Online Archiving System for Twitter Message

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Abstract

The spread of Internet, a lot of user advertise and collect information, because of the arrival of SNS (Social Networking Service) such as Twitter, Facebook, and so on. Along with that amount of information in circulation increased significantly. On the other hand amount of information in collected user have limit. It is important problem for us to collect necessary information. In this research focus on Twitter message. It is necessary making archive of Application for user to collect they want information and they are more comfortable. This research is about application developing.

1 Introduction

1.1 Twitter

Twitter [1] was started in 2006. This service post to short sentence. It is called "tweet" and less than 140 word. This is categorized as mini-blog, micro-blog. Twitter have various terms. Tweet:post to sentence less than 140 word. User is able to post a picture. Follow:Register another user on follow. just then user is able to look there tweet in user timeline. However, in case of not open to the public user, need apploval from their. Follower: Timeline:Follow user tweets display on screen chronologically. Replay:Posting tweet to specific user. Tweet after atmark, In this way "@username Hello". Retweet:Repost to another user tweet. On many occasions it is RT for short. Open to the public setting:There

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are open to the public and not open to the public. The former case needless apploval from the user, by contrast the latter case need apploval from the user.

1.2 Twitter API

API is Application Programing Interface in short. It is library that using from out of application. And rule about using it. Therefore each developer abide by this rule and get to function. That alone developer is able to create software using this function. This is Twitter too. Twitter have as Twitter API. Packaged in function of collecting tweet, collecting follower and so on.

1.3 OAuth attention

It is attention system of user as using Twitter. By this way the application needless to manage user password, when running the application on attention of user. This system not just Twitter but Dropbox, Evernote also is using.

1.4 Gehirn RS2

It is rental server. In this research using it. It have rs2-command and useful preparing for development environment. So it is useful tool.

1.5 MySQL

It commonly is used open source database in the world. One of the RDBMS(Relational Database Management System) of implementation.

1.6 PHP

PHP is Hypertext Preprocessor in short. It is wide using for scripting language of open source. In particular it is fitting online developed and able to put in HTML. In addition it is used as scripting language of server side and running online server, request for script in turn exection script every time. It is simple grammar, so easy to understand but using big project a lot of times. Furthermore It have a lot of framework and library, therefore useful development.

1.7 json

json(JavaScript Object Notation) is data format of database. It is exceedingly effective, when check of data because data is format document. XML is similar. However json is more easily understand than XML because it have simple style of format.

2 Method

First of all it is necessary to register Twitter developer [2] to create Twitter application. And then consumer and access key put into circulation, so that be able to use Twitter API. Thereafter developed application process is categorized into two section. Building server and developed application by Programming with the PHP. About building server, GehirnRS2 used hosting service that is virtual private server(VPS). Accordingly, it is able to concisely build server making account GehirnRS2, agreement of VPS, making user of VPS, such as creating database. Just set the VPS. Hereafter to discrive at the center of developed application.

2.1 Implementation of login function

In this section it is necessary to authorize the OAuth attention. In order to that, sending Consumer key to Twitter API and acquisition of Request Token. Based on these authorize and call back in arbitrary position. And then acquisition of Access Token at call back place, store on session Access Token, Access Token secret. Thereby it is able to refer to those from session without acquisition of Access Token again, while it is valid. Consumer key, Consumer Secret key, Access Token, Access Token Secret, they use each time, when acquisition data from Twitter API.

This is login window.[figure 1]

Figure 1: Login Window

2.2 Implementation of follow list function

Acquisition my friends list based on own screen name from API. Display my friends screen name in order of front. This list is target user that store tweet in database. In other words friends list correspond exactly to configuration file.
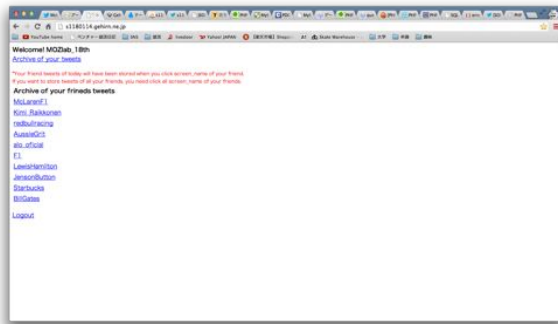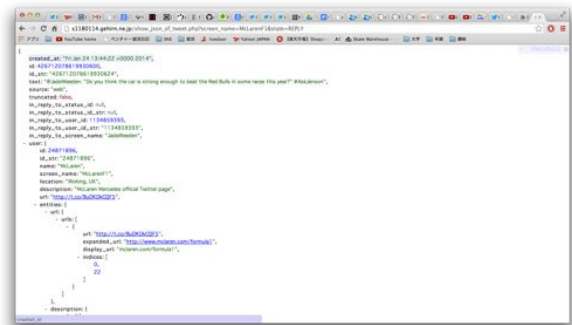
Figure 2: Friends List

