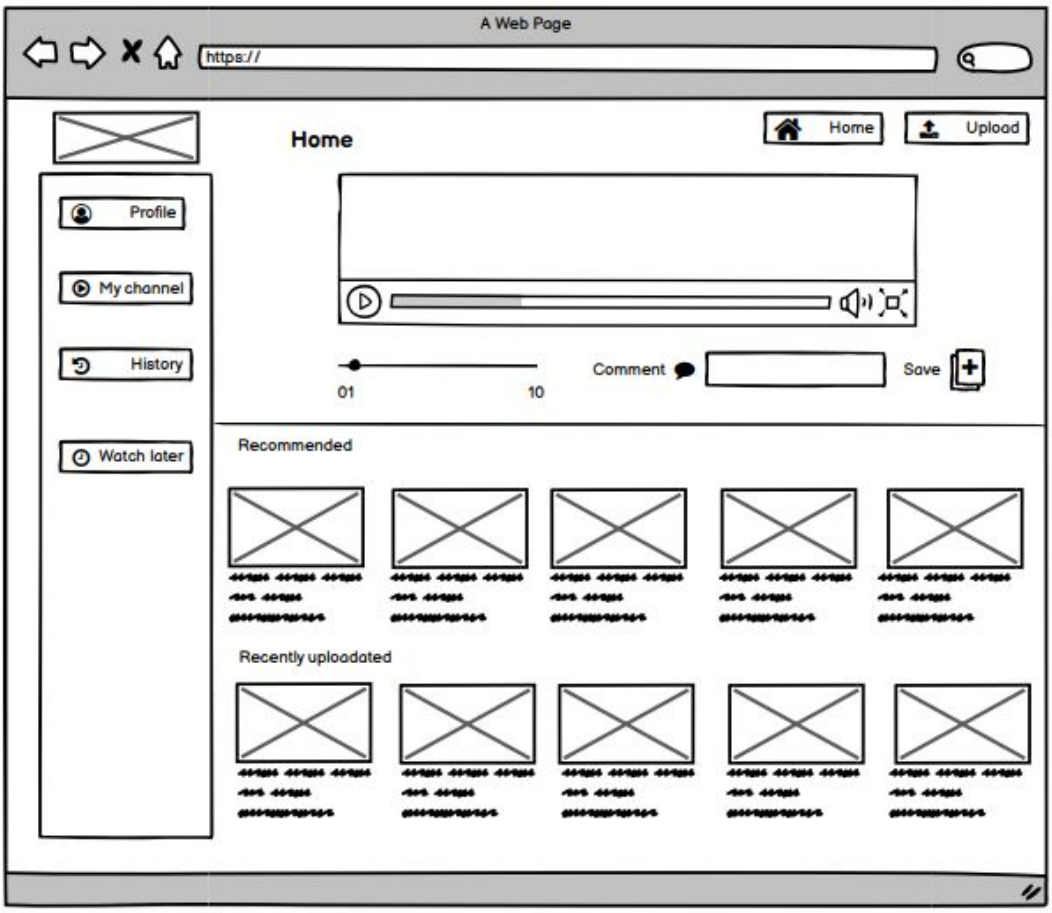




6. User's Manual

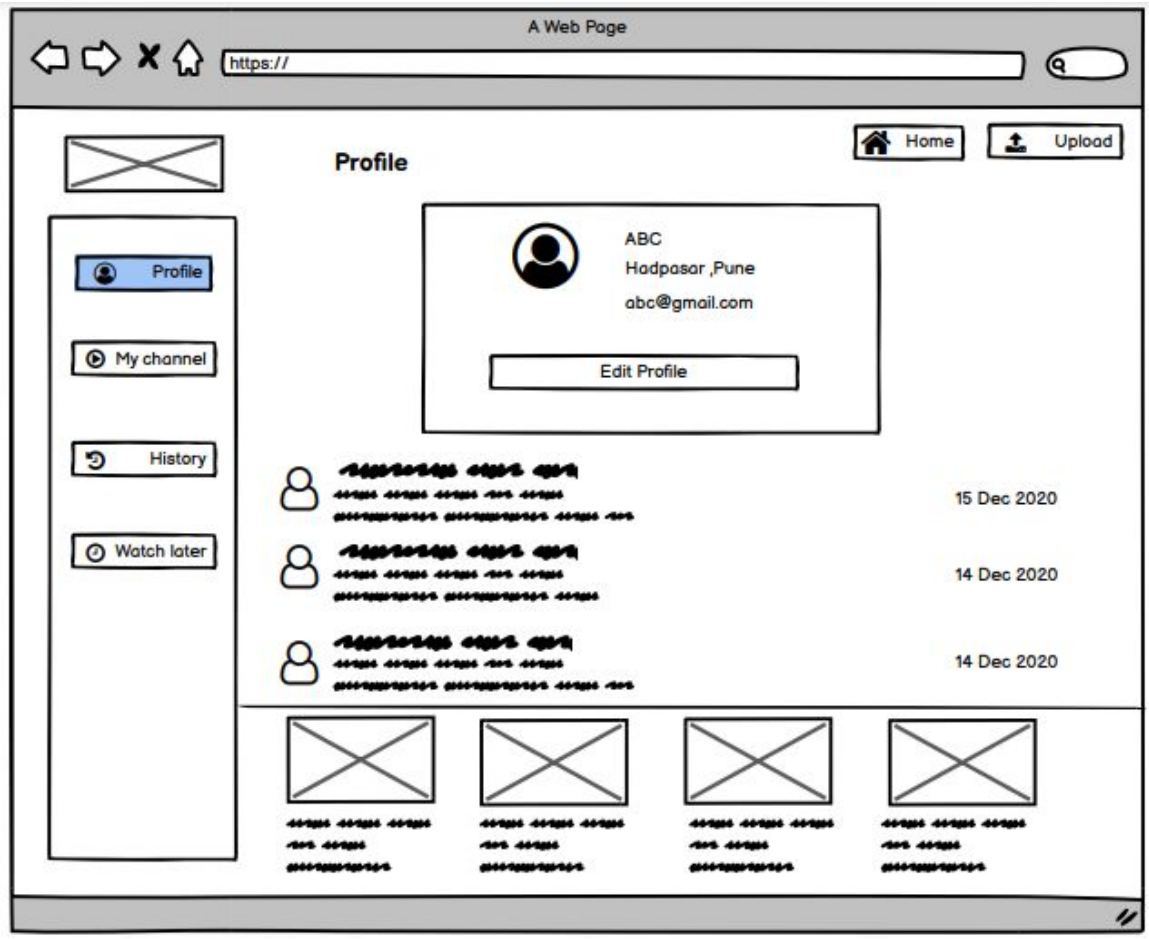
The user manual contains all required information for the user to make overall use of the media service data management system. It includes a manual description of all functionalities which are used in this application. The difficulties which are faced by users are all mentioned in this manual so it will be easy for all users to use the service and give better feedback for all activities.

1. Home page:



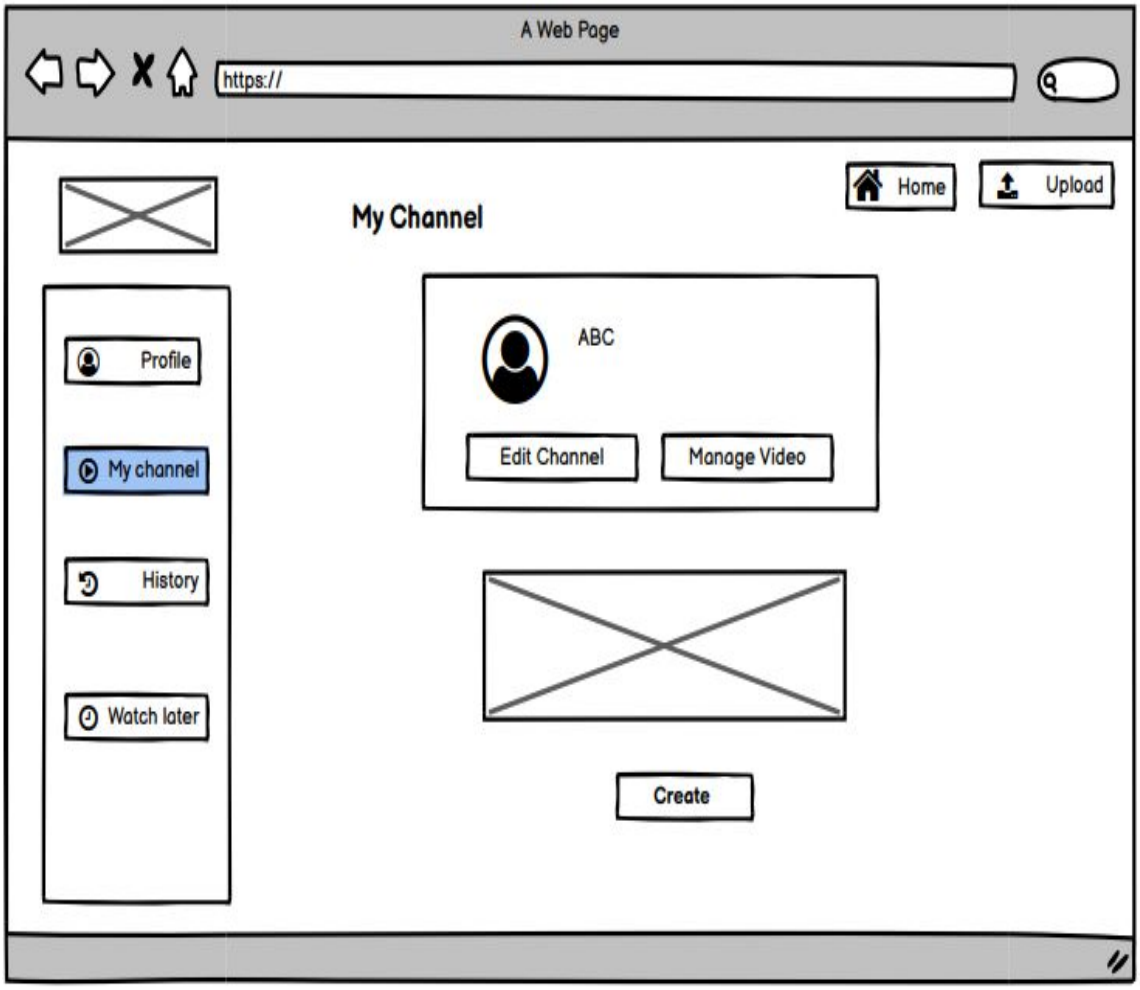
- The home page of the media service management system contains the many more channels which are created by users who are using this system.
- The home page contains recommended videos as well as a recently uploaded video list.

2. Profile page:



- The profile page of the user contains the personal information of the user who is using this service.
- The profile page contains the information which includes my channels, history options and list of all recent videos which have recently been seen by users.
- From this page users can go to the home page for searching their activities and upload option move the video to the publish section for publishing particular video with the help of company users.

