MeTube

Technical Report Spring 2017



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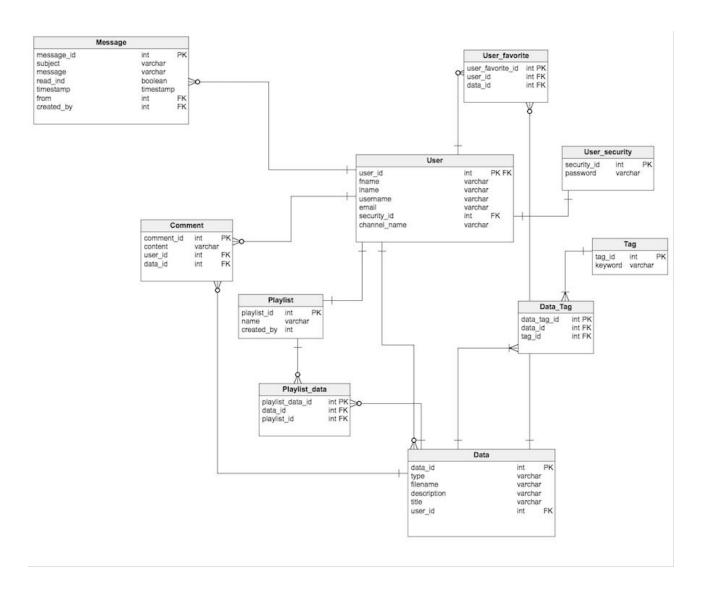
INDEX

- 1. System Design Pg. 2
 - a.Database Schema Pg. 2
 - b.ER Diagram Pg. 3
 - c. Webpage Design Pg. 4
 - d.Function Design Pg.11
- 2. Implementation Details Pg.14

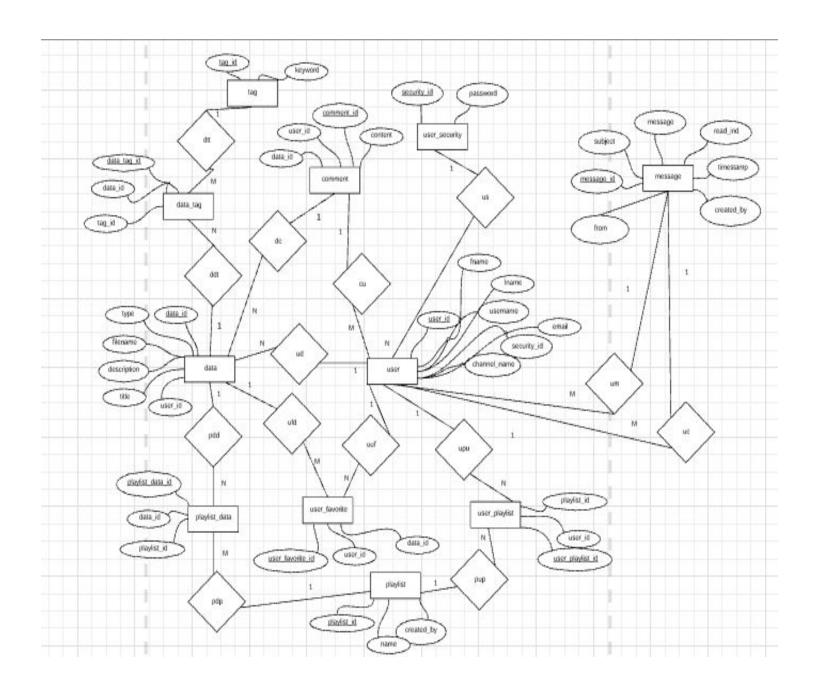
- 3. Testing **Pg. 16**
- 4. User Manual Pg.22

System Design

Database Schema:



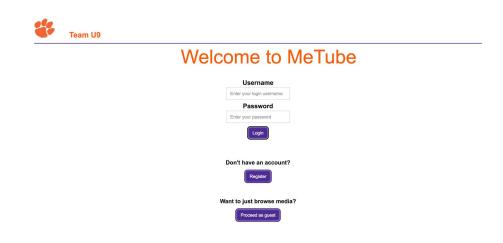
ER Diagram:



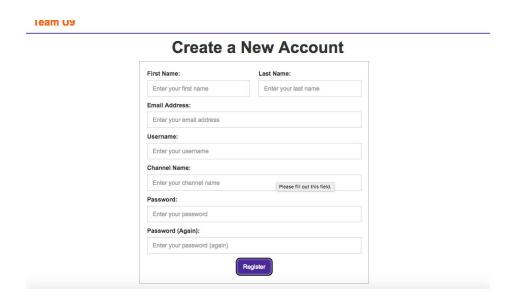
Webpage Design:

Overview: The entire web page uses the colors white, orange, and purple. It is very consistent in design and uses the same heading for every page. The navigation bar appears on all pages except for the login and register pages.

