**Twitter Feed Clone**

**Functional Requirements**

* Program should process files that contain users and their follower graph structure
* Text file is predictably formatted but errors should still be accounted for.
* Program should process files that contain users and their tweets
* Text file is predictably formatted but errors should still be accounted for.
* Program output is text file with feeds for all users
* Feeds can be accessed per user
* Data storage handled by a separate service

**Non-Functional Requirements**

* Each action should be handled by a service
* Time for accessing feed data primary factor
* Assume that we’ll have a machine capable of storing large amounts of data in memory
* Client application should be unit tested
* Integration and Behavioural test unnecessary for now
* Client Application will serve as testing for the service
* Will

**Service/Class List (First Iteration)**

* ClientApplication
* Responsible for exercising the services and serves as the first iteration of integration and
* UserTextInputClass
* Not good candidate as service since it does very specific functionality
* Responsible for handling user file input
* Sends found users to UserService
* TweetTextInputClass
* Responsible for handling Text Input
* Interacts with UserService for getting user information
* Sends tweets to TweetService for saving tweets
* UserService
* Responsible for saving all users
* Responsible for saving follower graph
* TweetService
* Responsible for processing saved user tweets
* Saves Tweets
* Sends Tweets to TimeLineService
* TimelineService
* Keeps track of timelines for each user
* OutputClass
* Responsible for creating output
* Consumes APIS from UserService and TimelineService to create output file

**Service List (Final System)**

* FanOutService
* Responsible for knowing where all data needs to be sent
* Sends new tweets to TimeLineservice
* Intended to serve as an intermediary for all tweet processing

**APIS (First Iteration)**

**UserService**

* SaveUser(string Username)
* GetUser(string Username)
* GetAllUsers()

**TweetService**

* SaveTweet(string UserId, string tweet)

**TimelineService**

* GetUserTimeline(string UserId)