

FINAL PROJECT REPORT

Name of Team Members Group 3 and CU user accounts

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Project description, motivation and survey of related work:

MeTube is a video playing service where users can watch, like , comment, message with their contacts and upload their own videos. The video service can be accessed on PCs, laptops, tablets and via mobile phones.

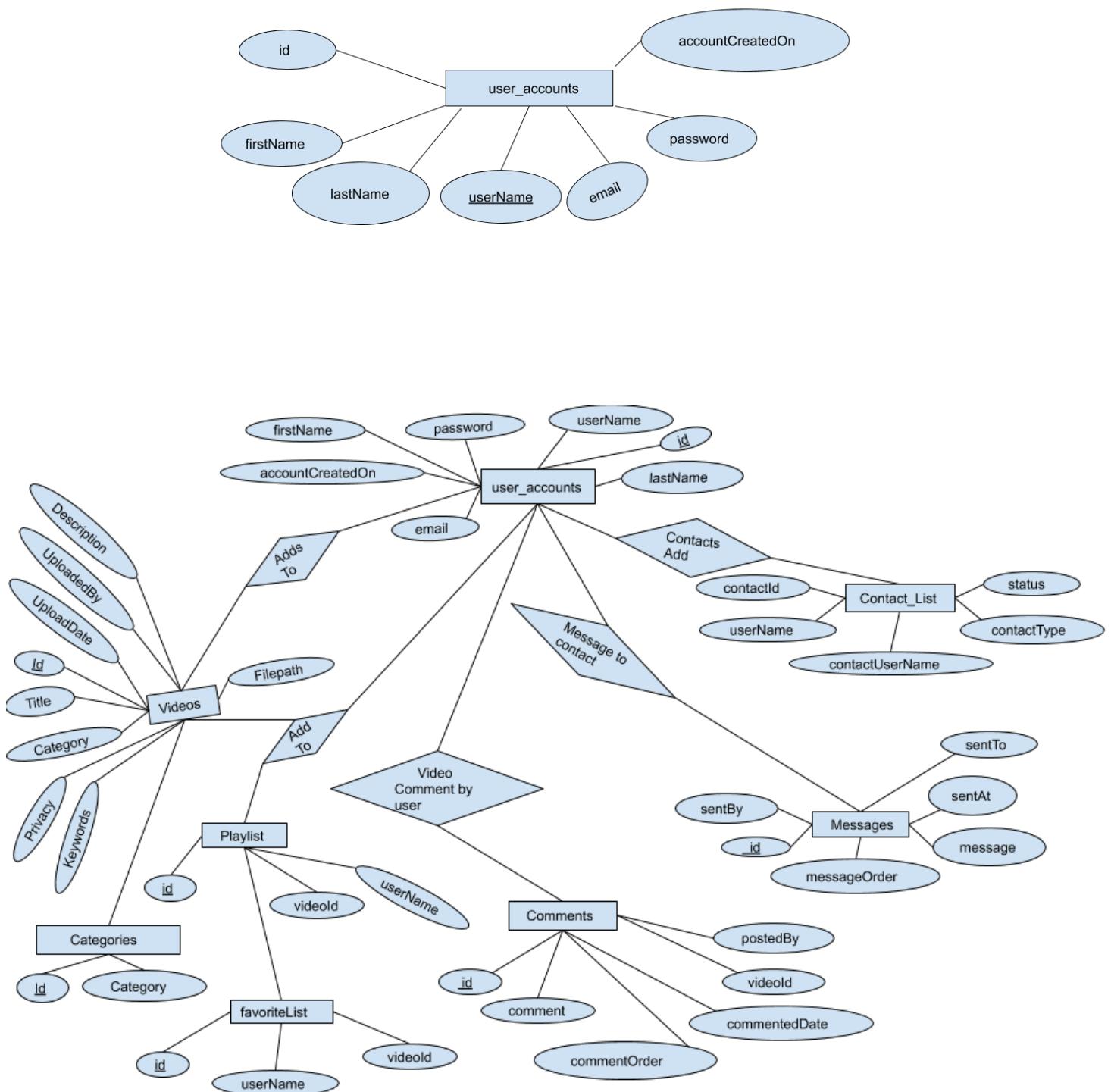
We were motivated to work on this project as it poses an interesting database problem. It involves the usage of a variety of data that needs to be stored in various tables with clearly defined relationships between them. Using databases will help the users search for videos easily according to their interests.