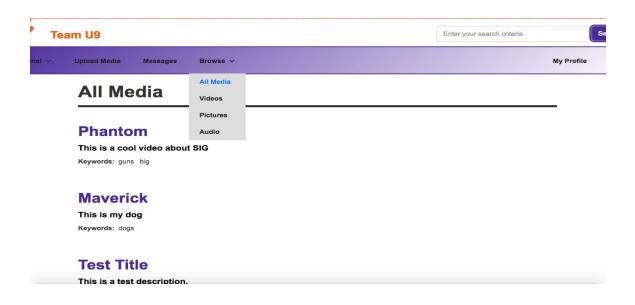
Login: The login page is the first page that is presented when you visit our website. Here the search bar that is consistent with the rest of the site is not present. The page contains a form that is used to verify that a user exists and sign in. There also contains a button that allows a user to create an account. The last button on the page allows a user to browse media without creating an account



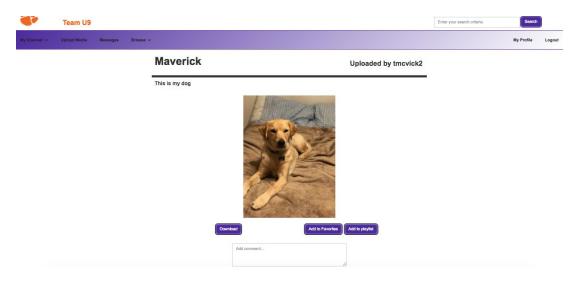
Register: This page contains a single form with various text fields needed to create a users account. Each input field is required, and the form cannot be submitted without values input. The register button pushes the inputted information to the database. This page like the login page does not contain the search bar.



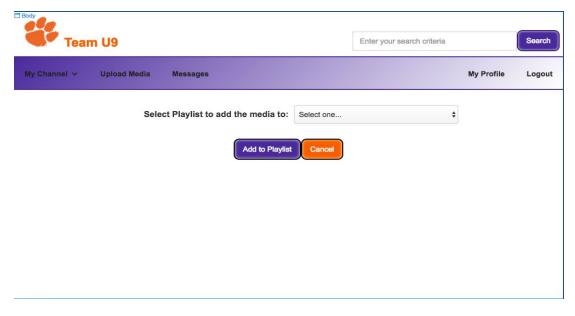
Browse page: This page is presented when login is successful. Here the search bar is first visible. This is the main page where everything happens. All browsing and search results will be shown here along with a default of all media upon login. The navigation bar is first present here, and is used to navigate the various features of our website. The browse drop down lets us choose the type of media we would like to view. Clicking my channel will present all videos uploaded by the user as well as their favorites.



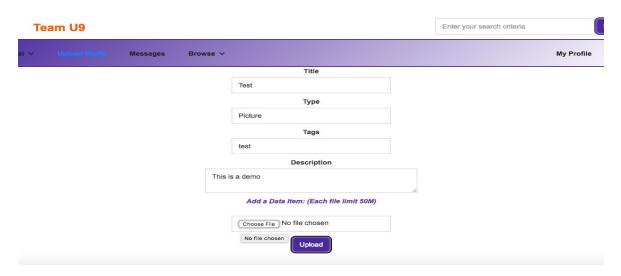
View data: This page displays the selected data. It also displays all comments associated with the data. The download button allows the user to push the data onto their PC. The add to favorites button puts the media in the users favorite list using the add to favorites php function. The add to playlist button presents the add to playlist page.



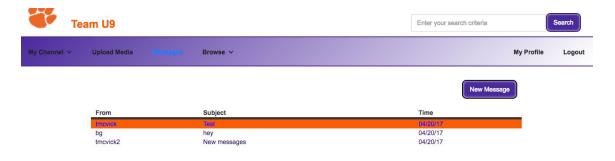
Add to playlist: This page allows us to choose a playlist we would like to add the selected media to. It uses php to push the data to the associated playlist on the database.