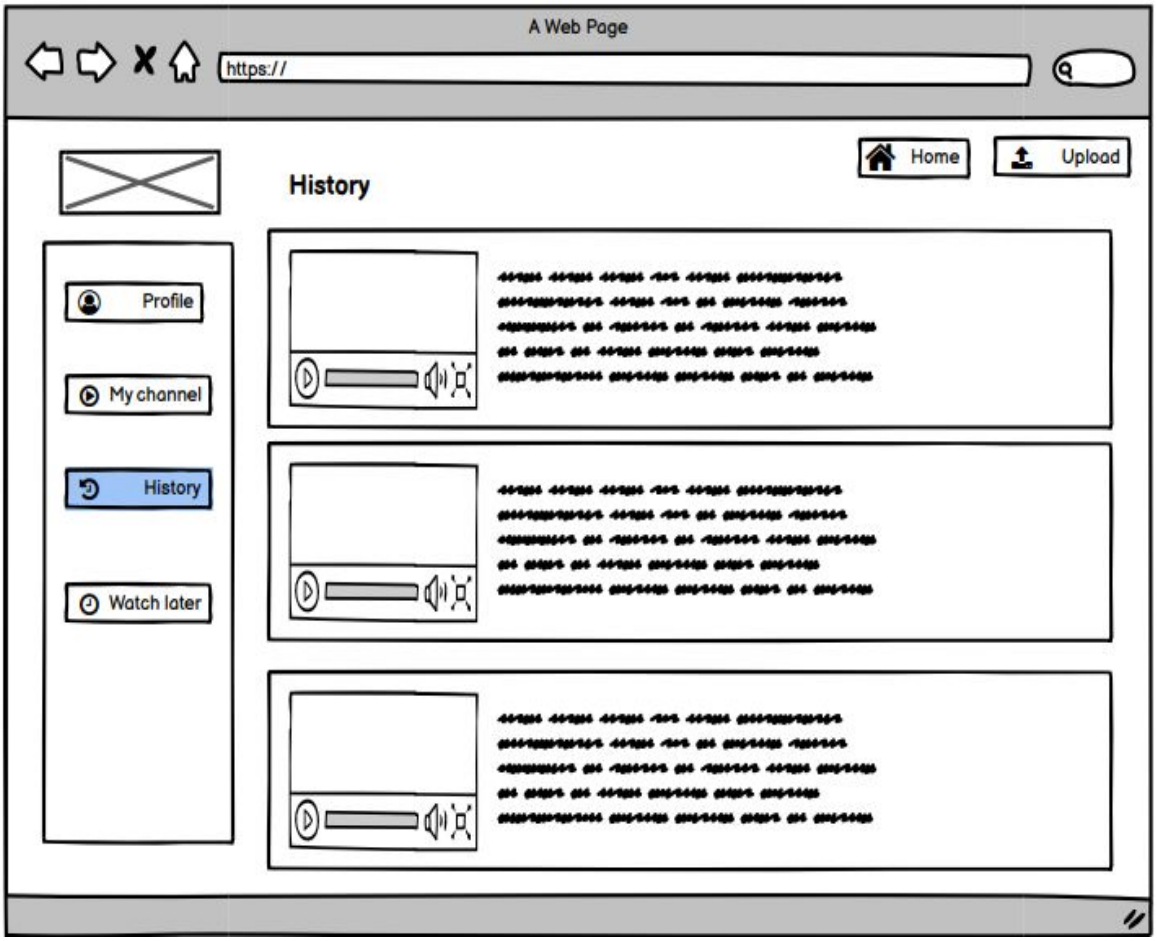
3. My Channel:



- It contains all information of a particular page from where we can edit our channel and manage videos for the various operations.

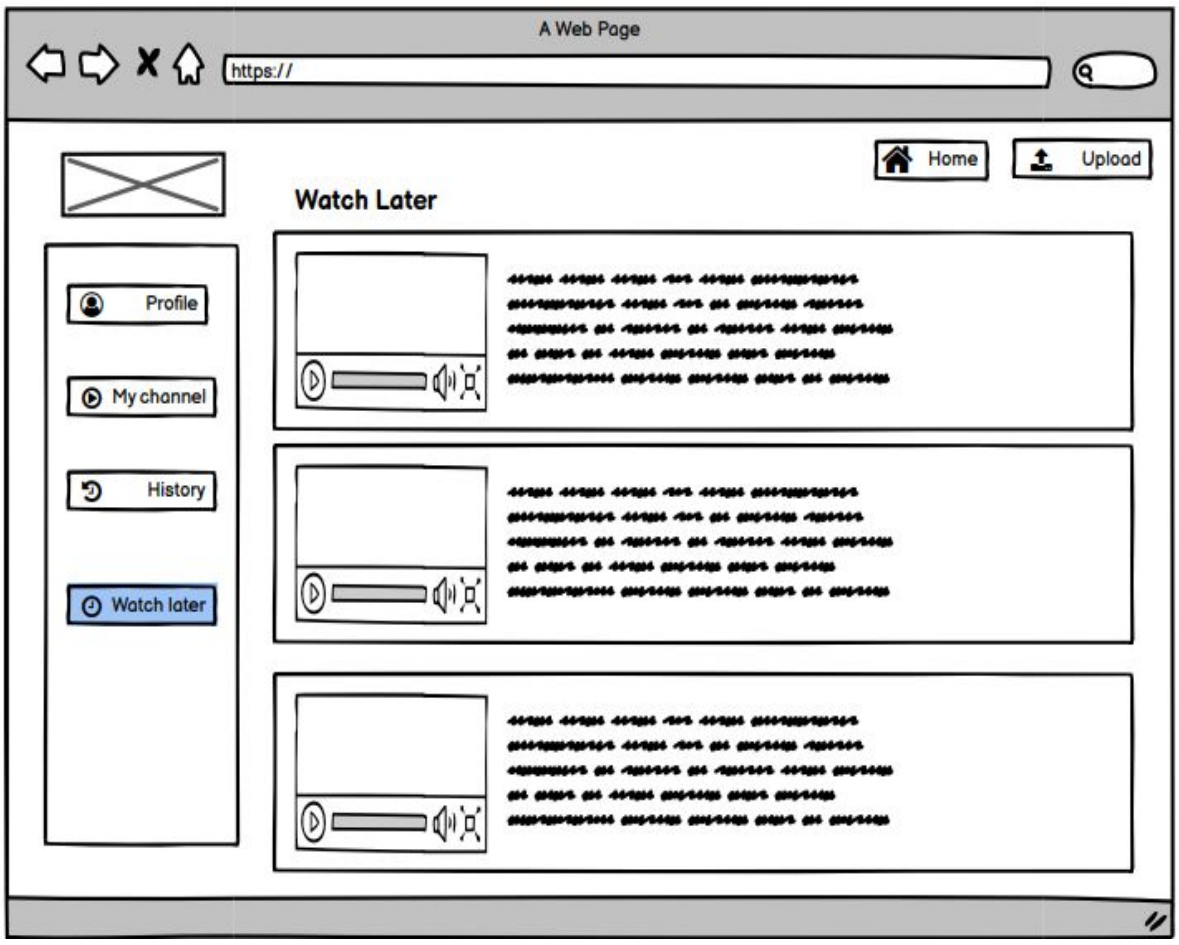
- It also contains detailed information about channels, it might be serials as well as movies.

4. History page:



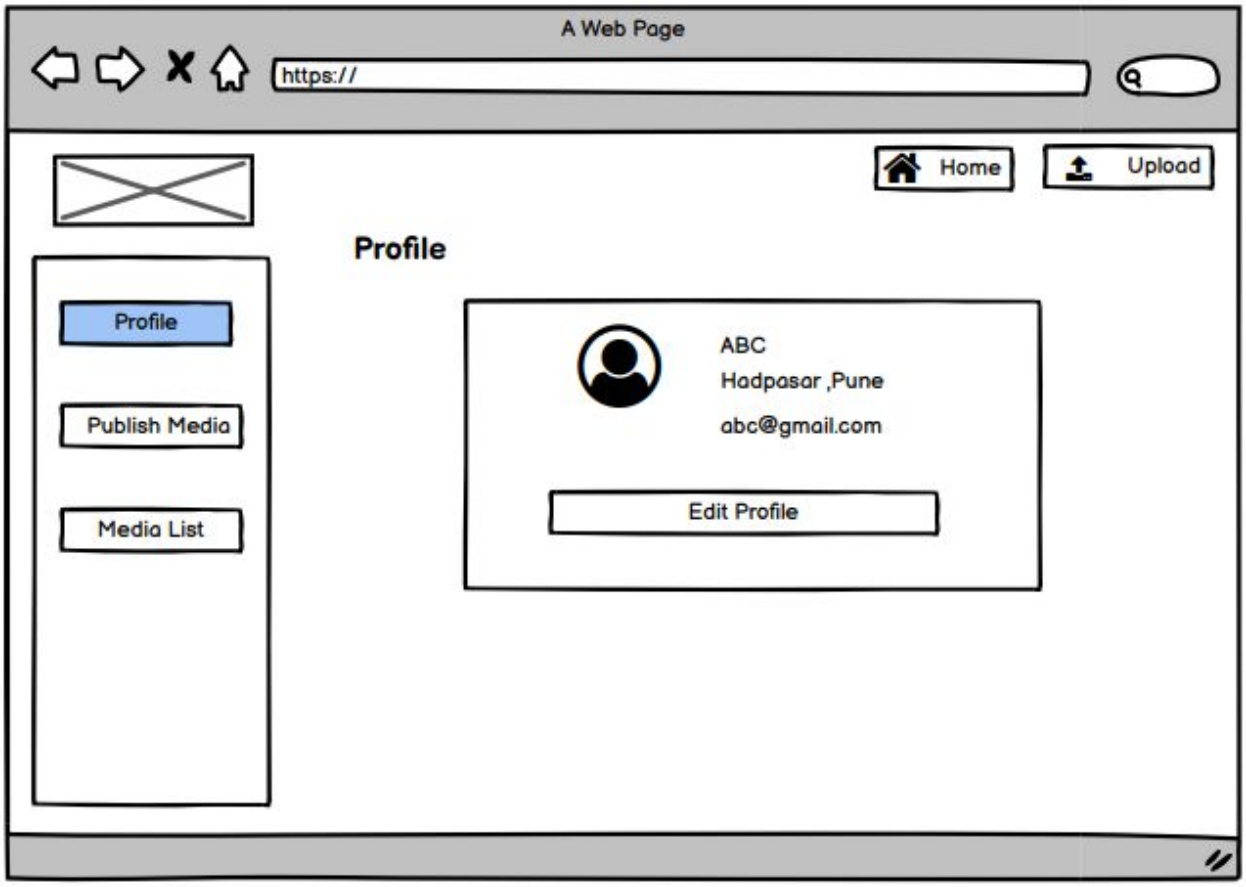
- The history page includes all recent activities which are also present in the recent activities. From where the user uploads their videos.

