TEAM PHOENIX

UBC CPSC 410 Project – Ever Friend

# Design Documentation (Project Evolution)

UBC CPSC 410 PROJECT – EVER FRIEND

# Design Documentation

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https://github.com/UBC-CS410/Project-Phoenix

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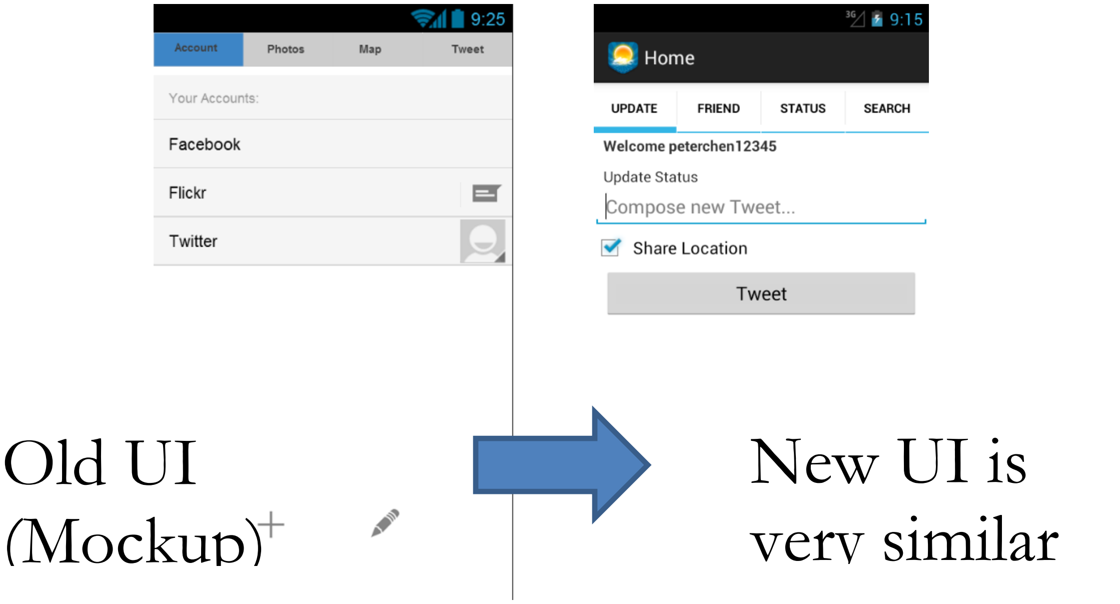
# Introduction

Our original design was to create a social network photo manager. Users can logging with Facebook, Twitter or Flickr and see all their photos and in our app. The photos would be geo-tagged on Google Map and users can make comment on them across different social networks. Across different social networks we mean that a user only login with twitter can see and make comment on their in-app friends' Facebook picture. Therefore people don't necessary to have all the account to make in-app friend and see their resources.

When we finish our design review and starting to write code, we realize that our design is too bold to be implemented. There are many limitations to our design and web services we decided to use. We first try to use Flickr API to download image url, we spent a large amount of time only to find out it only provide a link to Flickr server, not the image url we need. Then we abandon Flickr API and move on to implement Twitter API, which was quite successful in the beginning. We were able to show a grid of picture and their gallery view when click on them. But, the success was short live; those pictures were only profile picture, not tweet pictures. Twitter API do not provide tweet picture. At that time we only have two weeks left before our demo and nothing has yet met our requirement. Moreover, we are too heavily relying on web API, not our own server. That's when we decide to change our design.

# 1. Client Side Evolution

Since we had already implemented Twitter API, we decided to make our own social network with a little help from it. To keep our work simple, we keep a lot of our old UI elements.



Welcome peterchen12345

Update Status

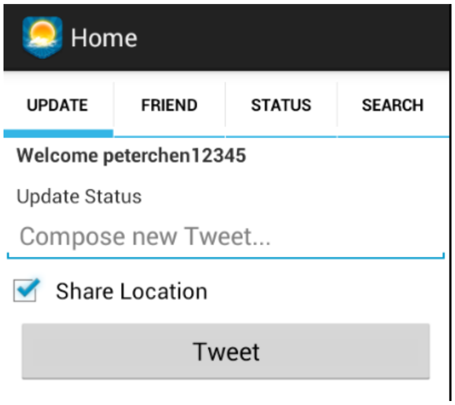
Compose new Tweet...

☑ Share Location

Old UI (Mockup)

New UI is very similar

We began with modifying all the Twitter functions into our new social network design. So now users still login with Twitter, and they can post tweets and search people from Twitter.

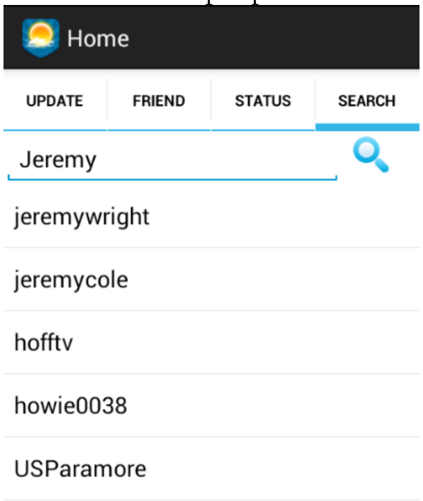


Welcome peterchen12345

Update Status

Compose new Tweet...