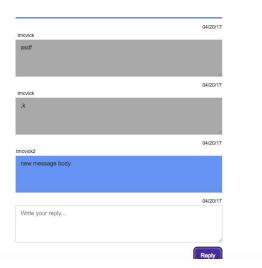
Upload media: The upload media tab contains a form handler where the user will enter all information about their media they are about to upload. Upon clicking upload the user will chose the media they are uploading and all information will be pushed to the database using a php script.



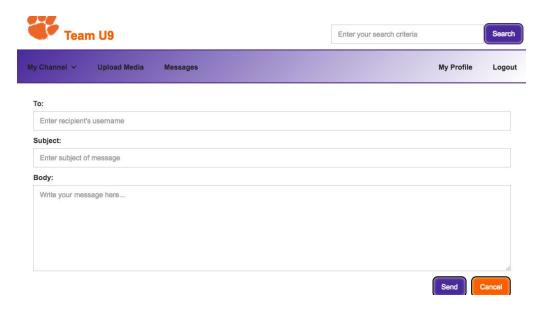
View messages page: The messages tab will present all message threads related to the user logged in. The threads are displayed with a short preview including who the message is from, the subject, and time of last message. Unread messages are marked in orange. It also contains a new message button which allows the user to create a new message. By clicking on a thread the view message thread page is displayed.



View message thread: Here we can see the ongoing conversation with another user and reply directly from within using the reply form we created. The single button pushes the message to the user using the send message php. The logged in users messages are blue while the user whom they are talking to messages are white.



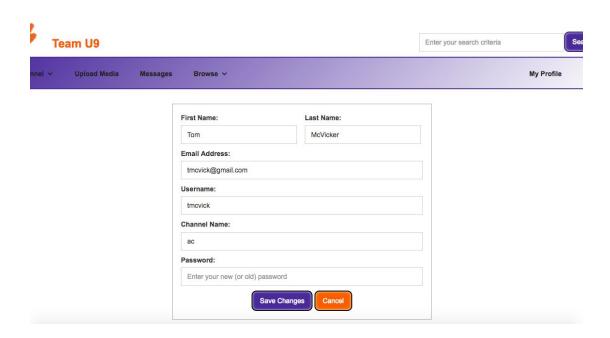
Create new message: Here we can use the form handler to send a message to another user. You must correctly enter in their username for the message to go through. Upon clicking the submit button the message is sent to the appropriate user within a php script.



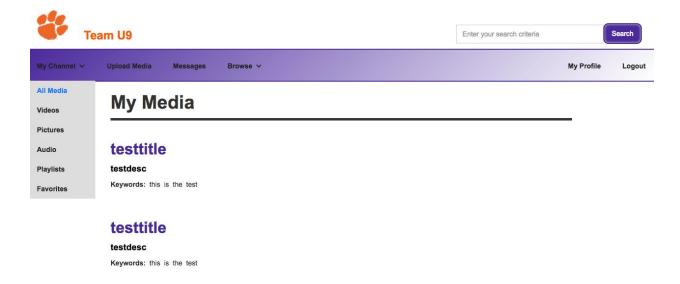
My profile: This page retrieves the logged in users' information and displays it in a nicely formatted fashion. It contains a single button that links to the update profile page.



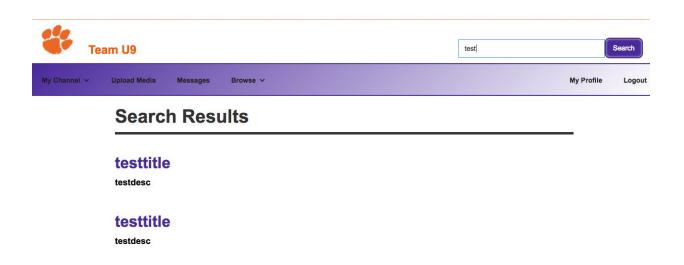
Update profile: This page contains a form handler which allows us to change any of the information about our account. Clicking save changes pushes the updated data to the database overwriting the previously associated user information.



My channel: This page shows the users uploaded media. You can filter the media displayed using the dropdown. The dropdown uses a php script to show only what we would like to see displayed.