5. Watch page:



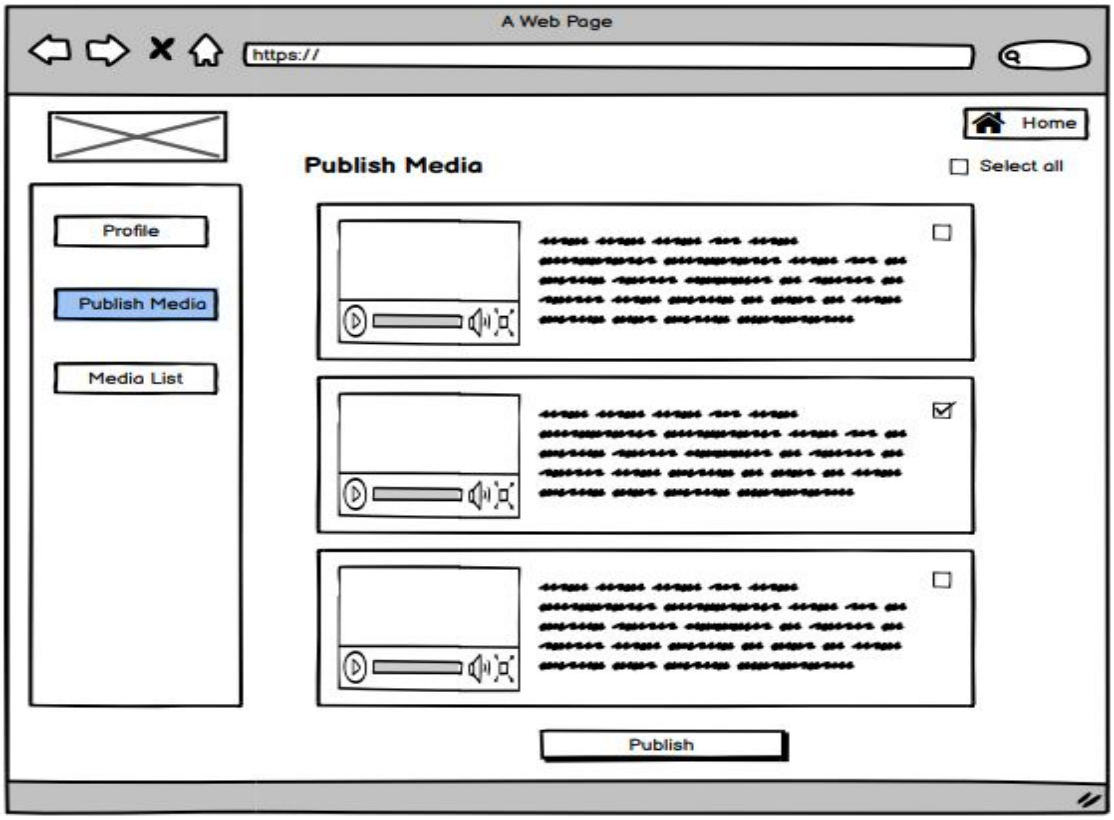
- After saving the videos the video is saved in the watch later page. All saved videos are added here for the next move.

6. Profile Page:



- The profile page of the company user is the same as standard users of the media service data management system. Here the company user can edit their profile.

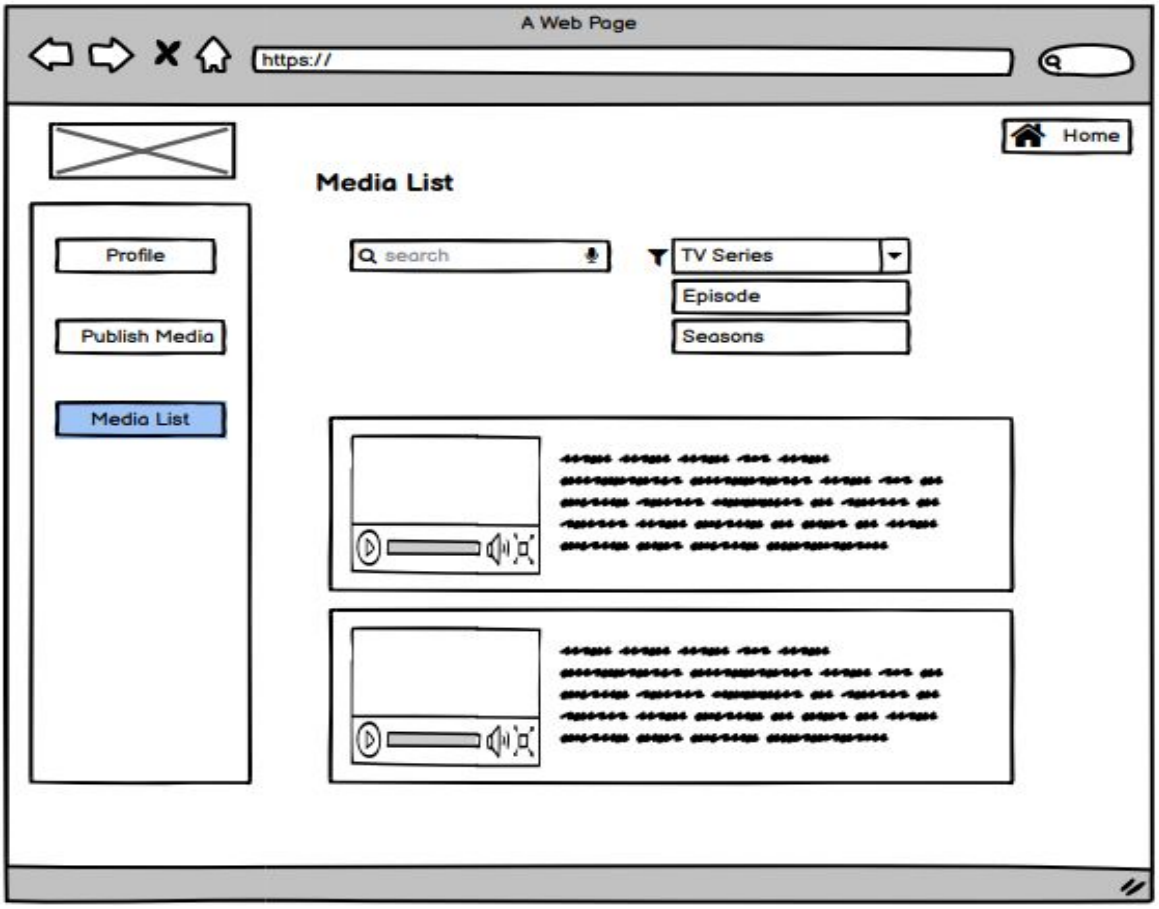
7. Publish Media:



- The users which uploaded their videos are saved for the published purpose.

- The video is then published by company users who are having authority. It contains a list of all videos for publication purpose.

