Student number: 21739631

Student name: Finn Dunkel

Teammate: None

# **Twitter System Description**

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This project centred around creating a program in C which mimics the behaviour of the following functionalities present in the social media service “Twitter”:

1. Following another user
2. Unfollowing another user
3. Posting a tweet
4. Showing the news feed (that is, the 10 last recent tweets, posted either by the user him/herself or by users he/she follows)
5. Deleting a user
6. Ending the twitter system

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First, the users are created and their following/followers are printed to the console. Subsequently, a menu gives the user the possibility to choose the above-mentioned functions and the calls to the functions themselves are encapsulated by a while loop. The menu options always follow a line of text indicating the current user in the system. Whenever a function in the menu returns, the menu is shown again, giving the user the possibility to call another function. The program is terminated if one of the following conditions below is satisfied:

1. The user has deleted all users in the system
2. The user deliberately ends the Twitter system.

Furthermore, the program is divided into 5 separate modules. These are explained below.

1. twitter\_create
   1. Creates the Twitter system, meaning it reads in the usernames and sets their following/followers to 0
2. menu\_functionalities
   1. contains functions to display the menu to the user, get input from the user and end the twitter system
3. follow\_AND\_unfollow
   1. Contains functions that allow the user to follow and unfollow a given user. Auxiliary functions in this module get user input in form of a string and make sure the user cannot follow him/herself, and that the user they are trying to follow actually exists.
4. tweet\_functionalities
   1. This module contains all functions needed to post a tweet, display the news feed and delete tweets. The tweets are saved in a linked list (stack).
5. delete\_account
   1. This module makes deletion of the current user possible. It takes care of removing the deleted user from the following of users who followed that user, removing the deleted user from the followers of other users and ultimately deleting that user from the system.