Nano Twitter 0.7 update

Team xx

What we have done:

1) We designed the APIs once we began this project, and the major part of the requests front-end send are based on RESTful APIs. We use JavaScript to send the requests and render the page.

2) We haven't yet finished the client library, but have done more on Scalability problem. Now, almost everything is in cache. The architecture is quite like the real Twitter, we have timeline, and home timeline stored in cache, also information about social connections and some personal information are cached. These are the most frequent read data pieces.

   The mechanism is as following:

   There is nothing in the cache at the first time. Every time a request comes in (timeline, home timeline, followers, followings), the server will first check whether it exists in cache, if cache doesn't hit, it will go to database and import the data into cache. If the cache hits, it will just return the result.

   Things related to the home timeline are much more complexed. First, the application server is not responsible for the home timeline update. It only queries home timeline. If one user posts a tweet, then it will be delivered to all the followers' home timeline, if one user add/delete a follow relationship, the tweets of that user will be added into/deleted from the action user's

home timeline.　Since this operation may cost a lot of time if one user has a lot of followers, these operations on home timeline are separated into another worker. So, on Heroku, we now have two apps: 1) nano-twitter-xx 2) nano-twitter-homeline-service

PS: code for nano-twitter-homeline-service is in another git repository.

https://github.com/hongjic/nano-twitter-homeline-service.git