8. Media List:

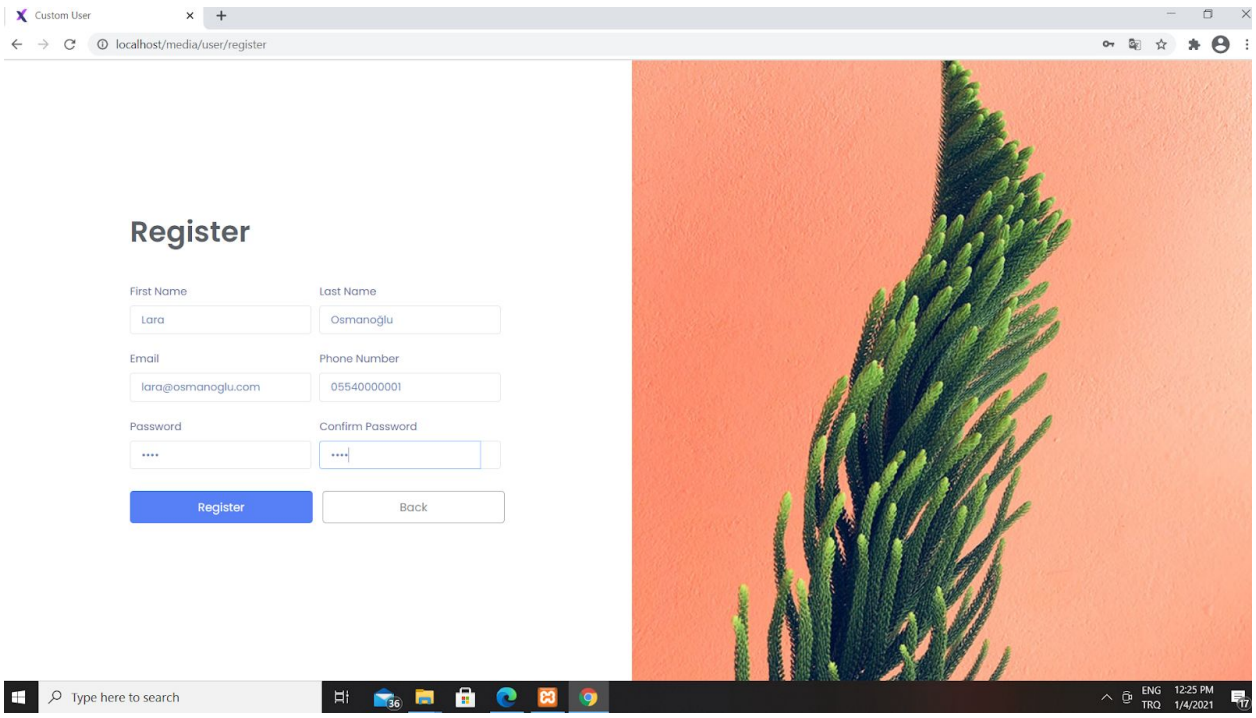


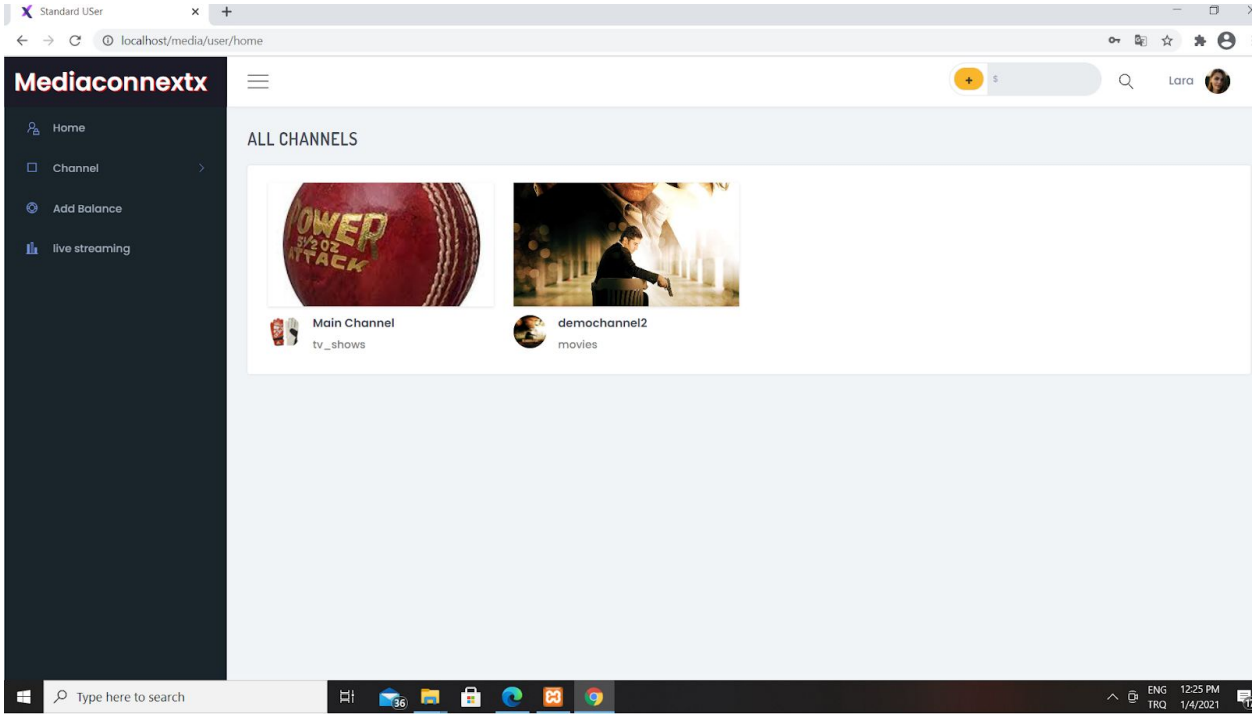
- The media list page contains the information which is divided into genres such as TV series, episodes and seasons also.

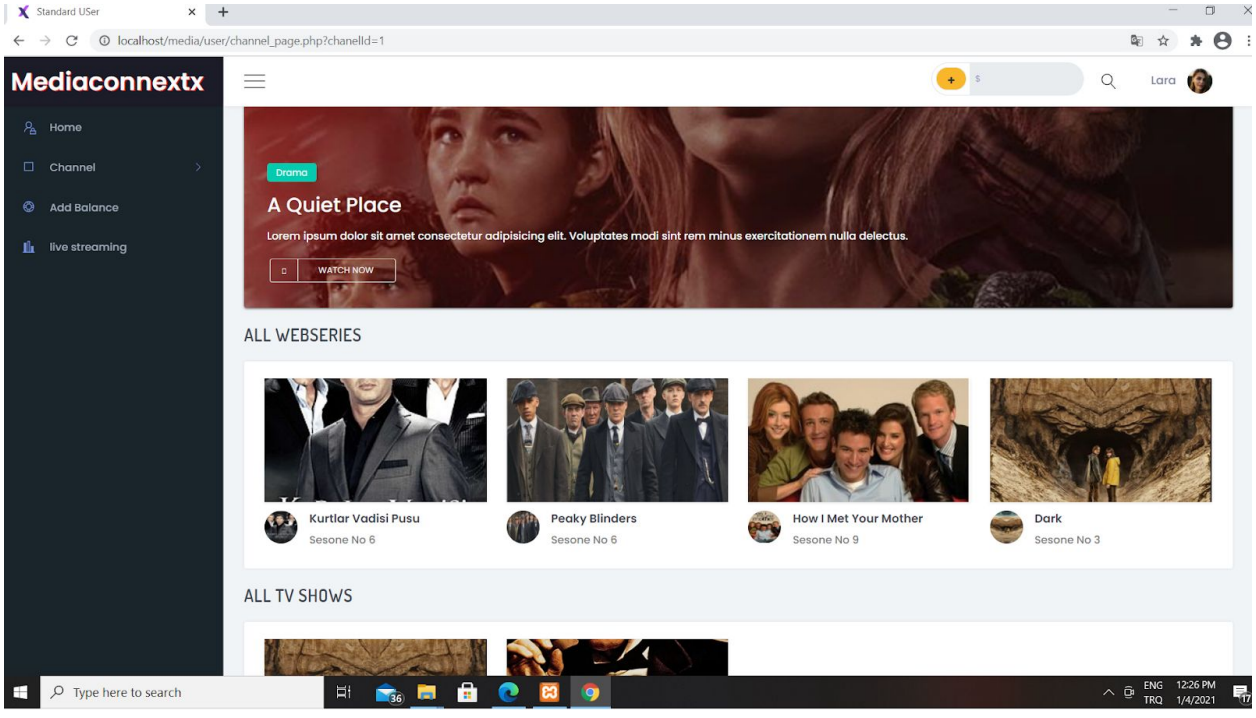
- We can find particular genres by searching it from the search bar.

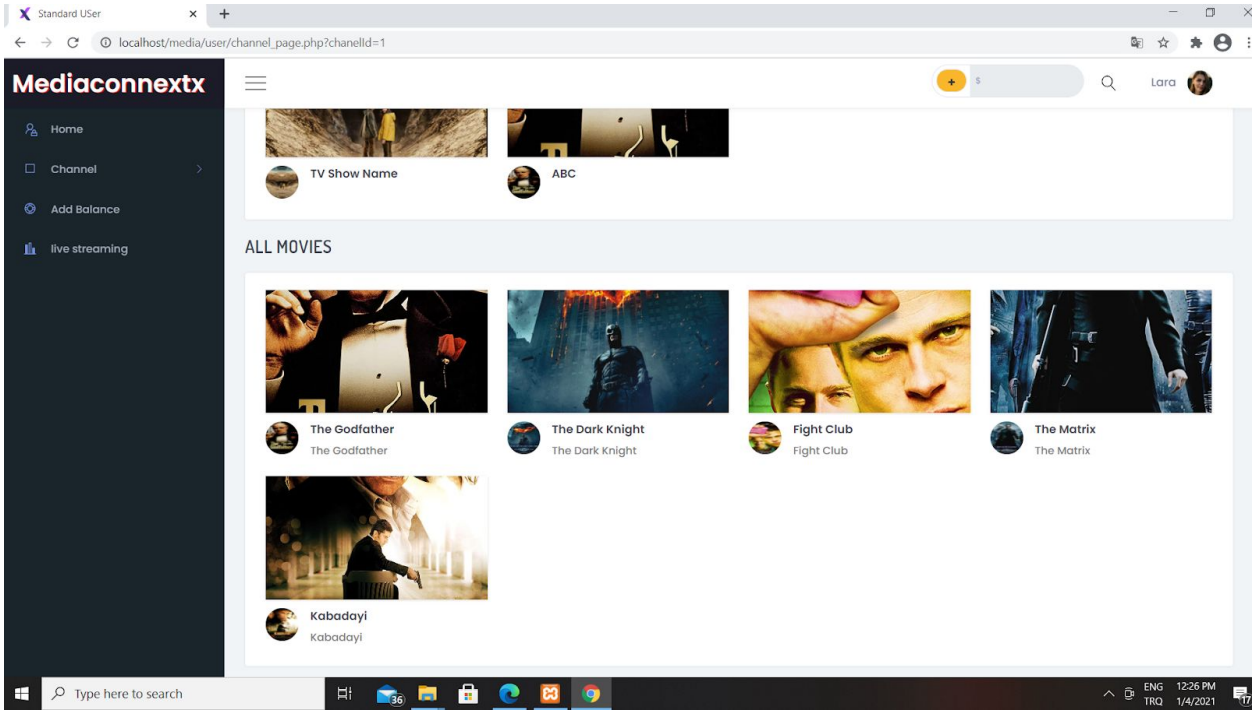
7. Appendix

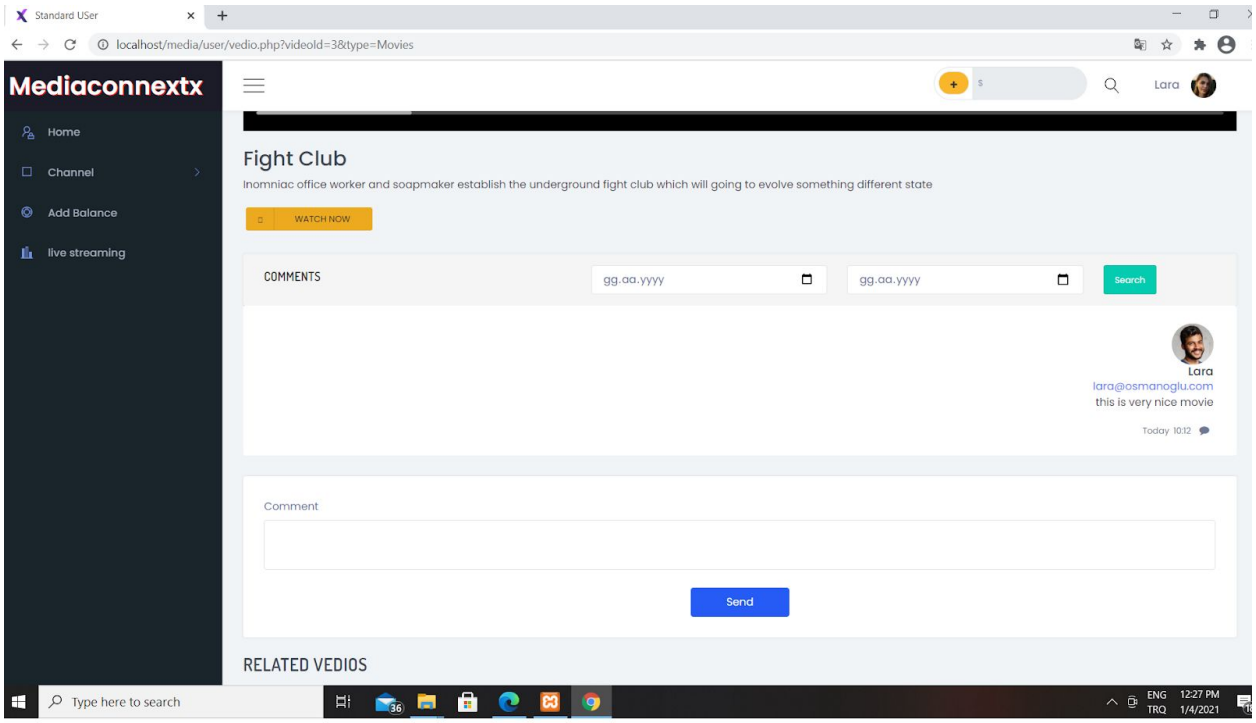
1. Standard Users:

