

40122332

SET09103

Coursework 2

Report

## Introduction

The task set was to design, implement and evaluate a prototype web application of choice. The application must be created in the learning environment that has been used throughout the module. The application that was chosen to be implemented is a Twitter clone.

The application has a menu bar that is present at the top of all the pages in the application except for the login page and the new user page. The application uses cookies to check if the user is logged in or not. If the user is not logged in then they are redirected to the user login page. From the user login page the user can also create a new account to access the website. Once the user has logged in the application goes straight to the users feed page which displays all the users' messages and the messages of all their friends as well. There is also a world feed page that displays all messages posted in the application. There is also a friend's page that displays all the friends of the user. To add friends the user can use a search menu to search for a specific person. All the users that match the input are then displayed with a button that will send a friend request to the user. The menu bar also has a notification drop down list that displays all the friend request that the user has received. The user then has the ability to accept or deny the friend request.

## Design

For the design for the application was inspired by Facebook. Like Facebook the application has a navigation bar at the top of the page, I liked this as it is easy to move from page to page and also all of the pages are accessible from one location. The navigation bar (as previously suggested) has all of the links to every other page in the application except the new user page.

The application also has a search bar that allows the user to look for their friends accounts. The user can then send their friend a friend request via a button next to their friends' name. The search bar is located on the navigation bar.

The friend requests are stored in a drop down box called notifications. Putting them in in here is useful as it means that the user can look at them in their own time rather than having them constantly displayed somewhere on the page.

## Enhancements

The use of Pagination would be useful for the Feed page and also the world feed page as it would break up the messages instead of having them all on the same page. Also it would allow easier navigation to previous pages.

A good feature that would be nice to have is a text editor for the messages. At the moment the application just uses a text field for writing messages. The API quill would be a useful api as it allows you to edit text and images.

One way enhancement would be to create a personal page that only showed the messages of a certain user. Users would be able access these personal pages if they select their username in the

friends list. This would work in a similar way to twitter where if you select another users name then you will be redirected to another user's page.

Another feature that could be added is the ability to show other people's messages as your own similar to the way Facebook has the ability to share posts and twitters ability to retweet. This would allow users to share things they find interesting or funny.

More error handling would help with user interaction especially if something goes wrong. At the moment the error handler returns the user to the root page if a 404 error is passed.

A user gallery would also be a nice addition to the web application. The user gallery would allow the user to add personal images to that would be able to be viewed by other users. It would also allow the user to add in profile pictures.

## Critical evaluation

At the moment there is currently no way to return from the message page other than posting a message. This could be easily fixed by adding a button that redirected the user to the root page.

The notification drop down menu currently has no way in informing the user that they have a notification. Currently the user has to manually check whether they have a notification which could be a bit of an inconvenience to some users. One way in which you could solve this issue is to maybe add an image pop up in the notification button in a similar fashion to the way Facebook has the number of notifications pop up.

One issue that would be nice to resolve would be to display the users name in the notification window. At the moment the only the users id number is displayed which isn't very useful for the user as they do not know the id numbers of all the other users. This issue could probably be fixed by the use of a better SQL select statement to return the users name from the database.

The Application looks very black when you compare to other social media applications such as Facebook or Twitter. One example of this is when the user first creates an account there is nothing in the post area as the user at first has no friends and hasn't posted anything yet. Applications such as twitter gets around this by getting you to follow other users when you first sign up that way your news feed isn't empty. A way in which you could solve this is by allowing the user to pick an image for their background thus making it look less bleak and also it adds in a bit of personality to the users' page.

The biggest problem with the application is that it doesn't have any error handling for if the user puts in the wrong username. At the moment if you enter the wrong username then the application will send a debug error message. This is very bad as it would allow the user to see files and information that they should not be able to see and could be a serious security risk.

## Personal Evaluation

The first issue I faced was trying to implement the login feature for the application. At first I was using a tutorial that I found online. This lead to some issues and I found that I did not fully understand what the tutorial was teaching me and wasn't sure about what the code was actually doing. This became a really big issue as the code started to break and I did not know how to fix it. Eventually I made the decision to get rid of the code and replace it with something that I actually understood. This has taught me to make sure I understand how code fully works before trying to use it.

One problem I faced during development was that I was struggling a bit with the SQL statements. I had to spend a lot of time looking into how to some of the more difficult statements such displaying all of the users friends. This has resulted in me learning a lot more about databases than I previously ken and has also made me more confident in the subject.

The main thing I have learnt is to try and stay calm and level headed whenever I come across a bug in the code. During the project I discovered a bug that I wasn't sure how to fix. I wanted the bug to be resolved quickly so it lead me to rush in trying to find a solution. Eventually I had spent two hours try to fix the bug and I was getting more and more frustrated. After taking a break and calming down I thought about the code a bit more I discovered a simple solution to the problem. I could have reached this solution a lot quicker if I had stayed calm and though about the problem rationally.

## Resources

<http://www.codedoodle.com/2014/12/social-network-friends-database.html> (used to help structure the databases in the applications)

<https://en-gb.facebook.com/> (Facebook. Used as research material in to the workings of a social media applications)

<https://twitter.com/?lang=en-gb> (Twitter. Used as research material in to the workings of a social media applications)

<http://www.yikyakapp.com/> (Yikyak is a social media mobile application. Used as research material in to the workings of a social media applications)