Search: The search results page displays all media relevant to the tag that the user has queried a search for.



Function Design:

Register:

- 1) Retrieve First name, last name, username, email, and password from input fields.
- 2) Ensure no field is empty
- 3) Insert the fields into the database as a new user

Log In:

- 1) Check if username exists
- 2) Check if inputted password matches the user's associated password
- 3) Retrieve user information from database and set current user

Logout:

1) Set current user to null

Update User:

- 1) Display user's information in text fields
- 2) Update database upon submit
- 3) Retrieve user's new information

Upload Data:

- 1) Input information about data. (Filename, datatype ,description, title, taglist)
- 2) Ensure no field is left blank
- 3) Set current user as uploader
- 4) Push data onto server and store information in database
- 5) Present data on site

Download Data:

- 1) While viewing data click download button
- 2) The filename is retrieved from the database
- 3) The appropriate file is retrieved from the server and pushed to the users computer

View Data:

- 1) Select one data and retrieve all information associated
- 2) The data and information as well as tags, comments, and same channel as well as playlist media should be displayed

Browse:

1) Retrieve all data and display them

Filter:

- 1) Retrieve data based on user search and display the data
- 2) Retrieve data based on selected tags and display the data

Create Playlist:

- 1) Click create playlist
- 2) Input playlist name
- 3) Playlist is linked to user that created it in database

Add to Playlist:

- 1) Select a playlist
- 2) Choose data to add to it
- 3) Data and playlist ID are linked in database

Remove from Playlist:

- 1) Choose a data within a playlist and click remove
- 2) DataID is removed from the playlist in the database

Add to Favorite:

- 1) User clicks the favorite button on a data
- 2) The userID and dataID are linked in the database

Remove Favorite:

- 1) The user clicks unfavorite
- 2) The data is unlinked from the user in the database

Display Favorites:

- 1) User clicks favorites
- 2) All of the favorites associated with the user are retrieved and displayed

Create Message:

- 1) The user clicks create message
- 2) The user selects another user
- 3) The user enters a subject and message
- 4) Ensure neither field is left blank
- 5) The message is linked to the recipient user and thread between the users and defaulted to unread

View Message:

- 1) A user clicks on their messages
- 2) All of the messages to that user are displayed
- 3) If one is unread it is marked unread until opened
- 4) Upon clicking a message that thread of messages will be displayed

Create Comment:

- 1) A user is viewing a data
- 2) The user clicks add comment and types their comment
- 3) The user clicks submit and the comment is linked to the data and displayed

Display Comment:

 Comments based on the current data are selected from the database and displayed

Implementation Details

- 1) Create account: The user fills in the text fields with the appropriate information. If the information is valid a user is created and stored in the database.
- 2) Log in: The user enters in a username and password. The form handler verifies in the database, that the user exists and that the password entered is in fact the associated key.
- 3) Logout: Upon click the current user is signed out by setting resetting the session.
- 4) Update account: A user can edit their information from their settings page. The process is nearly identical to the create account feature. All updated data is pushed to the database.
- 5) Upload data: The user selects a file from their PC and enters in a title for their media, the type of media it is (picture, video, audio), tags for their media separated by commas, and a short description. Using all of these attributes the information for the data is stored in our database along with the file path of the media. View permissions are set upon upload.
- 6) View/Download data: A user clicks on the data they would like to view. Upon loading, all information associated with that data is pulled from the database and presented including: the data itself, a download link, comments, tags, playlists it belongs to, and an option to favorite.

- 7) Commenting: While viewing a data the logged in user can submit a comment using the form handler. The comment is linked to the data within the database and presented.
- 8) Messaging: Under messaging a user can view their current list of conversations with various users. If a message has not been opened yet it is marked unread. The user can either click on one of their current conversations to reply or simply click new message. Upon sending the message is marked unread and sent to the appropriate users account. All message information comes from our database.
- 9) Browsing: Within the home page as well as viewing media in a channel, favorites list, search, type, or playlist, will be pulled from the database and presented on a single page in list form. Without the filters, the default is all media being presented.
- 10) Display favorites/channel: A user can go to their page to view all the videos that they have uploaded from their account. They can also view their favorite media from their page. This information is stored in the database.
- 11) Searching: Users can search by tags. All videos related to the search query are pulled from the database and displayed.

