

Top Tweet News

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Abstract

Twitter is a worldwide social media website. The technology of Web 2.0 such as the Internet has made it possible to reach people around the globe in a single click of a button on personal computers or mobile phone devices. Twitter helps us easily share any ideas in the form of fewer than 140 characters messages which are called “tweet”. Even though the message is short but if we usually follow many Twitter accounts, there will be too many short messages. This kind of problem may cause it to be difficult to read all the tweets in our timeline. Thus, in this study we present the system call “Top Tweet News” which can automatically collect the information of the twitter users we follow from Twitter API, ranking the most significant tweets as the top ten tweets and be able to automatically post the up to date news via account @topthainews, then deliver the top ten tweets via email and also show the results on a webpage. To evaluate the system we have conducted the online survey page, the results have shown that about 63.18% is satisfied, 30.96% is neutral, 5.86 % is dissatisfied with the system.

Keywords: Twitter, Social Media, Social Network, New Media, Microblogging, Web 2.0

Introduction

Social media is a media for social interaction [1]. The idea of which allows users to create and exchange content or we so-called “user generated content” has been slowly developed in the era of Web 1.0 because of being connected to the network it has never been easier than it is today. Nowadays we live in the era of Web 2.0 after the Internet has made it possible to reach people around the globe with a single click of a button or on hand-held devices. Social Media has already exploded into one of the biggest innovation of our time. Examples of Social Media tools such as

Facebook, Hi5, LinkedIn, and Twitter. In this study we focus on “Twitter” which is categorized in Microblogging [2] among Social Media tools.

The Twitter company finally revealed its long mysterious registered user number, speech by Co-founder Biz Stone during his opening remarks in kicking off Twitter’s Chirp developer conference, April 2010[3]. It is 105,779,710 registered users.

Twitter is basically a simple social media web site. It is a hybrid of microblogging site, email, instant messaging and SMS messaging all rolled into one neat and simple package. The idea behind twitter is that we broadcast to anyone who chooses to follow us, simple messages also known as “tweets”. It could be as simple as what we are doing now or we may ask a question to our followers. Likewise we can choose to follow people and receive their messages. Twitter also has some unique characteristics such as the ability to send direct messages to users instead of broadcasting to everyone, mobile options to send and receive tweets via SMS messaging on our mobile phone, search options allowing us to find other Twitter users near our location, and APIs that allows 3rd party developers to develop some great applications. One significant difference between blog and Twitter is the size of the message – the character that puts Twitter into microblogging. Twitter messages are limited to 140 characters, the reason for this restriction is that Twitter is designed to be used via SMS (Text message) on mobile phones. These short messages are called “Tweets” and when the short messages are forwarded by the other Twitter users, we call such messages as “retweets”.

As we enter into the Twitter world our first question is likely to be “who to follow?”. Who usually provides useful and interesting content? Some ideas about “who to follow” have been proposed [4]. Suppose we already know who to follow, the problem of reading the information still happens. Even though the messages are short but if the twitter users we follow continually tweet the message 24/7 there will be too many messages shown in our timeline. This kind of

situation is more serious especially when we follow some popular newsperson that use twitter as News Media [5] to deliver the latest news to their audience. Thus, the problem is that there are too many tweets to catch up with. For example, for some people who do not use twitter everyday, it is inconvenient to go back from the current timeline to read the old tweets.

Therefore in this study we propose and develop a system that can solve the problem mentioned above. We named our system as “Top Tweet News” which is automatically run 24/7. The output consists of 1) processing the interesting tweets in the news area 2) automatically posting to @tophainews 3) pushing the content of the top ten tweets to the given email and 4) showing the top ten tweets via a web page. The top ten tweets are updated every hour.

Research Methodology

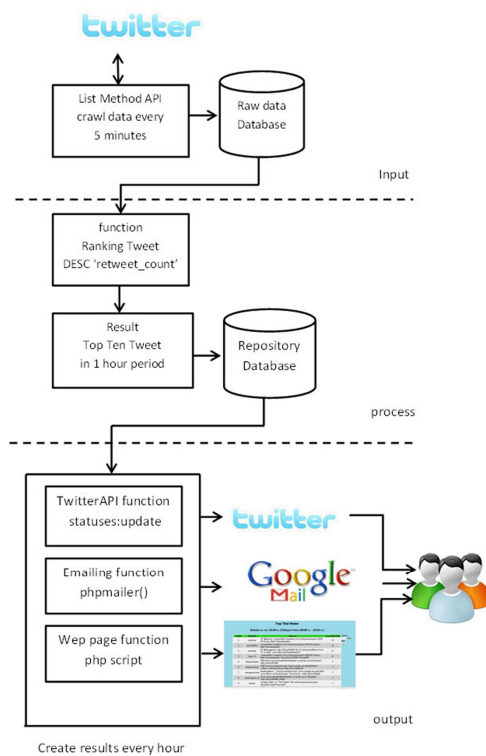


Figure 1. Conceptual System Design and Development

To study and to solve the problem that we state above we design our system as show in figure 1. The system was divided into 3 main parts.

Input Unit: The function of input unit is to collect data. As shown in Figure 1. The system input is payloads(informations) that we get from Twitter APIs.

We created the system than automatically provoke the Twitter APIs to get and save input to database.

Processing Unit: The function of the processing unit is to rank the tweet by the ‘retweet_count’ DESC(descending). As shown in Figure 2, the status of tweet shows that the number of times the tweet has been retweeted.

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in_reply_to_status_id_str: null,
in_reply_to_user_id: null,
text: "RT @jinn_nation: เจริญใจ!!! RT @Cake_NBC: ผลรางวัลผลบอลพรีเมียร์ลีก83 ทุกรางวัล http://bit.ly/dUS1Hp",
contributors: null,
retweeted: false,
in_reply_to_user_id_str: null,
retweet_count: 31,
geo: null,
source: "<a href='\"http://www.tweetdeck.com\"' rel='\"nofollow\"'>TweetDeck</a>",
created_at: "Mon Feb 28 04:46:19 +0000 2011",
id_str: "42083149840257024",
place: null,
in_reply_to_status_id: null,
coordinates: null,
truncated: false,

```

Figure 2. The retweet_count status.

Output Unit: The function of output unit is to automatically post the top ten ranking tweets in the processing unit in the period of one hour, There are three channels to be delivered :

- Timeline of @tophainews: top ten tweets can be updated via Twitter API called “Tweet Resources: Post status/update” method.
- Email: top ten tweets can be delivered to user email via Google mail SMTP services.
- Web Page: show the results via a web page written in PHP language. The general users (Twitter users and non-Twitter users) can request the result via URL.

To evaluate the system we have conducted the online survey page, at the period of the study there are 250 questionnaire responder, the results have shown that about 63.18% is satisfied, 30.96% is neutral, 5.86 % is dissatisfied with the system.

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