Background and Motivation

In recent years, people start to spend a lot of time on social networks. The power of social media has stronger and stronger influence and impact in modern society. In social networks, people can "friend" each other or post status of individual user. All these interesting interactions between individual users makes the social network a fun place for friends and family to hang out. In another perspective, more and more business and enterprise are getting involved in the social network area, where the social network itself are used as efficiency tool for the enterprise or business.

In the background of this project, we are inspired by the idea of "Twitter within a company", to create a social network website that can be adopted in the research area, where the main users for this website are science researchers and any relative role people play in the science industry. They can share their personal profile of information in his personal main page for other users to view. If a certain user is interested in the research interest listed in the user profile, he/she can follow that researcher. Whenever a user is followed, his/her new post, which is a way for that user to share information within the social network, will be displayed on their followers’ page. In this sense, the social network we developed for this project is kind of like a "Twitter" but more focused on the science research theme. More content will be thoroughly discussed in the rest of the report.

This report is constructed as follows:

First, we are going to tell you the motivation behind our project. Then we are going to talk about the related work we have received to develop our project. After that, we will show you the system design of our project, including front end and back end. Following that, the detailed system implementation will be listed. Then we are going to show you the experiments we have done for our project, which also comes the analysis for them. Then, the conclusion will be drawn for our project and future work that could be done will be discussed. Last but not the lease, a detailed tutorial will be given to walk you through our project.

We are also going to talk about the motivation behind this project, regarding why we are developing this project and where we are coming from.

The first thing you need to know about modern society is that we are in an information explosion time in history. We are surrounded by information we might or we might care for. One of the major success stories about social network component is Microblogging. Microblogging is a broadcast medium that exists in the form of blogging. A microblog differs from a traditional blog in that its content is typically smaller in both actual and aggregated file size. Microblogs allow users to exchange small elements of content such as short sentences and image or video media, which may be the major reason for their popularity. These small messages are sometimes called microposts.

In the industry of scientific research, we think microblogging has its own natural advantages, for instance, science researchers are always devoted to their work and sometimes they take down of little notes of their discovery here and there, in a hurry with little notes, but later found them missing. What if we can create a social network website, so that the researcher can take down the notes and record it in his/her own repository. What is even better is that if he/she decided to share this piece of information or discovery, he/she can change the status of little piece of information from private to public, so that the followers of this user can view this note, which is the micropost in our case.

Strongly motivated by this interesting and inspiring idea, we developed a social network website mainly for science researchers, where they can share private or public posts, follow or unfollow fellow researchers, view posts of his/her own or of others, edit personal information to connect with fellow researchers with common research interest. We call this comprehensive social network the "ZETWORK"! In our vision, ZETWORK can be a popular hit product in the science research industry. It will win peoples' hearts with its delicate UI design and professional functionality and services provided for users. People in the industry will be gushing about this website and all signed up for our service.