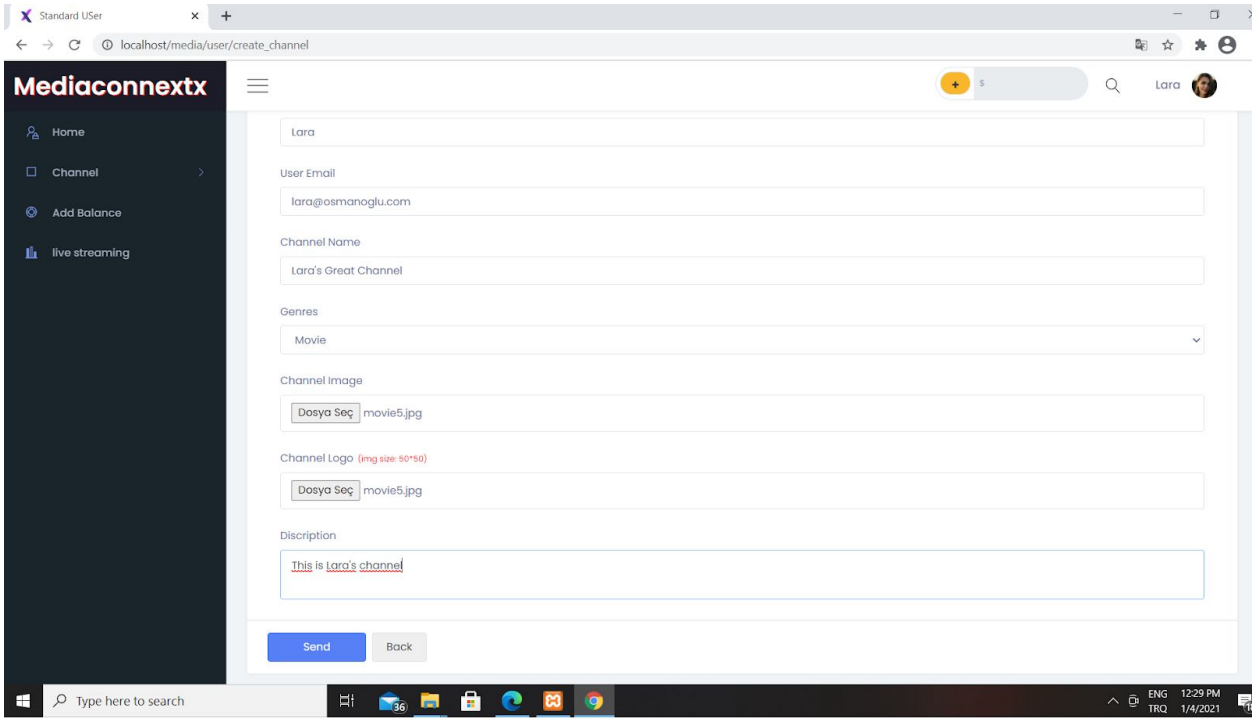


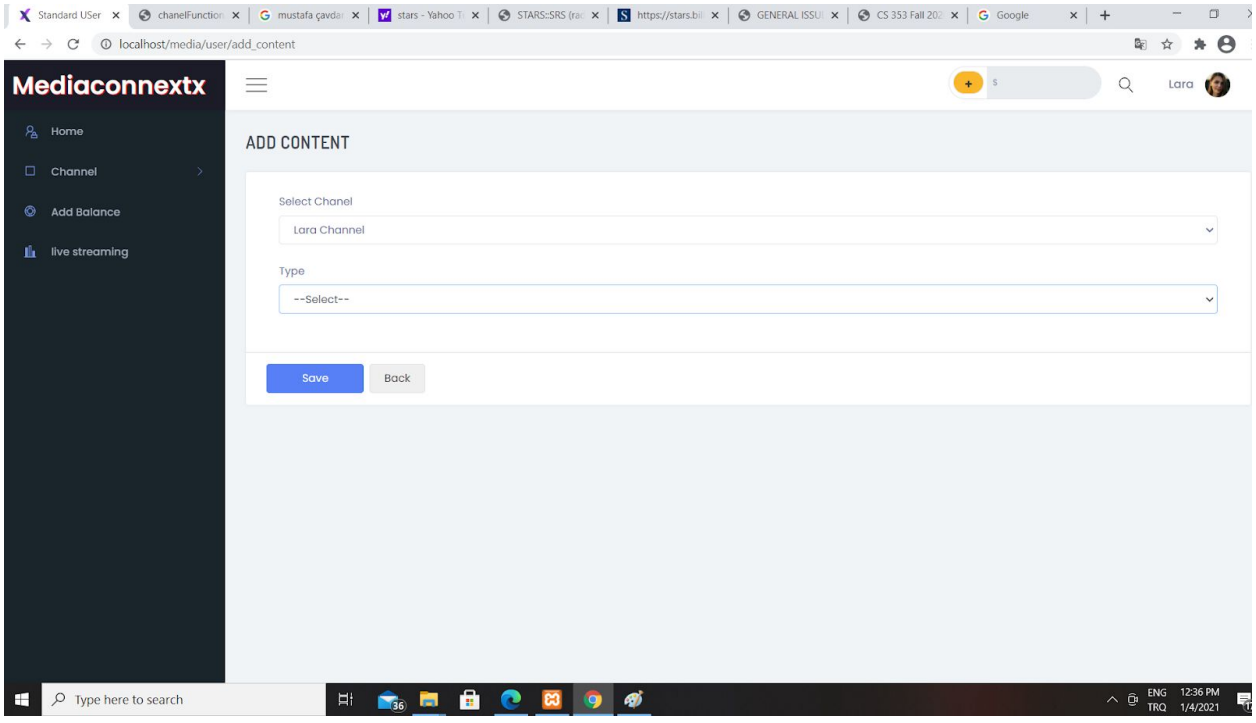

Standard USer
localhost/media/user/home
Mediaconnextx
Lara
Home
Channel
Add Balance
live streaming
ALL CHANNELS
Main Channel
tv_shows
demochannel2
movies
Type here to search
ENG
TRQ
12:25 PM
1/4/2021

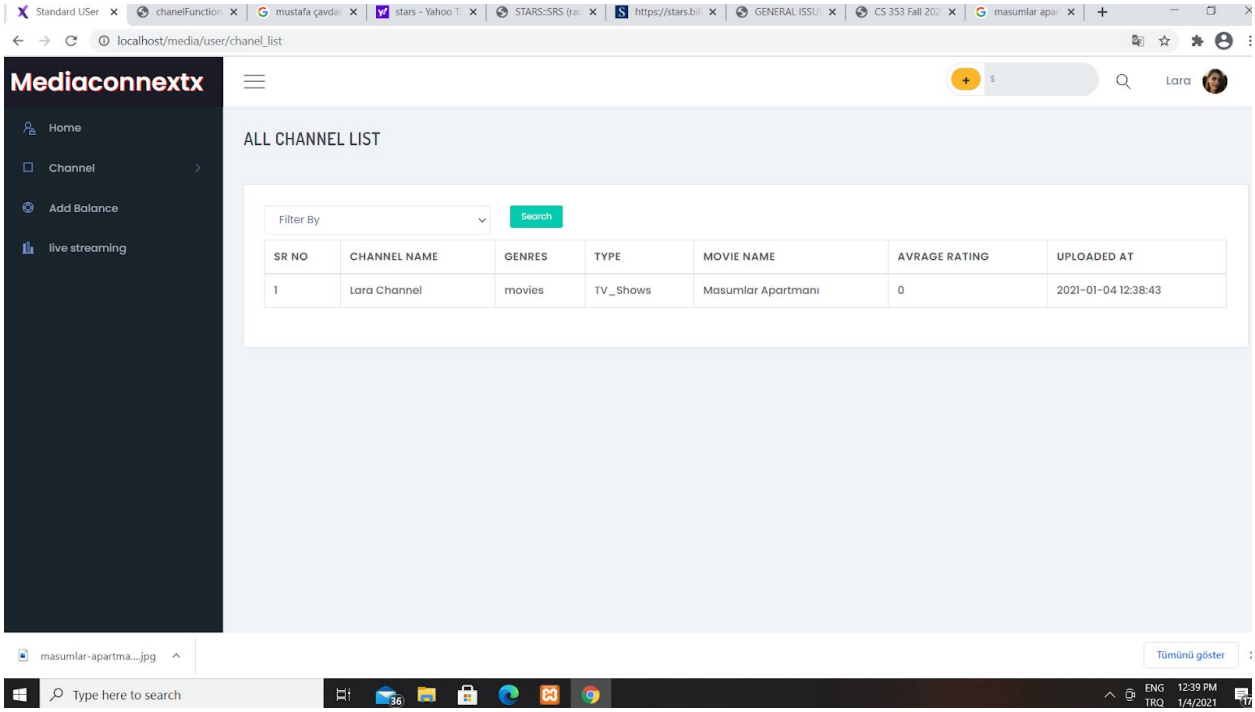

Standard USer
localhost/media/user/channel_page.php?chanelId=1
Mediaconnextx
Lara
Home
Channel
Add Balance
live streaming
Drama
A Quiet Place
Lorem ipsum dolor sit amet consectetur adipisicing elit. Voluptates modi sint rem minus exercitationem nulla delectus.
WATCH NOW
ALL WEBSERIES
Kurtlar Vadisi Pusu
Sesone No 6
Peaky Blinders
Sesone No 6
How I Met Your Mother
Sesone No 9
Dark
Sesone No 3
ALL TV SHOWS
Type here to search
ENG
TRQ
12:26 PM
1/4/2021