Testing

Test Scenario	Test Case	Test Data	Expected Result	Actual Result
	Ensure no field is blank	All fields blank	Error	Error: "Please fill out this field"
Test Registration Functionality	Ensure both passwords are the same	Password 1: pass Password 2: password	Error	Error: "Passwords must be matching"
	Verify new user is in database	Username: testing user	User exists in database	User exists in database
	Verify two users can log in simultaneously	Log in with username tmcvick, computer 1; tmcvick2, computer2	Both users are logged in	Both users are logged in
Test Login	Verify proper login works	Username: tmcvick password: pass	User is redirected to browse page	User is redirected to browse page
Functionality	Verify correct username wrong password results in error	Username: tmcvick password: p	Error	Alert: Login failed
	Verify correct password wrong username results in error	Username: p password: pass	Error	Alert: Login failed
	Verify user	Click logout	User is	User is

Test Logout Functionality	brought back to login page		redirected to login page	redirected to login page
	Verify login page presented upon reopening of browser	Click logout, close window, reopen window	User is present login page	User is presented login page
	Verify change first name works	Change first name from "Tim" to "Timothy"	First name is shown as "Timothy"	First name is shown as "Timothy"
	Verify change last name works	Change last name from "Last" to "Last2"	Last name is shown as "Last2"	Last name is shown as "Last2"
Test Update Account	Verify change username works	Change username from "tmcvick" to "testtmcvick"	Username is shown as "testtmcvick"	Username is shown as "testtmcvick"
Functionality	Verify change email works	Change email from "email" to "email2"	Email is shown as "email2"	Email is shown as "email2"
	Verify change password works	Change password from "pass" to "pass5". Logout, login using "pass5"	Login is successful	Login is successful
Test Upload	Verify upload data works	Upload video	Video is on the server	Video is on the server
Data Functionality	Verify no field can be left blank	Left each field blank once	Error	Error: "Please fill out this field"
Test View Data Functionality	Verify data loads	Click on title of media "Phantom"	Displays title, description, uploaded by, and media	Displays title, description, uploaded by, and media content

			content	
	Verify comments are displayed if there are any	Click on media "Phantom" and "test"	"Phantom" displays comments, "test" displays no comments	"Phantom" displays comments, "test" displays no comments
	Verify download works	Download media "Puppy Video"	Media is downloaded to computer	Media is downloaded to computer
	Verify tags are displayed	Browse All media	Tags are displayed	Tags are displayed
	Verify favorite works	From "Phantom" view page, click "Add to Favorites"	Alert displays "Data added to favorites" and redirects to favorites, listing the new media	Alert displays "Data added to favorites" and redirects to favorites, listing the new media
Test View Data Functionality	Verify add to playlist works	From "Phantom" view page, click "Add to Playlist"	Redirected to "Add to Playlist" page, select "P1" from dropdown of playlists, click "Add to Playlist", redirect to Playlists, listing new media under "P1"	Redirected to "Add to Playlist" page, select "P1" from dropdown of playlists, click "Add to Playlist", redirect to Playlists, listing new media under "P1"
Test Comment on Data Functionality	Verify comment is posted	Add comment "test comment" and click "Add Comment"	Alert will display "comment created" and	Alert will display "comment created" and will refresh the

	T	T		1
			will refresh the current media page with the added comment	current media page with the added comment
	Verify correct username is associated	Add comment as user "oguzzar"	Comment displays with label "Posted by oguzzar"	Comment displays with label "Posted by oguzzar"
	Verify message is sent	Check database for message	Test message in database	Test message is in file
	Verify recipient is valid	Type invalid username	Error	Message was not sent
Test Messaging	Verify no field is left blank	Leave field blank while composing message	Error	Please fill in this field
Functionality	Verify message is received	Log into recipient user's account	Message received	Message received
	Verify message received is unread	Log into recipient user's account	Message should be highlighted in orange	Message is highlighted in orange
	Verify reply works	Click reply within message thread	Message should be sent	Message is sent and recieved
Test Browsing Functionality	Verify my channel videos are displayed	Click "Videos" under my channel	Any uploaded videos are displayed; if none, display "There are no videos to browse."	Any uploaded videos are displayed; if none, display "There are no videos to browse."
	Verify my channel pictures are displayed	Any uploaded pictures are displayed; if	Any uploaded pictures are displayed; if	Any uploaded pictures are displayed; if