We looked at a few similar web applications/video player websites, such as Youtube ([youtube.com](https://www.youtube.com)), *Dailymotion* ([dailymotion.com](https://www.dailymotion.com)), and Vimeo ([vimeo.com](https://www.vimeo.com)), to name a few, to get a basic idea of how these applications function.

Following approach were taken while working on the project:

1. We first decided on the entities involved, namely:
 - a. User details (contains details about the user who is logging into the system)
 - b. Category List(contains details of different type of categories like Entertainment, Games, Music, Sports and many more)
 - c. Video Details (contains description of video, who has uploaded video on what date, how many views are there on an video)
 - d. Contact List (It allows you to add any user as your friend, family member or Favorite)
 - e. Messages (You can privately message your contacts about videos and also share emoticons)
 - f. Comments Section (contains comment body, who has commented it and the time of comment)

2. We then proceeded to look for various sources to design for our database. We looked up various sources online such as [youtube.com](https://www.youtube.com) for analyzing the data communication and styling of pages . After the entities were decided on, we proceeded to design the database schema along with the ER diagram as follows:



Current Implementation:

Basic Features:

1. A new user can sign up with a unique username and password.
2. Users can log-in to the system with a valid username and password.
3. Password can be changed based on current password.
4. They can view all the available videos on home page.
5. After signing in , users can upload videos based on their privacy modes (public, private)
6. While watching videos, Users can also comment on videos to share their views on it.

Advanced Features:

1. Application shows the recommended videos to users.
2. Users can search video based on keyword and sort them based on uploaded date or views
3. Users can add other users as their contacts (family or friends)
4. There is an option given to user that he can block the undesirable users.
5. If the user blocks another user then, he cannot view his videos.
6. On home page only videos which are public can be viewed.
7. Video Sharing to friends, colleagues, family members is possible.
8. User can message any user.
9. There is an option given to users to download any video they want, which is not available in Youtube.
10. If user is not signed in he can still view videos but cannot comment on any of them.

Testing Procedure:

The following lists the procedure that needs to be followed in order to view the working of the system and test it out:

1. The users can visit the link (webapp.cs.clemson.edu/~Spanwar/MeTube/index.php)
2. Select ‘Sign Up’, to register yourself to the application.
3. They can fill the required details to create an account. The users will be prompted checks (valid email id, compulsory keyword)that need to be followed in order to create a valid profile.
4. They can use these credentials to login to the application.
5. After the user logs in with the credentials, his username will be displayed above and will be allowed to used advanced features of the application.
6. The user will upload videos of his/her choice of category.

7. If the user wants to update his profile, he will click on the upper left navigation bar to avail that feature.
8. Then user can go in contacts section where he can add a user as his friend, colleague or family member.
9. For blocking a user, first it should be kept in blocked state and update button has to be pressed for updating in database. After a user is blocked, no communication is allowed.
10. If not blocked, messages can be shared between users.
11. User can comment on any video and also has an option to download any video he likes.

System Screenshots:

Given below are screenshots of the system:

	Id	UploadedBy	Title	Description	Keywords	Privacy	Filepath	Category	UploadDate
Delete	85	Subbu12	Sample 1	Hi subbu	sa	Public	uploads/videos/5e9bb6b25fb8c5bb0ba5665d24.mp4	1	2020-04-19 02:25:5
Delete	86	Subbu12	sample 2	bye subbu	su	Public	uploads/videos/5e9bb6c78cbcc5bb7a68bd6276.mp4	1	2020-04-19 02:26:1
Delete	87	Subbu12	sample 3	hello shivam	sung	Public	uploads/videos/5e9bb6e1e28bf5bba2c77ae7d8.mp4	1	2020-04-19 02:26:4
Delete	88	Subbu12	sample 4	bye shivam	sula	Public	uploads/videos/5e9bb6f8b43445bba2cd313ebd.mp4	1	2020-04-19 02:27:0
Delete	89	Spanwar	sample 5	sample video 5	sam	Public	uploads/videos/5e9cd933d18b25bba2d7a09460.mp4	3	2020-04-19 23:05:2
Delete	90	Spanwar	sample 6	sample video 6	Samp	Public	uploads/videos/5e9cd975ba3725bba2ca8896ee.mp4	1	2020-04-19 23:06:2
Delete	91	Spanwar	sample 7	sample 7	video 7	Public	uploads/videos/5e9cd9a8c209d5bb7a68bd6276.mp4	1	2020-04-19 23:07:2

