Assessments

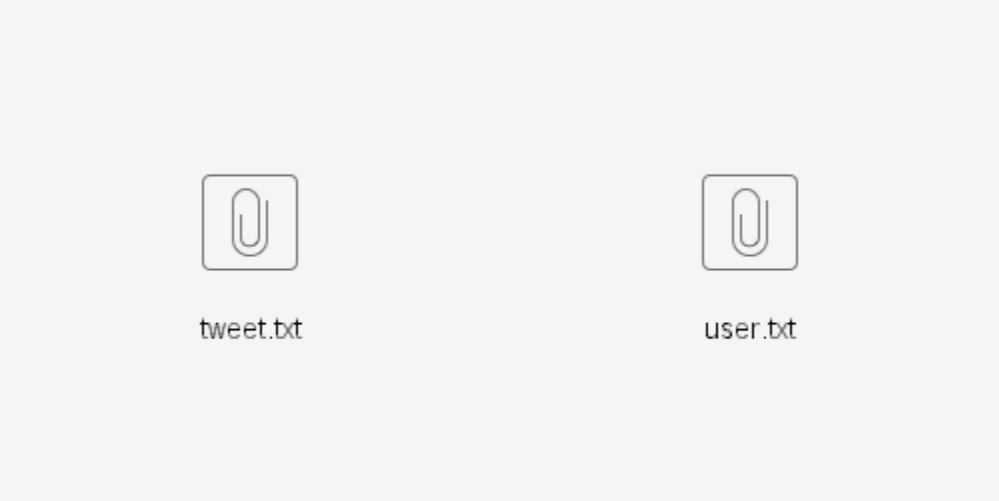
The assignment is more than just getting the assignment to work we are looking for qualitative things too (e.g. does one handle exceptions, does one write simple code, are there tests, potential patterns and best practice etc)

In the end we would like to see what you consider to be a good solution and want to see if it is aligned with our understanding. Since the role is predominantly .NET I would recommend that you do it in C#. We would prefer if the source code was submitted via **GitHub** or **BitBucket** and would need all the source files as well as **instructions** on how to run it.

Coding Assignment (Logic)

Please write a program to simulate a twitter-like feed. Your program will receive **two seven-bit ASCII files** (see below Annexure 1).

Annexure 1(see attached txt files)



- The first file contains a list of **users** and their **followers**.
- The second file contains **tweets**.

Each line of a well-formed user file contains a **user**, followed by the word '***follows***' and then a **comma separated** list of users they follow.

Where there is more than one entry for a user, consider the union of all these entries to determine the users they follow.

Lines of the **tweet** file contain a user, followed by **greater than**, space and then a tweet that may be at most **140 characters** in length.

The tweets are considered to be posted by the each user in the order they are found in this file.

Given the **users**, **followers** and **tweets**, the objective is to display a simulated twitter feed for each user to the **console**.

The program should be well designed, handle errors and should be of sufficient quality to run on a production system.

Indicate all **assumptions** made in completing the assignment.

Your program needs to write console output as follows:

- For each **user / follower** (in alphabetical order) output their name on a line.
- Then for each **tweet**, emit a line with the following format: **<tab>@user: <space>message**.

Here is an example. Given user file named user.txt:

Ward follows Alan

Alan follows Martin

Ward follows Martin, Alan

Here is an example tweet file named tweet.txt:

Alan> If you have a procedure with 10 parameters, you probably missed some.

Ward> There are only two hard things in Computer Science: cache invalidation, naming things and off-by-1 errors.

Alan> Random numbers should not be generated with a method chosen at random.

So invoking your program with user.txt and tweet.txt as arguments should produce the following console output:

```
Alan
    @Alan: If you have a procedure with 10 parameters, you probably missed some.
    @Alan: Random numbers should not be generated with a method chosen at random.
Martin
Ward
    @Alan: If you have a procedure with 10 parameters, you probably missed some.
    @Ward: There are only two hard things in Computer Science: cache invalidation, naming
things and off-by-1 errors.
    @Alan: Random numbers should not be generated with a method chosen at random.?
```

Extra: Coding Assignment (API)

Please write a web api to:

- Get a **User** and his **Followers**.
- Add a **follower** to a **user**
- Delete a **follower** from a **user**

Try follow best practices w.r.t to patterns and rest constraints.