		none, display "There are no pictures to browse."	none, display "There are no pictures to browse."	none, display "There are no pictures to browse."
	Verify my audio are displayed	Click audio under my channel	Uploaded audio files are displayed	Test audio file displayed
	Verify my playlists are displayed	Click playlists under my channel	Playlist test is displayed	Playlist test is displayed
	Verify if anything is empty the site tells you this	User with no picture files clicks their pictures under my channel	Error	There are no pictures to browse
	Verify general browse all media works	Click browse all	All files should be displayed	All files are displayed
	Verify general browse videos works	Click browse videos	Only video files are displayed	Only video files are displayed
Test Browsing Functionality	Verify general browse pictures works	Click browse pictures	Only picture files displayed	Only picture files displayed
	Verify general browse audio works	Click browse audio	Only audio files displayed	Only audio files displayed
Test Search	Verify search works test 1	Query dog	Maverick2 media displayed	Maverick2 media displayed
Functionality	Verify search works test 2	Query audio	Test audio media	Test audio media displayed

			displayed	
	Verify search works test 3	Query guns	Phantom media displayed	Phantom media displayed
Test Guest Functionality	Verify guest can only browse	User chooses to continue as guest	You may only browse data	User can only browse data

User Manual

First steps:

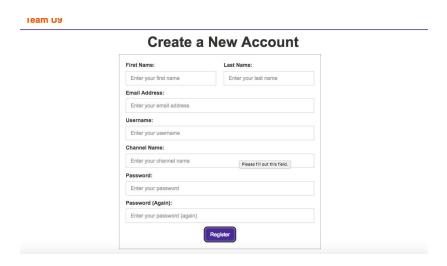
MeTube was designed for the everyday individual. It allows virtually anyone to simply open the site and get started. It is a place where individuals can find and upload new and exciting images, videos, and even songs. A user can add a 'liked' file to their favorite list for easy future access. When a user is trying to compile related files into a central location they can create a playlist and add various files from other users to it. It even offers the option for a user to download a file that they may like. Users can comment on one anothers media telling them what they think about their upload. If a user has a particular question for another users they can send them a direct private message. MeTube is a place for collaboration and ideas to flourish.

Logging in:



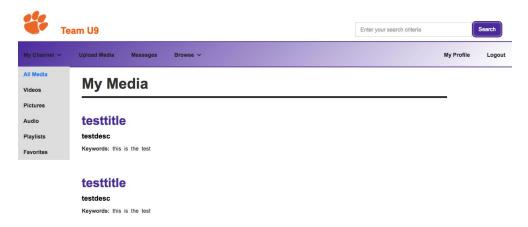
Here we see the home page that is displayed to a user not currently signed in. If a user has an account they simply fill in their credentials. If the username or password is invalid this will be displayed. If a user does not have an account they may choose to click register or continue as a guest.

Creating an account:

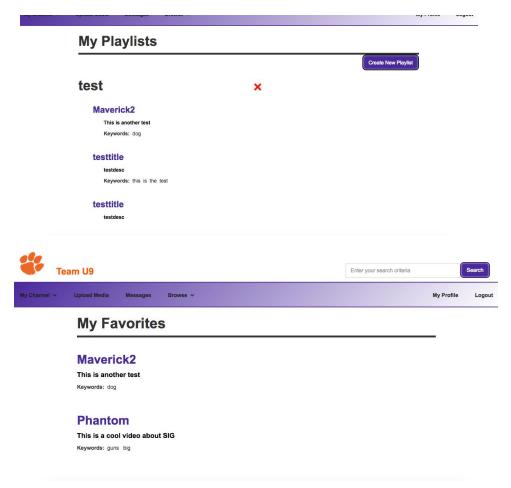


Upon clicking register on the home page you will be presented with the create an account form. After properly filling in your credentials and ensuring your passwords match simply click register to get started! Special characters are not permitted in any form except for email where you are required to put an @ sign. (Don't worry about not liking your username we can always change this later.)