With selected: [Edit](#) [Copy](#) [Delete](#) [Export](#)

Fig 1: Database structure of video table

	id	firstName	lastName	userName	email	password	acc
Copy Delete	2	Shivam	Panwar	Spanwar	panwar.shivam@gmail.com	e30fba9f14341303d237b9cb8573d5cc6665ba63b9d152a645...	2020
Copy Delete	3	Subbu	Rao	Subbu12	subbu@gmail.com	ba3253876aed6bc22d4a6ff53d8406c6ad864195ed144ab5c8...	2020
Copy Delete	4	Subbarao	Illa	Subbu	subbu@clemson.edu	ba3253876aed6bc22d4a6ff53d8406c6ad864195ed144ab5c8...	2020
Copy Delete	5	Chirayu	Sharma	JonSnow	chirayu@clemson.edu	ba3253876aed6bc22d4a6ff53d8406c6ad864195ed144ab5c8...	2020

Fig 2: Database structure of User table with password encrypted

sample 4 Subbu12 0 views - Apr 19th, 2020	sample 3 Subbu12 0 views - Apr 19th, 2020	sample 1 Subbu12 2 views - Apr 19th, 2020	sample 2 Subbu12 4 views - Apr 19th, 2020
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Fig 3: Home page without sign up

 Metube

Sign Up

to continue to Metube

First Name:

Last Name:

Username:

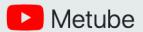
E-mail:

Password:

Confirm Password:

[Sign Up !\[\]\(9d51e4aed9d76be0b8b42af6c3854752_img.jpg\)](#)

Already have an account? [Login here!](#)

 Metube

Login

to continue to Metube

Username:

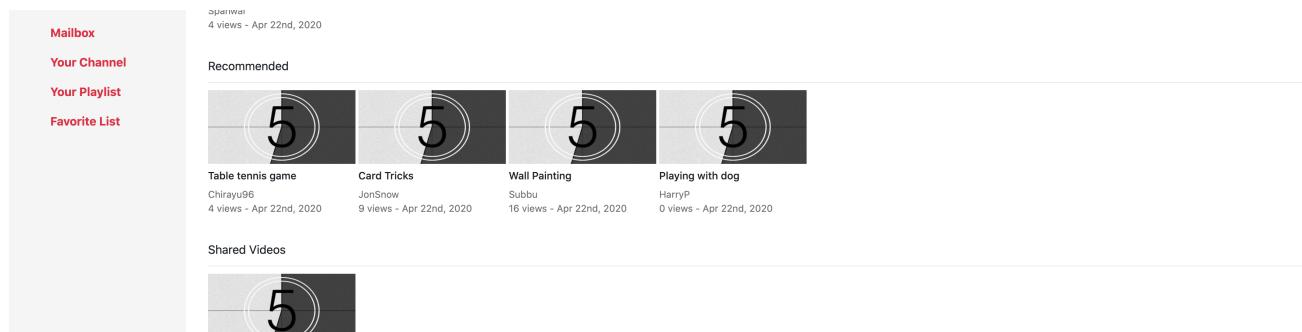
Password:

[Login !\[\]\(f2975838ab6906b24a31c0126b2f0464_img.jpg\)](#)

Don't have an account yet? [Sign Up here!](#)

Fig 4: Sign up page

Fig 5: Login page



The screenshot shows the Metube home page. On the left, there's a sidebar with links: Mailbox, Your Channel, Your Playlist, and Favorite List. The main content area has a "Recommended" section with four video thumbnails, each showing a large number '5' over a video frame. Below it is a "Shared Videos" section with one visible thumbnail.

