# CS518 – Web Programming

# Milestone 1

# **TEAM MEMBERS**

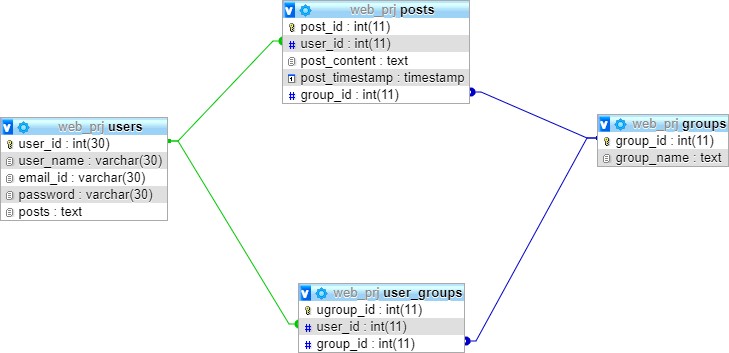
# Hariharan Thiyagarajan

# Sai Siva Saketh Kantimanhanthi

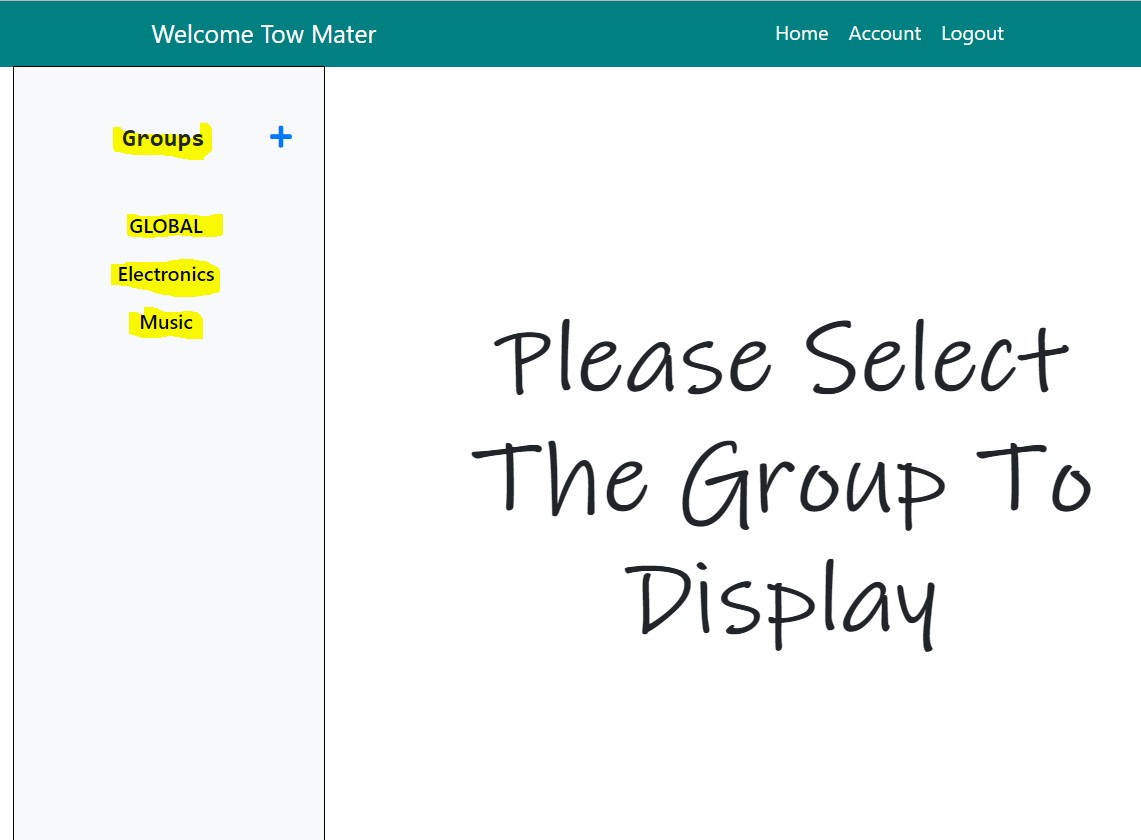
## INTRODUCTION

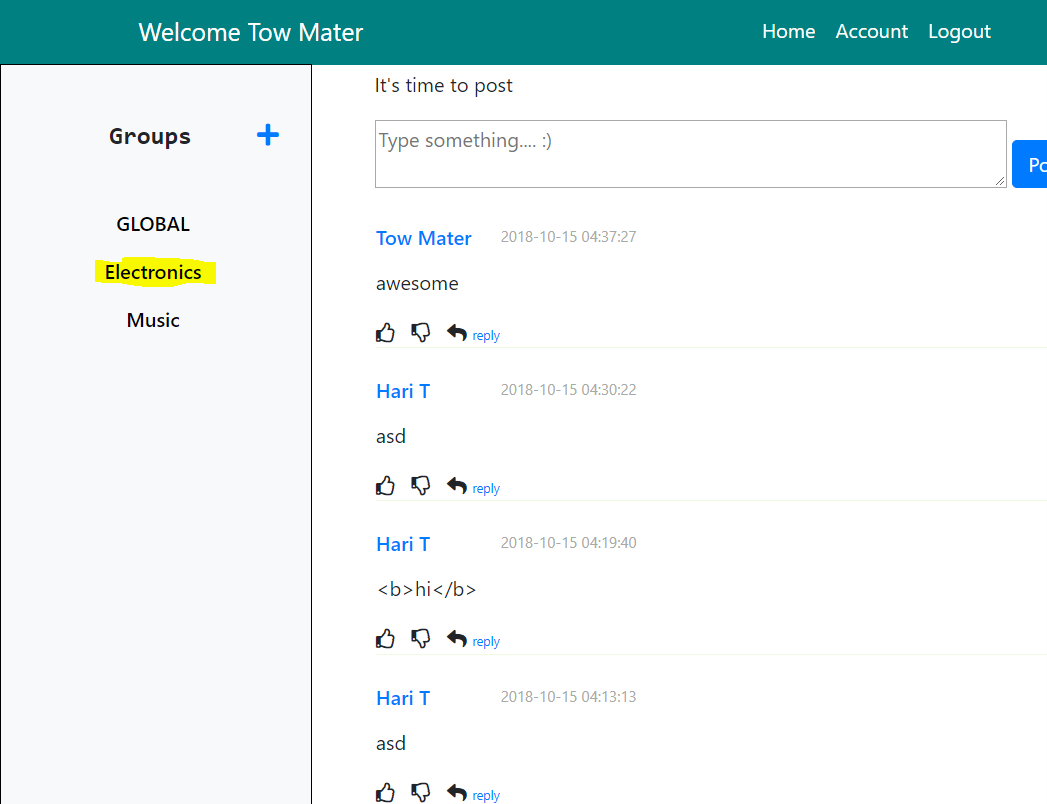
This project is the implementation of a social media website where it will have additional features like the Facebook’s “Market Place”. The idea is to construct a similar web application using LAMP stack which includes Linux, Apache, MySQL and PHP.