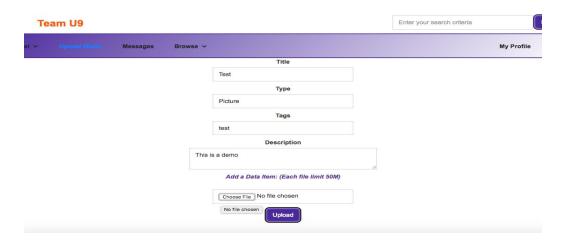
My channel:



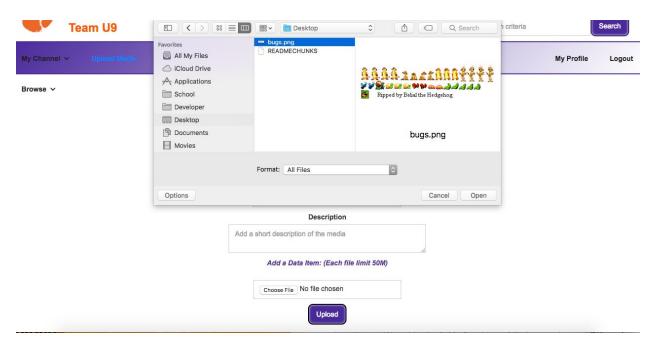
Upon logging in we can click the my channel navigation item to see the various types of media we have uploaded or are able to upload. We can also choose to see our playlists that we have created or our list of favorite items. From the playlist tab we can create new playlists to store media. If you do not have anything in any of the various categories the page redirect will tell you that your list is empty. Pictured below we can see our playlist "test" that contains several different files. We can remove the playlist by simply clicking the red X. Also pictured below is a sample favorites list. (Favoriting data covered under Viewing data.)



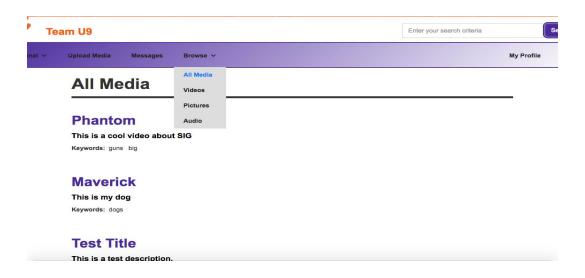
Uploading data:



By clicking the upload media tab on the nav bar we are presented with the option to create a new media. Here no special characters are permitted. We recommend a nice descriptive title with solid description. The type is the type of media you are uploading while the tags are the searchable terms. If choosing to have multiple tags you must separate each tag with a comma. All other special characters are forbidden throughout the form. Pictured below is an example of our test user choosing a file to upload.

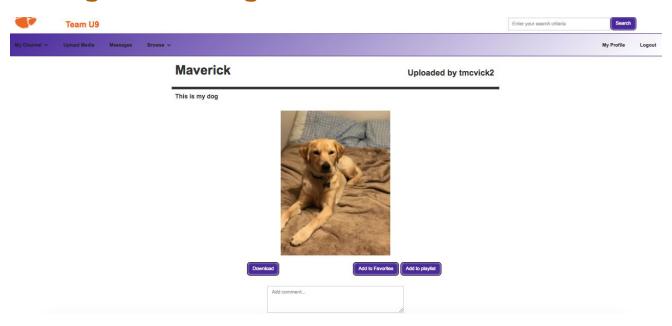


Browsing data:

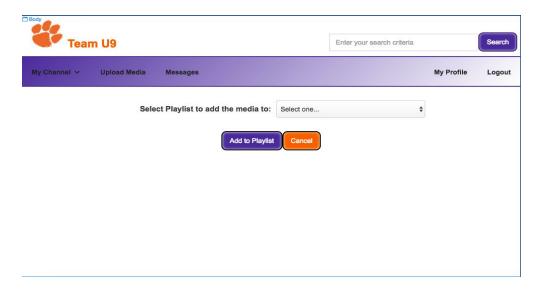


By clicking the browse tab the user can view all media hosted by the site or narrow it down by type of media (videos, pictures, audio). While browsing data, we see the media's title, description and keyword tags. By clicking on a medias title we can view that individual media as well as a numerous amount of other features.