Thumbnail	Title	Uploader	Views	Date
	Table tennis game	Chirayu96	4 views	Apr 22nd, 2020
	Card Tricks	JonSnow	9 views	Apr 22nd, 2020
	Wall Painting	Subbu	16 views	Apr 22nd, 2020
	Playing with dog	HarryP	0 views	Apr 22nd, 2020

Fig 5: Home Page

Friends

Username	Name	Email	Contact Type	Block/UnBlock
Spanwar	Shivam Panwar	panwar.shivam@gmail.com	Friend	Unblocked

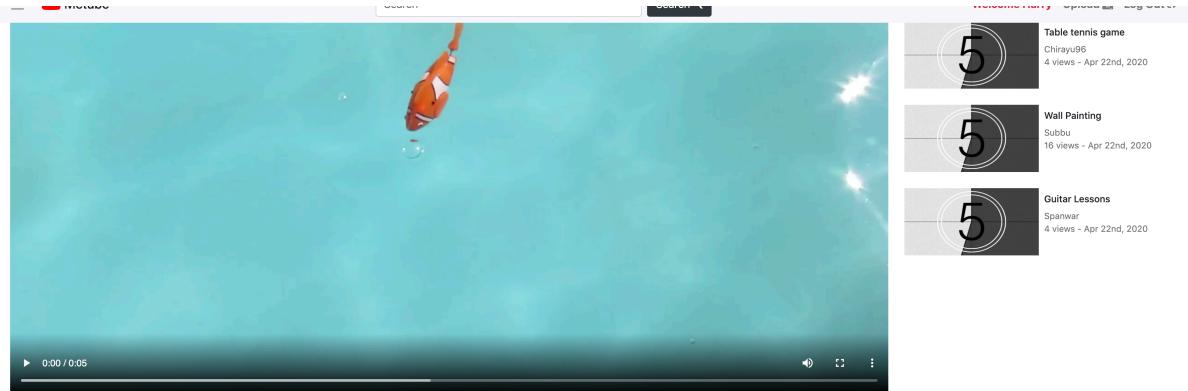
Family

Username	Name	Email	Contact Type	Block/UnBlock
Subbu	Subba rao Illa	silla@clemson.edu	Family	Blocked

Favorites

Username	Name	Email	Contact Type	Block/UnBlock
Chirayu96	Chirayu Sharma	Chirayu@clemson.edu	Favorite	Unblocked

Fig 7: Adding Contacts based on hierarchy



fish in the lake

8 Views

[Download](#)