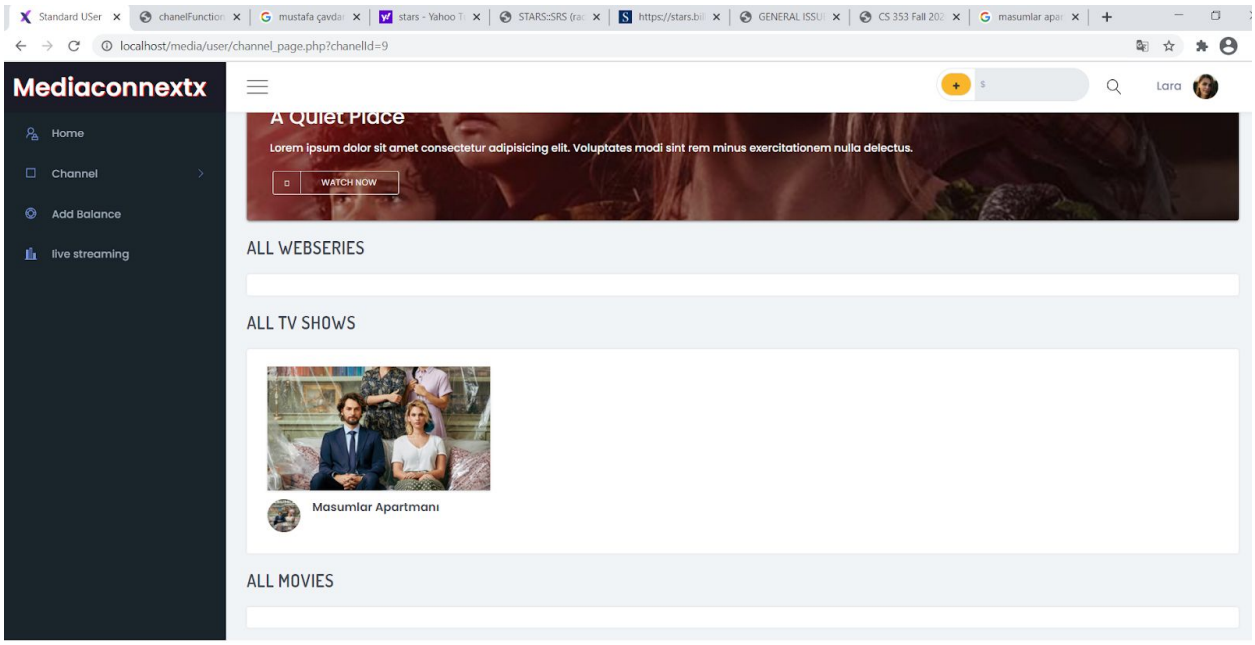

Standard USer
localhost/media/user/channel_page.php?chanelId=1
Mediaconnextx
Home
Channel
Add Balance
live streaming
Lara
TV Show Name
ABC
ALL MOVIES
The Godfather
The Godfather
The Dark Knight
The Dark Knight
Fight Club
Fight Club
The Matrix
The Matrix
Kabadayi
Kabadayi
Type here to search
ENG
TRQ
12:26 PM
1/4/2021

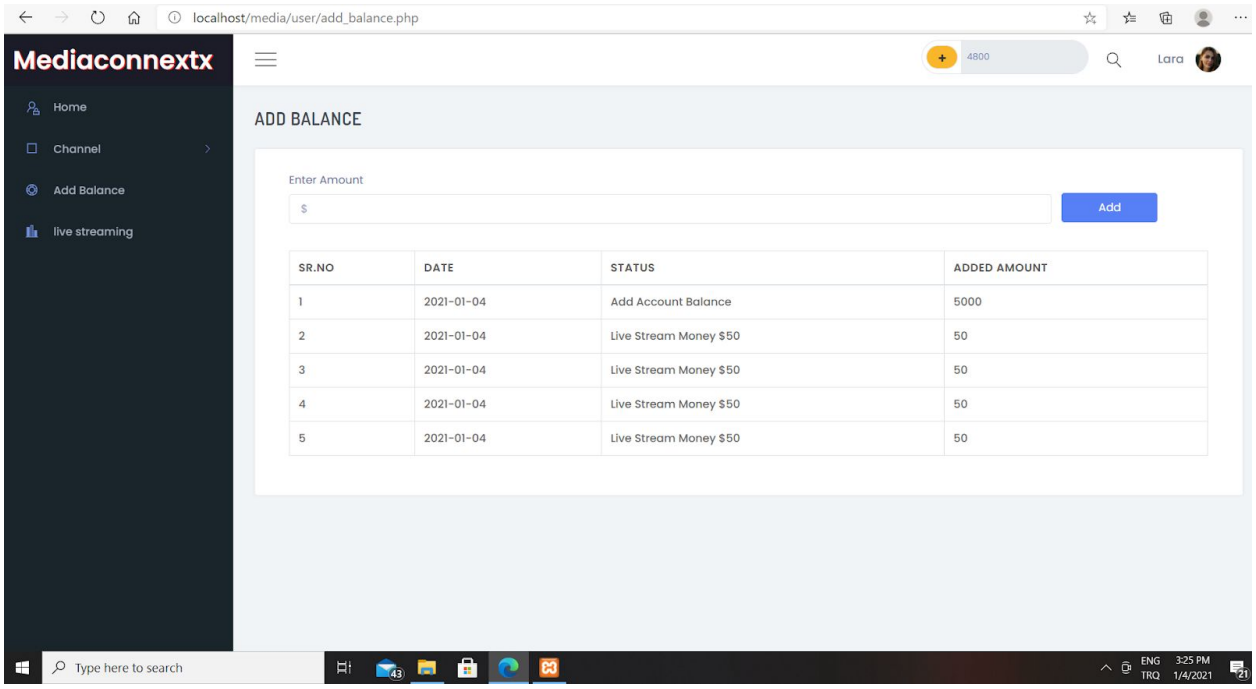

Standard USer
localhost/media/user/vedio.php?videoId=3&type=Movies
Mediaconnextx
Home
Channel
Add Balance
live streaming
Lara
Fight Club
Inomniac office worker and soapmaker establish the underground fight club which will going to evolve something different state
WATCH NOW
COMMENTS
gg.aa.yyyy
gg.aa.yyyy
Search
Lara
lara@osmanoglu.com
this is very nice movie
Today 10:12
Comment
Send
RELATED VEDIOS
Type here to search
ENG
TRQ
12:27 PM
1/4/2021

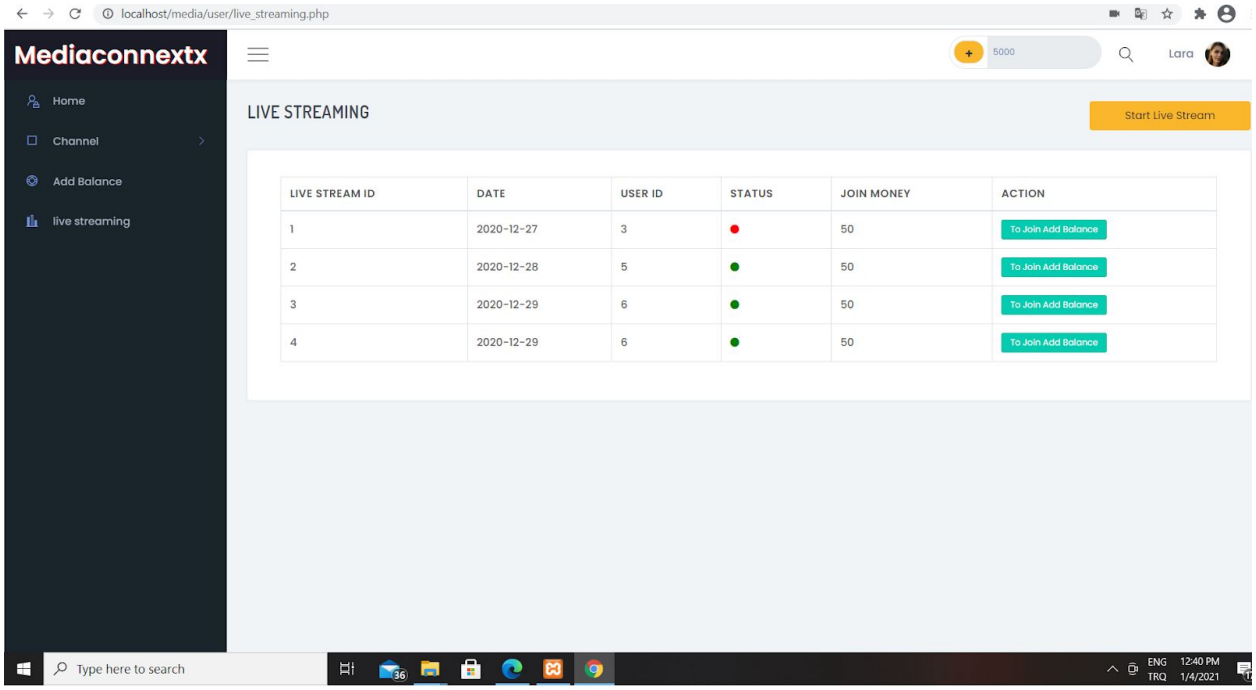

Standard USer
localhost/media/user/create_channel
Mediaconnextx
Lara
Home
Channel
Add Balance
live streaming
Lara
User Email
lara@osmanoglu.com
Channel Name
Lara's Great Channel
Genres
Movie
Channel Image
Dosya Seç
movie5.jpg
Channel Logo (img size: 50*50)
Dosya Seç
movie5.jpg
Discription
This is Lara's channel
Send
Back
Type here to search
ENG
TRQ
12:29 PM
1/4/2021

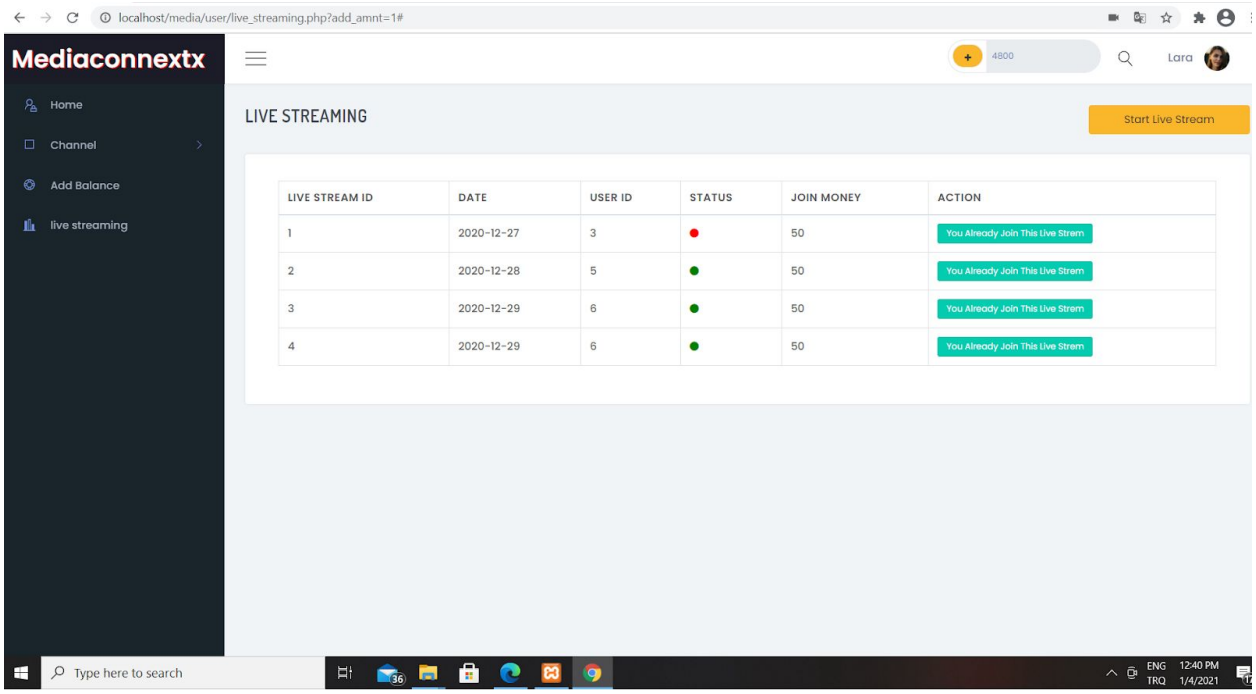

Standard USer
localhost/media/user/add_content
Mediaconnextx
Lara
Home
Channel
Add Balance
live streaming
ADD CONTENT
Select Chanel
Lara Channel
Type
--Select--
Save
Back
Type here to search
ENG
TRQ
12:36 PM
1/4/2021