Figure 3: Pure Tweet

2.3 Analysing and archiving tweet

First, collection configuration a user based on screen name. On this occasion it is able to collect tweet configuration the user per a page 200 tweets and repeat the same thing 16 pages therefore collect total 3200 tweets. Second, the same tweet is stored date of tweet in server. Conpare collection tweet date with stored tweet, if the former is new tweet date, be stored status in server. That status is tweet ID, screen name, name, text, date. There are three kinds of status of tweet, pure tweet, reply, retweet. Third, in case of there is key of retweeted_status in json of tweet, its tweet is retweet. Similarly, in case of there is key of in_reply_to_user_id in json of tweet, its tweet is reply. In case of don't correspond aforementioned two status, its tweet is pure tweet. Also it is necessary to access each screen name of friends list and to store each if want to store the tweet of all.

Figure 4: Reply

2.4 Implementation of download function

It is able to download tweet each of tweet accessed. First, collection to choose user tweets of all based on database. Next, transform from these into CSV (comma separated
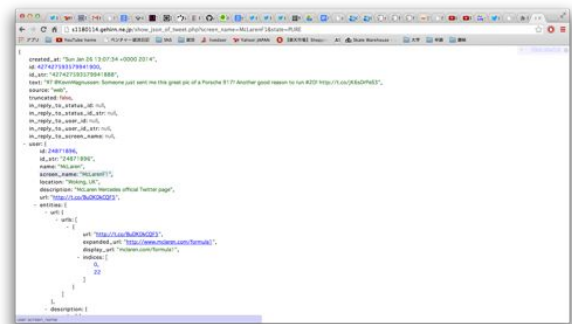

Figure 5: Retweet

Figure 6: Tweets List

value) format. In that procedure making download possible.

Figure 7: Downloaded CSV data a

3   Result

It was able to be displayed and stored for each screen name to get the Tweet using TwitterAPI in this study. Tweets of users that can be obtained from TwitterAPI at a time is a 3200 tweet, but they began to save each time is accessed the difference between the tweets of the user database. It is possible to store as text data to the database tweet that has been acquired, to download in CSV format.

4   Conclusion & Future works

In this study , we were able to go to the pooled database archive to get the message of Twitter. The upper limit of the tweets to get in to one user from TwitterAPI at a time is a 3200 tweet , but 3200 or more from the database if you use this application in a few years or a few months if Ikere by accumulating data on an ongoing basis to the database it is possible to get the tweets. It is another object of the present invention to store database and archive tweets in the study , but it is a first step , it's experimental. Future , must be adjusted in order to help in this laboratory or practicality , I think it's possible . Possible spread only accumulate tweet if Tamale in the database . First , it is possible to save a tweet to move every day this software is important . Further project is generated by the database to store tweet , analyze not only the archive will also be.

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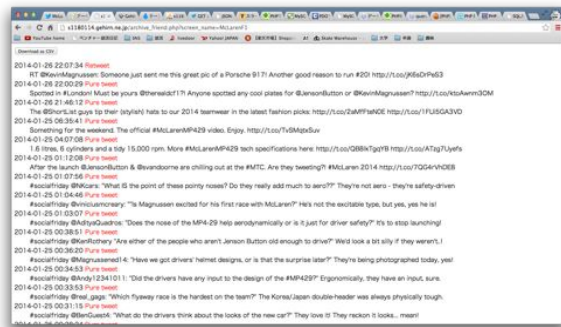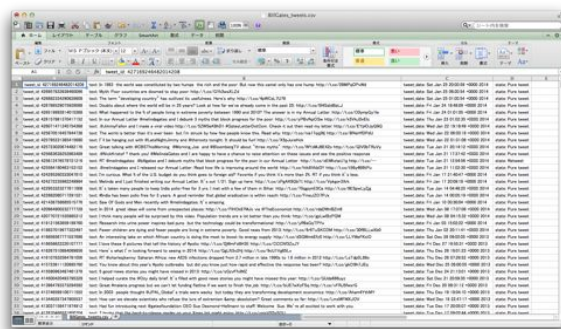
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