Video Added to Favorites

Comment Section

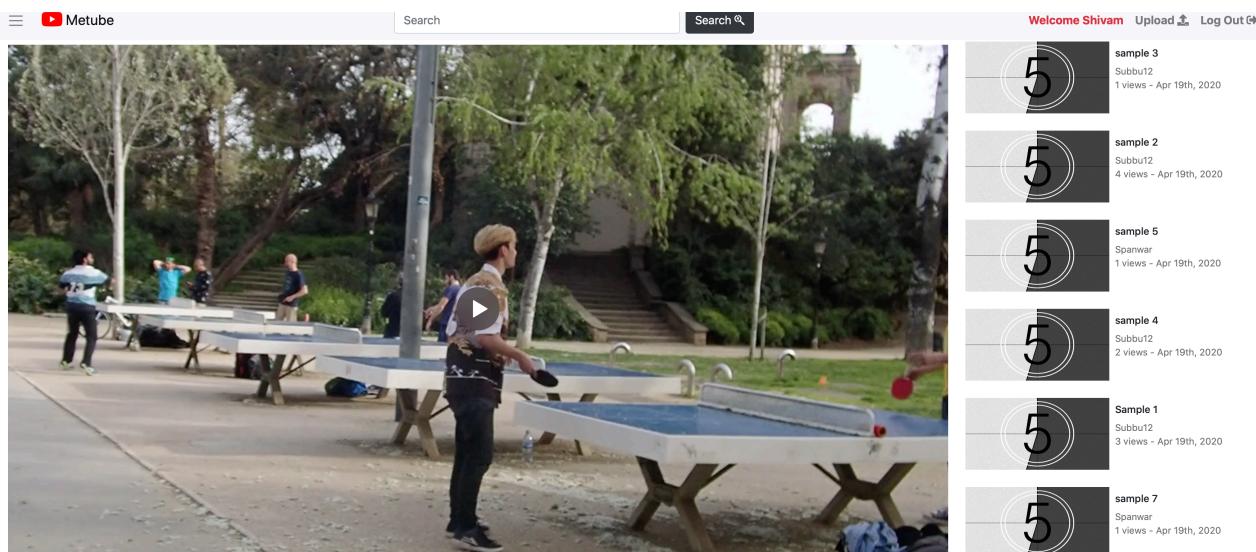
HarryP
such a rare fish

Fig 8: Video added to Favorite list

Mailbox

Username	Name	Email	Send Message
Spanwar	Shivam Panwar	panwar.shivam@gmail.com	Check Mailbox
Subbu	Subba rao illa	silla@clemson.edu	Check Mailbox
Chirayu96	Chirayu Sharma	Chirayu@clemson.edu	Check Mailbox
JonSnow	Abhijeet Amle	Abhijeet@clemson.edu	Check Mailbox

Fig 9: Message to users



sample 3

1 Views

[Download](#)

Comment Section

Fig 10: Watching videos on application



sample 7

8 Views

[Download](#)

Comment Section

JonSnow

Nice puppy with a beautiful sunset 😊

2020-04-19 23:16:15

Spanwar

What a view guys ❤️😊

2020-04-19 23:16:52

Subbu12

Want this pup 😊

2020-04-19 23:18:04

[Post](#)

Fig 11: Comment section on video

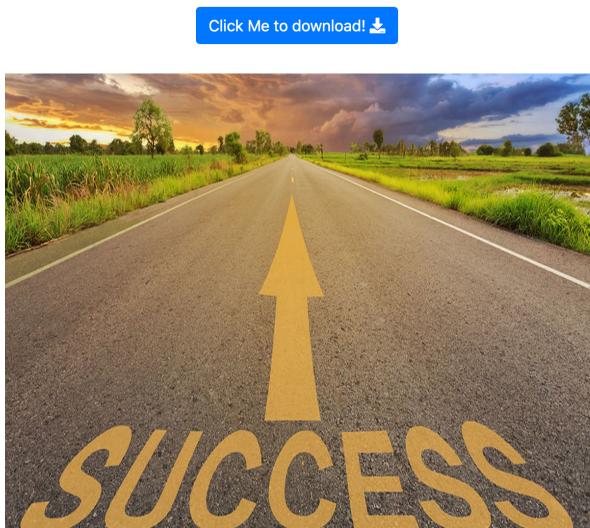


Fig 12: Download Page

Test Cases:

Case 1: Registration

- User is able to register for MeTube
- All fields are compulsory
- Check for already existing user
- Passwords matching
- Validating email as @, .com
- Name should not contain any special characters or numbers
- Result: Pass

Case 2: Login

- User is able to log into MeTube
- Give warning for incorrect username or password
- Result: Pass

Case 3: Profile Update and contact list

- User is able to change basic information and password except for username
- If changing passwords, passwords should match
- Show contacts after adding and options for blocking
- Organization of contact list (friends, family, favorite, Colleague)
- Blocking and unblocking a user in contact list
- Result: Pass

Case 4: Data Sharing and Viewing

- Users can only view media without logging in
- Users need to login to upload media
- User should be able to download media files
- Video player has to be embedded in the web interface
- Users should be able to view videos
- Users can set privacy on their media while uploading
- Blocking certain users from viewing media
- Result: Pass

Case 5: Media Organization

- Users should be able to categorize their data
- Based on categories, users can search media
- Users can create their own media channels
- Users can create their favorite lists of media
- Users should be able to see number of views for media files (videos)
- Result: Pass

Case 6: User Interaction

- Users can send messages to other users.
- Users can comment on media files
- If user is blocked, no videos can be viewed
- Result: Pass

Case 7: Searching and Filtering

- Users can search by category
- Users can search by data
- Users can filter by most recently viewed
- Users can filter by most recently uploaded
- Users can filter by name
- Result: Pass

Limitations of the current implementation:

Given below are the limitations of the system its current state:

1. If the user forgets password, then he cannot login into the system because there is no forget password option.
2. In the contacts section, there is no search bar for searching a specific username.
3. Due to time constraint, we could not create thumbnails functionality so we have kept default thumbnails for the videos.
4. Rating of the videos could not be implemented.

Link to Web Portal:

webapp.cs.clemson.edu/~Spanwar/MeTube/index.php

Administrator Details:

U ssername: Spanwar
Password: Shivam@97