ECS639 Coursework: Extension of Social Network Web Application

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We were assigned the task to implement features B2. Feature B required the adoption of the model which allows users to friend and unfriend users as opposed to the original follow and unfollow mechanism. This was achieved by creating two new tables within the database with the addition of two new classes representing entities of friends and friend requests. While the request to be a user's friend is pending, the 'friend request' class organises the users into two fields (sender and recipient) which is then removed from the table once the request has been either accepted or denied. If the request were to be accepted, a new entry is made in the "friends" table, keeping recording of the mutual relationship between the users.

The second feature which had been implemented involved a recommendation system which provided the user with a list of suggested friends based on their existing relationships. This feature utilised the modifications made to the database during the implementation of the first feature. A nested for loop was constructed where the outer loop iterates through the user's friends, each of which are then passed through the inner loop, recording the friends of the user's friends. The output of the nested for loop appends an array, returning a list of suggested friends for the original user.

Amongst the two features implemented, additional changes were made regarding the user interface. A clean and minimalist style had been applied throughout the web pages, reflecting current web design trends. This includes the use of iconography, typography and a colour palette (vibrant, energising and unsaturated). We believe that we have practised a good sense of user experience techniques which helped us to make design decisions such as button/tab placement, amongst other general composition/layout elements. A lot of the design changes were achieved using Twitter's Bootstrap library, which is provided through a JavaScript and CSS file. Classes were used frequently throughout the project to help achieve the design we set out to implement. However to truly personalise the look and feel of the application, we worked on writing our own custom CSS rules. The place where the most changes were made is the "Messages" page.

A search function has also been included, as it is a common feature found in most real life social media applications. This was achieved by making an Ajax GET request which sends the input text entered into the search box through a for-loop (in view.py), iterating through all the members. All the matches made are added to a single array which is returned to the user by processing through "test.html" page, adding all the formatting necessary to match other elements of its kind using jQuery code. The matched results are hyperlinked to the respective profile pages.