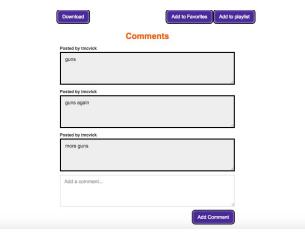
Viewing/Downloading data:



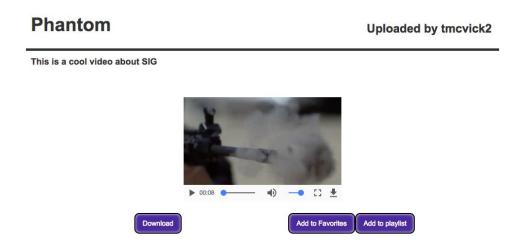
Upon clicking a datas title under browse data they will be presented the data along with the options to download the media, add the media to their favorites list, add the media to a playlist, or even comment on the media. Clicking download immediately downloads the file. Likewise clicking add to favorites instantly adds the media file to your favorite list. On the counter when you click add to playlist you will be presented with the following screen.



Here we can click the dropdown and choose one of our playlists to add the media file to.



By typing in the comment box and clicking submit we can see our comments for the media displayed.

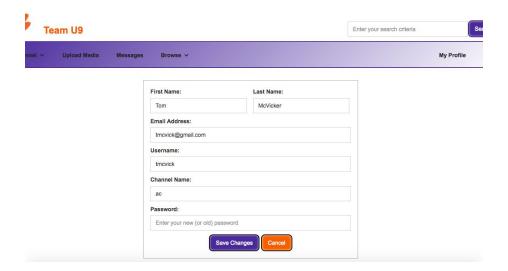


While viewing a video or audio file we can see various different controls under the actual file itself. These controls include playing the file (which on the counter pauses it also), scrubbing to certain points in the video or audio file, changing the volume, and for videos an option to view them full screen.

Editing your profile:

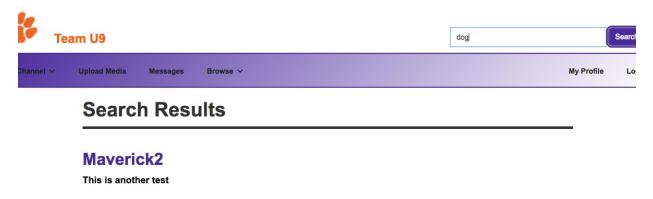


Clicking the my profile option on the navigation bar will present your current information registered on MeTube. If you click update profile you can choose to change any of this information.



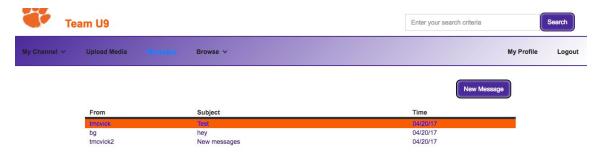
Here we can see an example of the page displayed after clicking the update profile button. The default upon opening is the user's information already filled into the text fields. If we change any of the information and click save the changes will be saved to the users account.

Searching:

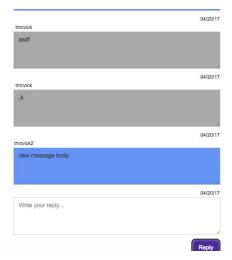


Our search is set up so a user can search for keyword tags associated with a specific media file. Here we can see a user searched for the keyword dog. The result that came up does in fact have the tag dog associated with it.

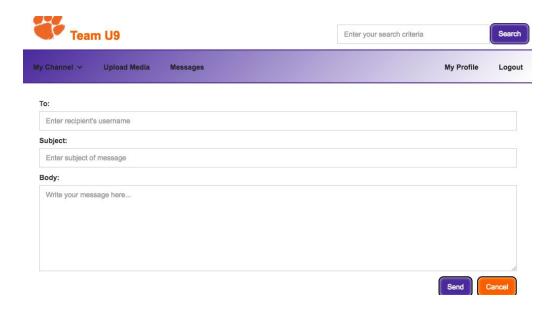
Sending messages:



By clicking the messages tab we can see all message conversations that you have participated in. If a message appears in orange it means that you have an unread message in that conversation. To read and reply simply click on the message.



When clicking on the message you will see the conversation that has been ongoing if one exists. Your messages you have sent will appear in blue while the other users will appear in grey. To reply to the message simply type in your message and hit the reply button.



If you would like to start a conversation with a user you have not message before click the new message button under the main message tabs screen. Upon clicking the new message button you will be presented with this form. You must ensure no field is left blank and that you type in the recipient's username correctly. After clicking send your message will be sent to the appropriate user and marked unread for them.