Implementation

The MeTube system is the result of combination of various web scripting languages. The MeTube implementation has been achieved by the combination of the following scripting languages:

1. HTML
2. PHP
3. CSS
4. MySQL

The system is implemented with the combination of few user defined functions with the built-in function of MySQL, HTML, PHP and CSS.

Following is the list of user defined functions that are used to implement functionality for MeTube system:

**File name:** function.php

**User defined function**

1. function user\_exist\_check ($email, $username, $password, $first, $last, $sex, $birth)

At the time of registration, this function checks whether the username being provided at the time of registration already exists. If the username exists already, the function returns a value which triggers an error saying “username already exists”. So in this way username becomes unique for each user and the function ‘user\_exist\_check( .. )’ helps in maintaining the uniqueness.

1. function user\_pass\_check($username, $password)

At the time of login, this function checks if the username and the password provided by the user matches. If it matches, user gains access to the MeTube system account and returns an error otherwise.

1. function updateMediaTime($mediaid)

The function above updates the media time taking in the mediaid as the parameter and updating the time depending on what time is it on the server.

1. function upload\_error($result)

This function consists of several cases which define an error that might occur while uploading a media file to the MeTube file system. This function returns a string saying depending on what type of upload error has occurred.

1. function update\_info($email, $password1, $first, $last, $sex, $password3, $username, $birth)

The update\_info function updates the profile information that a user provides when while updating the profile information. Personal information is optional at the time of registration and update.

1. function playlist\_exist\_check ($username, $playlist)

This function checks for the playlist name being entered by the user for creating a new playlist. If the playlist name already exists in the database, function returns an error saying “playlist already exists” and creating a new playlist otherwise.

**File name:** message.php

**User defined function**

1. function send\_message($username, $subject, $message, $sentfrom)

The send\_message function takes in arguments like the username of the user to whom the message is being sent, the subject of the message, the body of the message (text) and the username of the user who is sending the message. This function stores all the data regarding sending a message in the database table ‘messages’ and hence the receiver side be able to extract the data which is stored in the database table ‘messages’.

The above is the list of user defined functions used to implement functionality on the MeTube file system. Moreover, many MySQL queries have been used to deal with the back-end working in the database. Since all the data is flowing through the database, MySQL queries connect database with the web interface that users see when they browse through MeTube.

Following is an example of MySQL queries that are used often to implement functionality in MeTube:

1. mysql\_query( *query* )

This is one of the most important and useful function that is used to run a MySQL query.

1. mysql\_error()

The above is a function that is called when an error occurs while dealing with the database.

1. mysql\_fetch\_row( *result* )

The above mysql function fetches all the rows in a table and stores the index of the rows in an array.

1. mysql\_fetch\_assoc( *resource )*

This mysql function returns an associative array of strings that corresponds to the fetched row, or FALSE if there are no more rows.

Apart from these functions several other mysql functions are used to work on the MeTube database.

Database Schema

A database schema is the skeleton structure that represents the logical view of the entire database. It defines how the data is organized and how the relations among them are associated. It formulates all the constraints that are to be applied on the data.

The database schema defines its entities and the relationship among them. It contains a descriptive detail of the database, which can be depicted by means of schema diagrams. It’s the database designers who design the schema to help programmers understand the database and make it useful.

MeTube database is trivial to understand since only eight tables are present in the MeTube database. These tables are linked together to coordinate with each other while the database is getting updated or some data is being inserted or deleted from the database.

Following is the database schema design for the MeTube system: