Nanotwitter v0.4 Ashcloud: Andy Alexander, Mark Capobianco, Jinfeng Lin, Ruoyun Song

http://nanotwitter.herokuapp.com/
https://github.com/Ash-cloud/nanotwitter

Load Tests with Indexes:

Maintain Load:

1. Login and Loggedin root page load test. After login, we redirect to Loggedin root page to grab 100 tweets from timeline.

http://ldr.io/1ywGq3c

2. Welcome page load test. Show latest 100 tweets.

http://ldr.io/1aXbSwj http://ldr.io/1GUlfdY

3.unfollow

http://ldr.io/1JQNSXO

4.follow

http://ldr.io/1GUn0YG

Load Test summary - Implemented indexing, changed database design to minimize database calls when creating timelines, and switched server to Thin to address performance.

Noticed a benefit in performance for unlogged in root, follow and unfollow. Our login and loggedin root performance seems unchanged.

Significant Changes from v0.3:

- 1. Changed database: removed Tweet User table
- 2. Shortened recommendations method from this:

```
#get all the users who aren't you
@other_users = User.where.not(id: user_id)
puts("number of other users is #{@other_users.size}")
#get all the people you follow
@followees = Follow_Service.followers(user_id)
@recommended = []
num_recommendations = 0;
while num_recommendations < 11 #want to get 10 random recommendations
    index = Random.rand(@other_users.size)
    potential_recommendation = @other_users[index]</pre>
```

```
followed = false
       @followees.each do |followee|
             #if other_user is a followee of you, followed is true
              if potential recommendation.id == followee.user id
                     followed = true
              end
              @recommended.each do |rec|
                    if potential_recommendation.id == rec.id
                    followed = true
                    end
             end
       end
       #if you don't follow other_user yet, push to recommended
       if followed == false
             @recommended.push(potential_recommendation)
             num_recommendations += 1
       end
end
return @recommended
end
To this:
       candidates = User.limit(10).order("RANDOM()")
```

- 3. Create tweet arrays that contain fields we need to display for tweet timelines (user name, user id, tweet text, & tweet time) from one database join rather than multiple individual database calls for each tweet shown to address performance.
- 4. Hide User Password
- 5. Perform add and remove of old tweets in logged in root timeline when follow and unfollow checked
- 6. Display time in words
- 7.Included ReadMe
- 8. Implemented Indexes
 User table (user_name, email)
 Tweet table (created_at, user_id)

Follow table(user_id,follower)

9. Refactored Service into Tweet_Service, User_Service, and Follow Service

- 10. Switched to Thin from WEBrick
- 11. Clean erbs, collect time function into API file, use template to reduce redundancy.
- 12. Fixed Tweet Box Indentation Bug