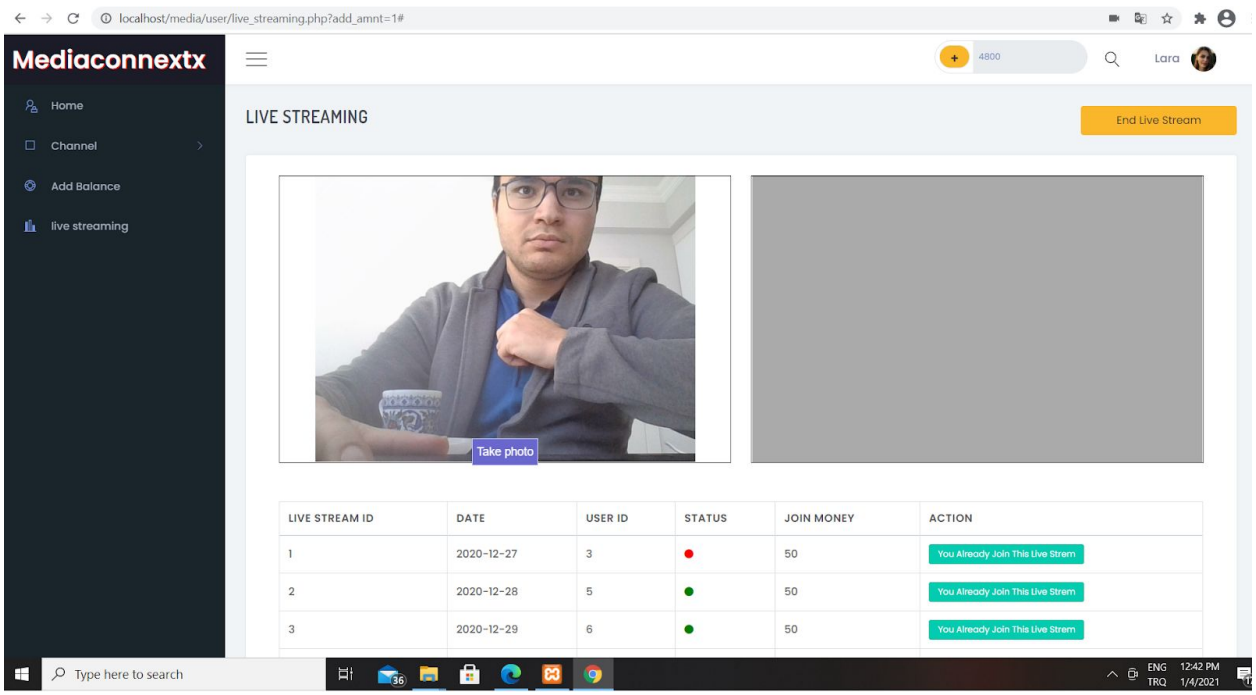

Standard USer
localhost/media/user/chanel_list
Mediaconnextx
Home
Channel
Add Balance
live streaming
Lara
ALL CHANNEL LIST
Filter By
Search
SR NO
CHANNEL NAME
GENRES
TYPE
MOVIE NAME
AVRAGE RATING
UPLOADED AT
1
Lara Channel
movies
TV_Shows
Masumlar Apartmanı
0
2021-01-04 12:38:43
masumlar-apartma....jpg
Tümünü göster
Type here to search
ENG
TRQ
12:39 PM
1/4/2021


Standard USer
localhost/media/user/channel_page.php?chanelId=9
Mediaconnextx
Home
Channel
Add Balance
live streaming
Lara
A Quiet Place
Lorem ipsum dolor sit amet consectetur adipisicing elit. Voluptates modi sint rem minus exercitationem nulla delectus.
WATCH NOW
ALL WEBSERIES
ALL TV SHOWS
Masumlar Apartmanı
ALL MOVIES

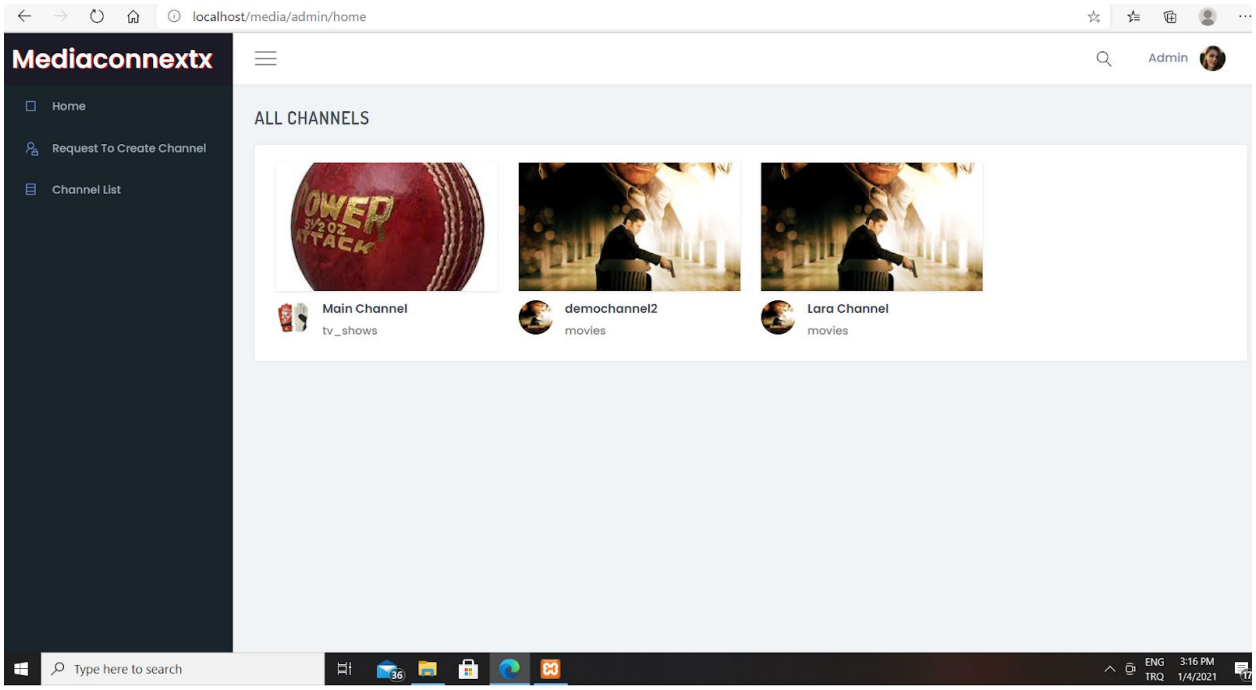

localhost/media/user/add_balance.php
Mediaconnextx
Home
Channel
Add Balance
live streaming
4800
Lara
ADD BALANCE
Enter Amount
$
Add
SR.NO
DATE
STATUS
ADDED AMOUNT
1
2021-01-04
Add Account Balance
5000
2
2021-01-04
Live Stream Money $50
50
3
2021-01-04
Live Stream Money $50
50
4
2021-01-04
Live Stream Money $50
50
5
2021-01-04
Live Stream Money $50
50
Type here to search
ENG
TRQ
3:25 PM
1/4/2021

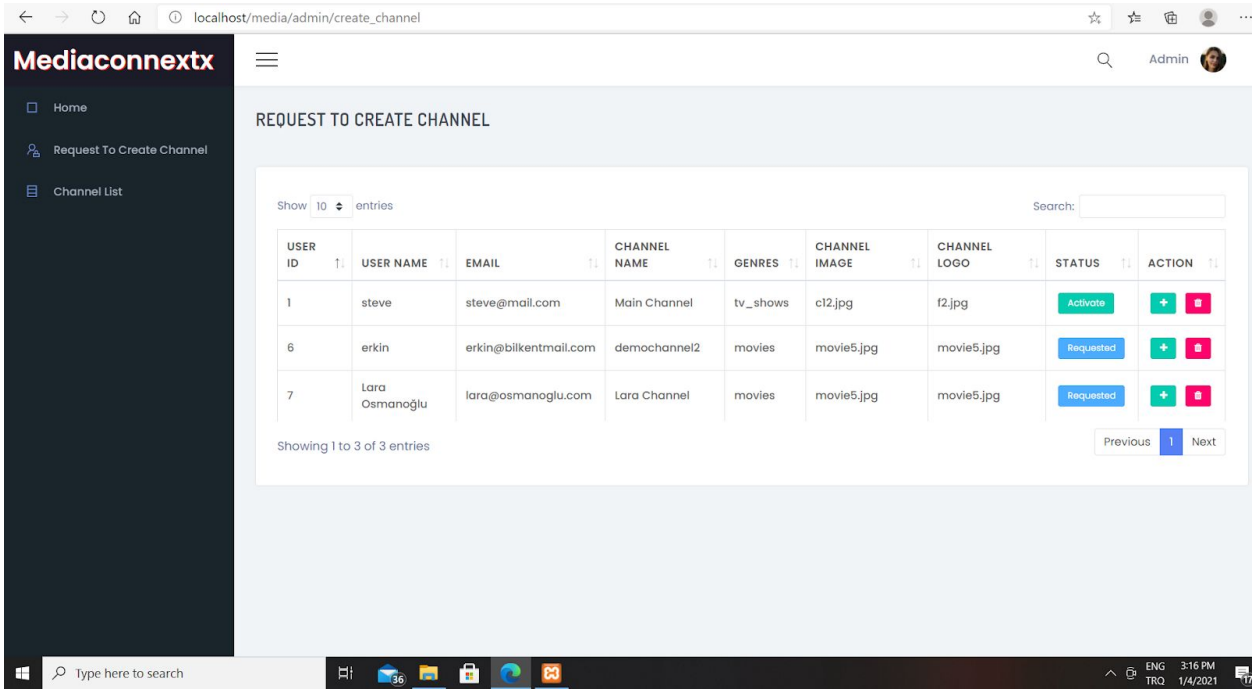

localhost/media/user/live_streaming.php
Mediaconnextx
Home
Channel
Add Balance
live streaming
5000
Lara
LIVE STREAMING
Start Live Stream
LIVE STREAM ID
DATE
USER ID
STATUS
JOIN MONEY
ACTION
1
2020-12-27
3
50
To Join Add Balance
2
2020-12-28
5
50
To Join Add Balance
3
2020-12-29
6
50
To Join Add Balance
4
2020-12-29
6
50
To Join Add Balance
Type here to search
ENG
TRQ
12:40 PM
1/4/2021