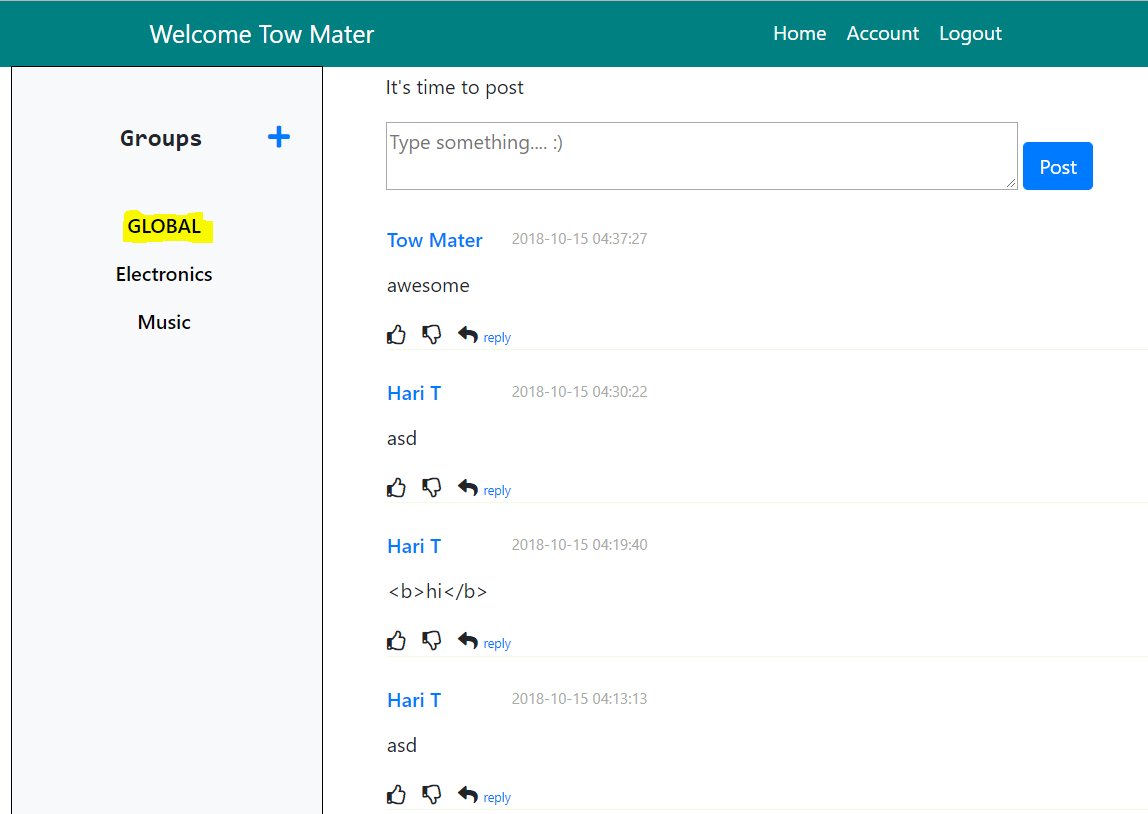
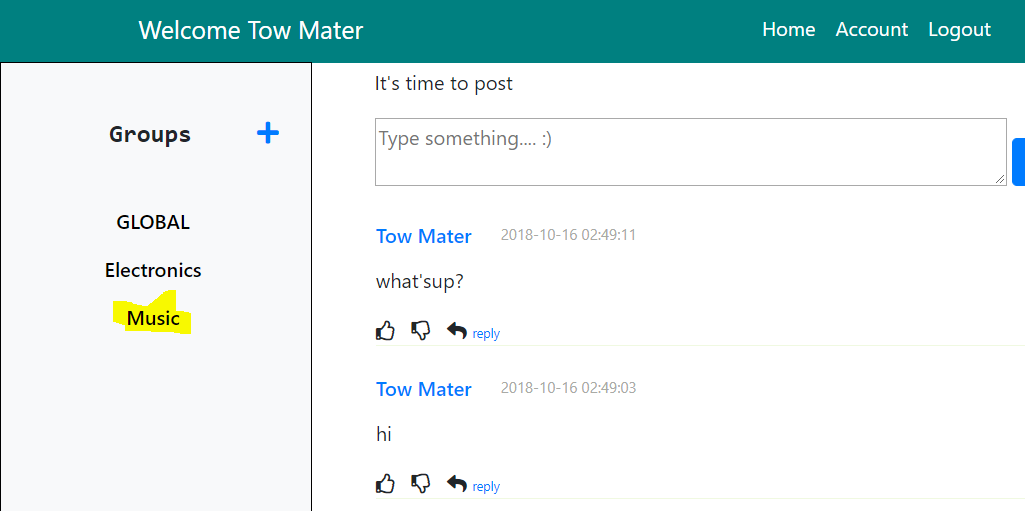
## DATABASE DESIGN



**MILESTONE 1 REQUIREMENTS**







1. The social media site should have a set of "groups" to which users can be members including a "GLOBAL" group to which all users are members.