☑ Share Location



Jeremy

jeremywright

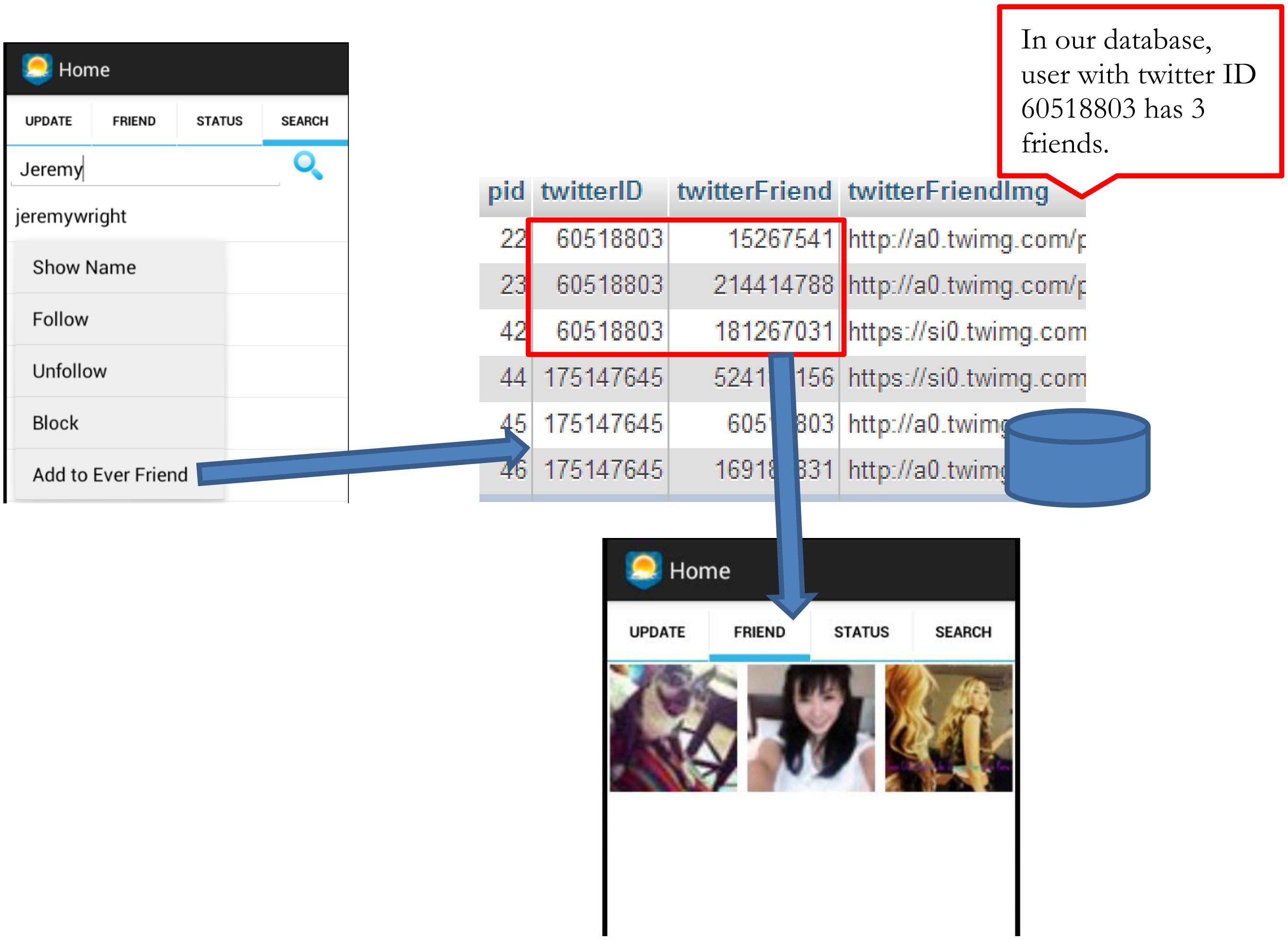
jeremycole

hofftv

howie0038

USParamore

After users have found persons they and add them into Ever Friend, we store their twitter ID into our database as the unique identifier of their relationships. After that, all their friends that have been added into Ever Friend will be shown on the friend tab:



