

PROJECT

KABUTAR

Sushant Bansal

Pragya Chaturvedi

Mohak Garg

Introduction

Our plan is to create a **Model** of a **micro-blogging site** such as Twitter, but more like Twitter and Facebook mix because they share some common elements.

We don't aim to create this Project to be sellable but to learn something that helps us to work and adapt in the industry better.

In a software context we will be creating everything in a UNIX based Environment. And we'll provide all the required files in a tar/bzip package or some other way.

One of the major constraints we'll face is **TIME**. We would need time for this which in ample we don't have. A small barrier is what we know (our knowledge) but we'll overcome that.

AUDIENCE

We **don't** have an **aimed audience** for this project as this is just a learning project. It is not supposed to actually be launched for the customers.

RESOURCES

We would be using internet resources to help us and move forward with the project. And some of the books prescribed to us in our academic curriculum and some from the plethora available to us.

Description

A simple way to look at the Project would be looking it like a **MOCK TWITTER Platform**.

It'll be just a model, basic framework of how Twitter works. We'll be working on similar lines but not exactly how Twitter works. We have taken the idea not the exact algorithms and data structures on which Twitter works.

And it will not have a GUI what so ever. We planned to work on Data Structures this time not on GUI and stuff, more of backend programming.

We would be mimicking a few of the elements of Twitter such as:

- Users can follow each other.
Simply how users follow each other to get their tweets and updates. This requires use of Graph Data Structure in bulk.
- A timeline for each user with his own tweets with appropriate mentions from others, i.e. @xyz.
- #tags maintained provided only one tag in a tweet. Not multiple.
It is just the casual #tags which make topics trends.
- Friend/Follower suggestions.
- How are friends and followers suggested!! . Graph data Structure is the answer.

ADD-ON FEATURES

- *** Moods:**

When a person tweets, we will check the users input and then add the mood of the user with the tweet. We need a big database for this, which we would be borrowing from the internet or creating a database on our own. Searching from that database faster would involve good data structure algorithms.

We need a data store for this, we would require knowledge of File Handling. Data structures would be involved in connecting all the users and for each new user we expect the structures to be more complex and enjoyable. Moods would help us in applying strong and fast searching algorithms, faster indexing.

Language and Environment

It'll be based on language **C**. And everything will be done in a **UNIX** based **Environment**.

All the required files will be provided in a bundle. No network connection will be needed to run the program. The project has no extra hardware dependencies. It won't actually be networked between different computers. And it is only LINUX based, i.e. it won't run on any other platform. Separate packages for platforms.

Assumptions

The only assumption we'll be taking is that only one #tag in a tweet. Multiple hash tags not supported.

System Requirements

- A computer system with Linux as the operating system. (Preferably).
- Can be run on Windows too. (Unstable/Unsure)

Functional Foundation(Use-Case)

Users

- **Admin :**
 1. Can make changes to the database of the software.
 2. Can add or remove users directly.
 3. Can remove tweets of the users.
 4. Can change passwords for users.

- **User :**
 1. Will be able to add a tweet.
 2. Will be able to add proper mentions.
 3. Will be able to create hash tags, one per tweet.

Usage

User will be able to **create** his own **account**, comprising of:

1. A separate username and Real Name.
2. A timeline for his own tweets.
3. A feed for the tweets from the people he follows and the one's he's mentioned in.
4. A tag wise search.

Administrator accounts cannot be created by an ordinary user.

*Moods will be automatically attached with the tweet; it's not an option to choose. Moods will not be added if, nothing matches from the database. This won't give an error; just a mood will not be added.

*Moods are just **text** and **not** added as a **special key**.

***Will be done only if Time permits and everything else works fine.**