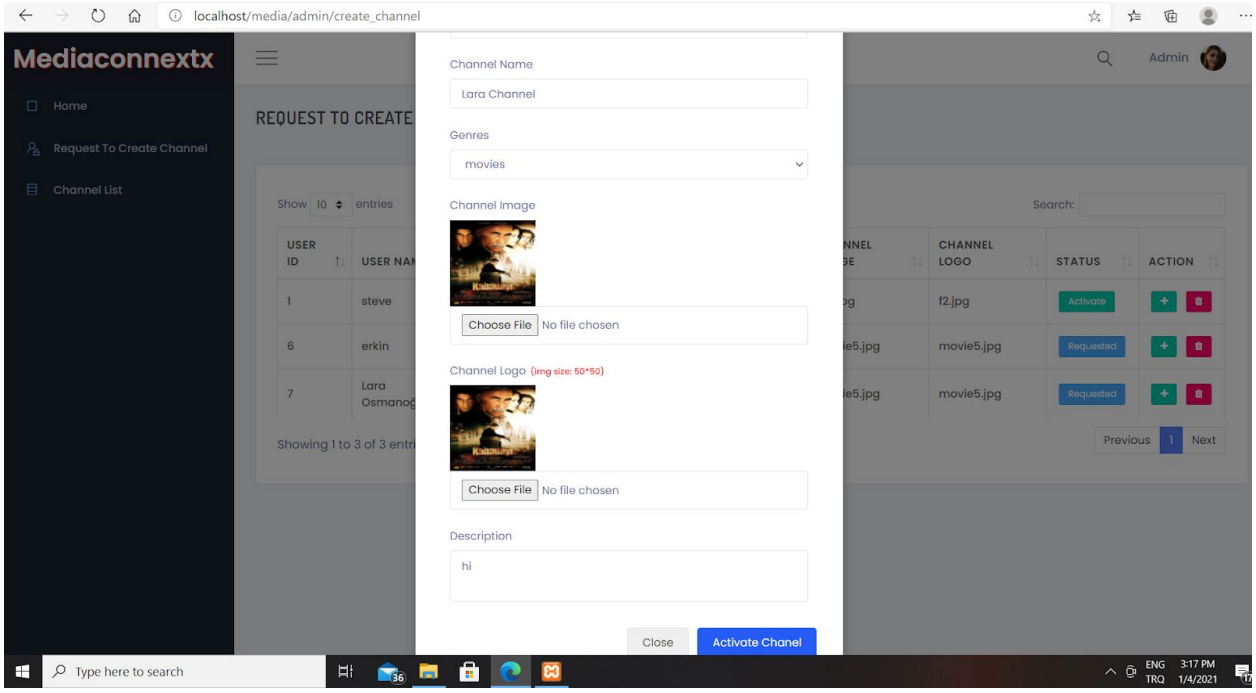


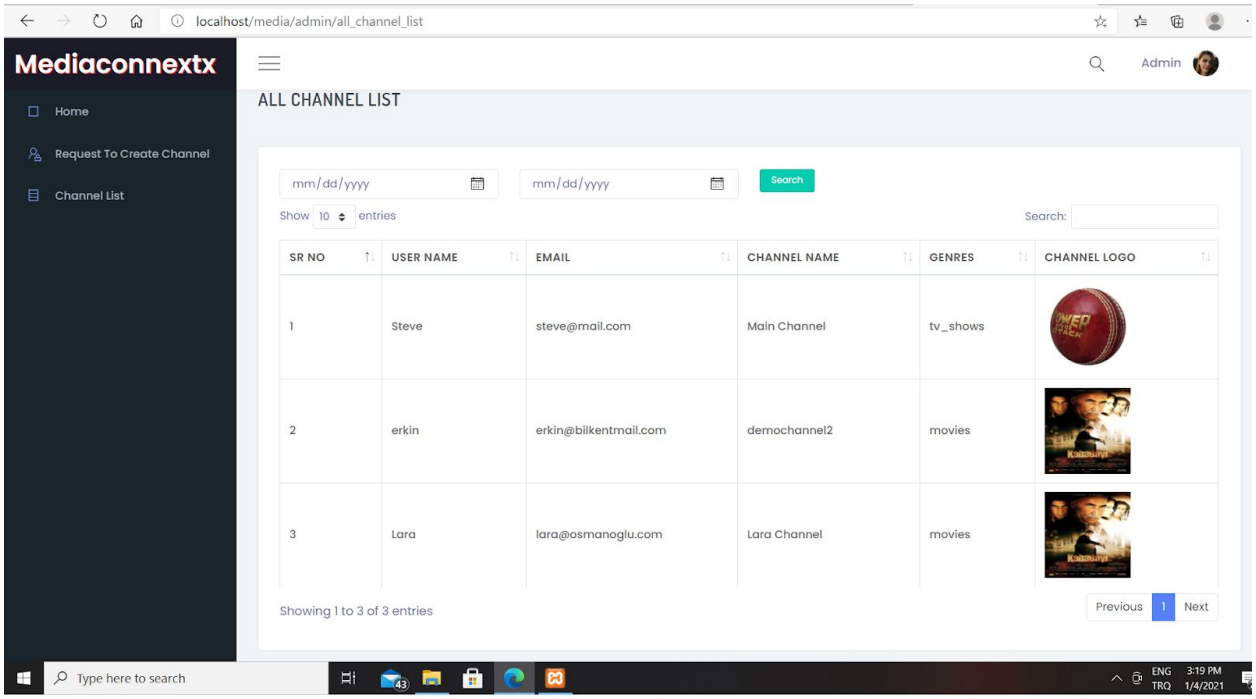


2. Company Users:


localhost/media/admin/home
Mediaconnextx
Admin
Home
Request To Create Channel
Channel List
ALL CHANNELS
Main Channel
tv_shows
demochannel2
movies
Lara Channel
movies
Type here to search
ENG
TRQ
3:16 PM
1/4/2021


localhost/media/admin/create_channel
Mediaconnextx
Admin
Home
Request To Create Channel
Channel List
REQUEST TO CREATE CHANNEL
Show 10 entries
Search:
USER ID
USER NAME
EMAIL
CHANNEL NAME
GENRES
CHANNEL IMAGE
CHANNEL LOGO
STATUS
ACTION
1 steve steve@mail.com Main Channel tv_shows c12.jpg f2.jpg Activate
6 erkin erkin@bilkentmail.com demochannel2 movies movie5.jpg movie5.jpg Requested
7 Lara Osmanoğlu lara@osmanoglu.com Lara Channel movies movie5.jpg movie5.jpg Requested
Showing 1 to 3 of 3 entries
Previous 1 Next
Type here to search
ENG
TRQ
3:16 PM
1/4/2021


localhost/media/admin/create_channel
Mediaconnextx
Home
Request To Create Channel
Channel List
REQUEST TO CREATE
Admin
Channel Name
Lara Channel
Genres
movies
Channel Image
Choose File
No file chosen
Channel Logo (img size: 50*50)
Choose File
No file chosen
Description
hi
Close
Activate Chanel
Search:
USER ID
CHANNEL LOGO
STATUS
ACTION
1
steve
f2.jpg
Activate
6
erkin
movie5.jpg
Requested
7
movie5.jpg
Requested
Previous
1
Next
Type here to search
ENG
TRQ
3:17 PM
1/4/2021


localhost/media/admin/all_channel_list
Mediaconnextx
Home
Request To Create Channel
Channel List
ALL CHANNEL LIST
Admin
mm/dd/yyyy
mm/dd/yyyy
Search
Show 10 entries
Search:
SR NO
USER NAME
EMAIL
CHANNEL NAME
GENRES
CHANNEL LOGO
1
Steve
steve@mail.com
Main Channel
tv_shows
2
erkin
erkin@bilkentmail.com
demochannel2
movies
3
Lara
lara@osmanoglu.com
Lara Channel
movies
Showing 1 to 3 of 3 entries
Previous
1
Next
Type here to search
ENG
TRQ
3:19 PM
1/4/2021

8. Advance Database Components

8.1 Reports:

● According to the age of users mostly watch movies:

CREATE VIEW mostWatchedMovies as

(SELECT M.name, count (W. media-id) as movieCount, age

FROM media-files M, movies M1, watch W, users

GROUP BY age

WHERE media-files. media-id = W. media-id and users. user-id = W. user-id and M1.media-id=media-files. media-id)

SELECT * FROM most Watched Movies WHERE movie Count=max (movie Count)

● Count of live stream in the year which is mostly watched::

SELECT max(mycount)

FROM(SELECT content, name, count(livestream-id) as mycount

FROM livestream, watch, users

WHERE livestream-id=watch.livestream-id and watch.user-id = users.user-id and date

BETWEEN ‘01/01/year’ and ‘12/31/year’)

● According to the age of users mostly watch series:

CREATE VIEW mostWatchedSeries as

(SELECT M.name, count (W.media-id) as seriesCount, age

FROM media-files M, series S1, watch W, users

GROUP BY age

WHERE media-files.media-id = W.media-id and users.user-id = W.user-id and S1.media-id=media-files.media-id)

SELECT * FROM mostWatchedMovies

WHERE seriesCount=max(seriesCount)

8.2 Views:

● Users can see the people who donate their live streams.

CREATE VIEW donationView as
(SELECT name, donate-amount
FROM donate , users, livestream
WHERE users.user-id=donate.user-id and livestream.livestream-id=@user.user-id)

● Users can see popular media files in terms of genre

CREATE VIEW PopularFiles as
(SELECT M.name, count(W.media-id) as mediaCount, g.genre-name
FROM media-files M, watch W, contains C, Genres g, users U GROUP BY g.genre-name, mediaCount DESC WHERE M.media-id = W.media-id and C.genre-id=g.genre-id and U.user-id=W.user-id)

8.3 Triggers:

- When a media file is deleted from the system of the media, then it will also be deleted from the media files table and all other related tables such as Users, comment, channels etc.
- When a user account is deleted from the system, it is deleted from the related tables
  such as Users and Regular Users.

8.4 Constraints:

- Users, who are younger than 18, cannot view mature content.
- Administrators can remove a user if he/she violates the application usage terms and conditions.
- The user will not be able to donate money if he/she does not have enough money in the balance.
- Same media file cannot be added to the same channel twice.

8.5 Stored Procedure:

- Users will be notified when there is a reply to their comments.
- Users will be notified when someone donates their live-stream.
- Users will be informed when balance adding operation is successful.

9. Website

“https://aerk1996.github.io/cs353group10/”