The left hand side of home screen UI has list of all the groups. All the users are part of GLOBAL group.

1. The web site must provide a web page that allows a registered user to post messages in a variety of existing groups.

Users are provided with a homepage, which allows a user to post in existing groups. We have divided the homepage into two parts. On the left hand side, the user can find the groups. On the other hand, history of messages posted by several users in the groups will be displayed.

1. Users must be able to log into your web site using the [course users list](https://www.cs.odu.edu/~jbrunelle/cs518/user_credentials.txt). There is no need to implement new user registration.

All the usernames, ids and passwords provided in the course user list have been inserted into the `users` table in the database. It will verify the credentials with the database based on the user input. Prior to checking the user information in database, it trims the data, strips the slashes and also avoids cross-site scripting. The following is the sql query to select the username and password from the database:

"SELECT \* FROM `users` WHERE email\_id ='$mail\_id' AND password = '$password'";

Messages could be posted in various groups depending upon the group\_id and user\_id which are inserted into `posts` table in the database.

1. The user login process must use the HTTP POST method.

HTTP post method is used in the HTML forms to process the user login credentials. In the form action the htmlspecialchars() is encoded to prevent the scripts from being hacked. It also avoids cross-site scripting.

1. Messages/posts shall be stored in a MySQL database with a reference to the poster and in the appropriate channels.

Posts will be stored in the MynSQL database based on user\_id, content and group\_id. The following query is used for insertion

"insert into posts(user\_id, post\_content, post\_timestamp, group\_id) values('$user\_id','$content', NOW(),'$group\_id')";

1. The message submission interface must minimally use HTML forms and use a text entry element of the user's choice, and a submit button.

To insert a message we provided the user with a HTML form and input button as a text entry. These messages can contain alphabets, numbers and any special characters. Users can insert a message by pressing “post” button.

1. Displaying the messages should include the posting user, message, and time of post.

Group messages are retrieved from the database using group\_id and displayed in message displaying area. Along with the messages, we displayed the username and the time of the message. To perform the fetch operation, then from the `posts` table, required elements were retrieved using the following query.

“SELECT \* FROM `posts` WHERE group\_id='$group\_id' ORDER BY post\_id DESC”;

1. Posts should be sorted in reverse order of posting time and in the appropriate group.

The recent posts will be displayed first because the message posting area is displayed on the top. This is done by using “ORDER BY post\_id DESC”

1. The site should include -- at minimum -- a set of groups, a messaging display area, and a message posting area.

All the three features in the collaboration site are handled dynamically by querying for the information in database. HTML, CSS and Bootstrap were used to structure and add styling to the web page.

1. The home page for your web site must provide links to the other groups and the history of chat messages posted by all users in each group.

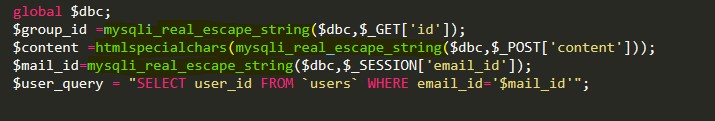
This requirement was taken care by default by accomplishing the above mentioned requirements. We have inserted the user details and manually placed them in different groups in the database according to the primary and foreign key constraints. Hence, whenever a registered user logs into the system, only the groups he/she is tagged to are displayed and the message posted by the group members are also observed by the user.

## REFERENCES

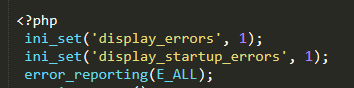
* [**https://stackoverflow.com**](https://stackoverflow.com/)
* [**www.w3schools.com**](http://www.w3schools.com/)
* [**https://www.tutorialspoint.com**](https://www.tutorialspoint.com/)

**PROGRAMMING TRICKS**

This helped us from preventing SQL injections and by using htmlspecialchars(), we can post the html special characters in the text area.



By using this we implemented the error handling mechanism



**CONCLUSION**

All the requirements for Milestone-1 have been met. The web pages have been created using only PHP, HTML ,CSS and Bootstrap.