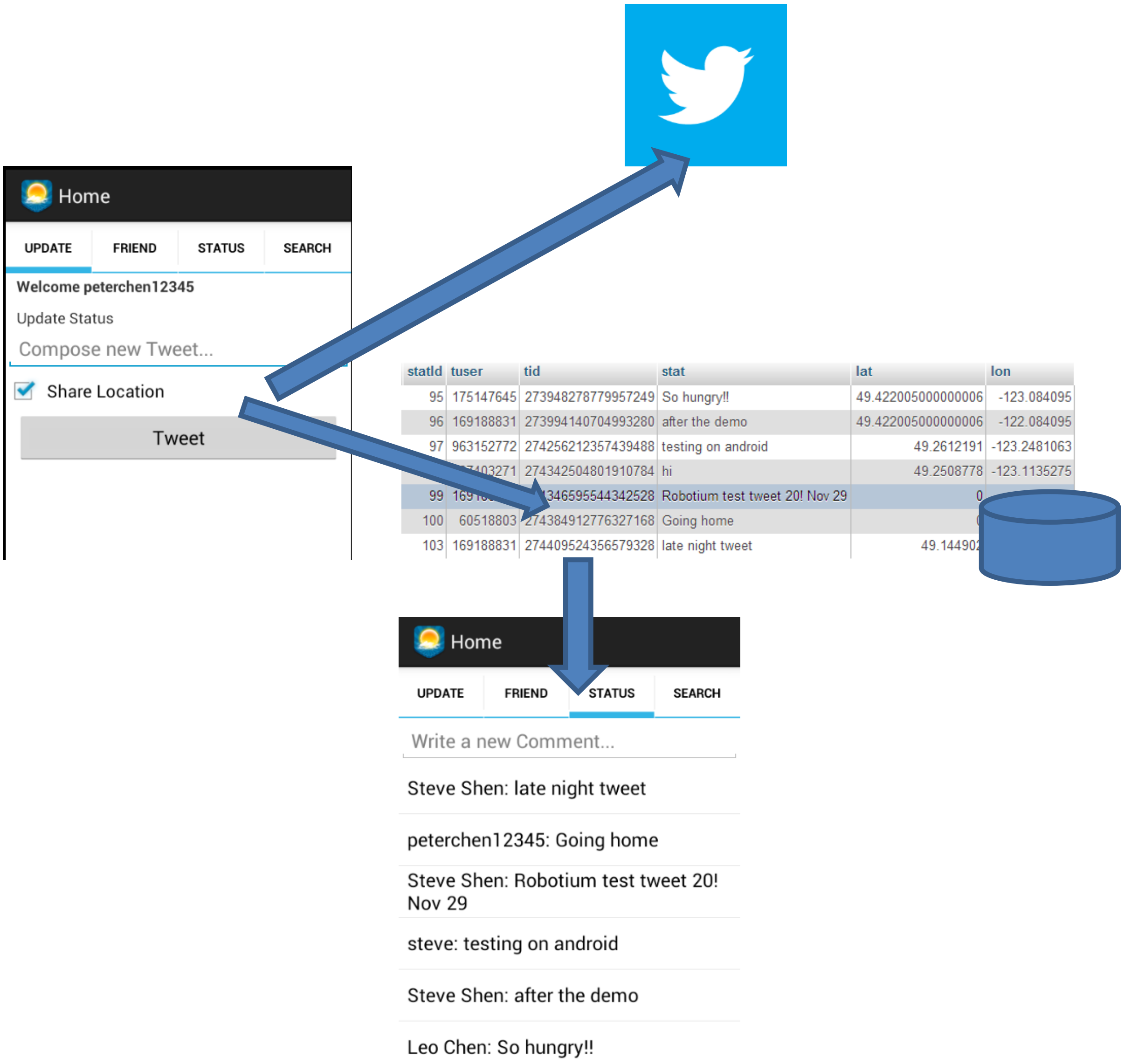
Jeremy

jeremywright

In our database, user with twitter ID 60518803 has 3 friends.

| pid | twitterID | twitterFriend | twitterFriendImg |
|---|---|---|---|
| 22 | 60518803 | 15267541 | http://a0.twimg.com/p |
| 23 | 60518803 | 214414788 | http://a0.twimg.com/p |
| 42 | 60518803 | 181267031 | https://si0.twimg.com |
| 44 | 175147645 | 5241[illegible]156 | https://si0.twimg.com |
| 45 | 175147645 | 605[illegible]803 | http://a0.twimg |
| 46 | 175147645 | 1691[illegible]831 | http://a0.twimg |

Each Tweet update till be pushed both to Twitter and our database. After users added their friends, their friends (also use Ever Friend) will be able to see each other's status update.



Welcome peterchen12345

Update Status

Compose new Tweet...

☑ Share Location

| statId | tuser | tid | stat | lat | lon |
|---|---|---|---|---|---|
| 95 | 175147645 | 273948278779957249 | So hungry!! | 49.422005000000006 | -123.084095 |
| 96 | 169188831 | 273994140704993280 | after the demo | 49.422005000000006 | -122.084095 |
| 97 | 963152772 | 274256212357439488 | testing on android | 49.2612191 | -123.2481063 |
| [illegible] | 7403271 | 274342504801910784 | hi | 49.2508778 | -123.1135275 |
| 99 | 169 | 346595544342528 | Robotium test tweet 20! Nov 29 | 0 | [illegible] |
| 100 | 60518803 | 274384912776327168 | Going home | 0 | [illegible] |
| 103 | 169188831 | 274409524356579328 | late night tweet | 49.14490 | [illegible] |

Write a new Comment...

Steve Shen: late night tweet

peterchen12345: Going home

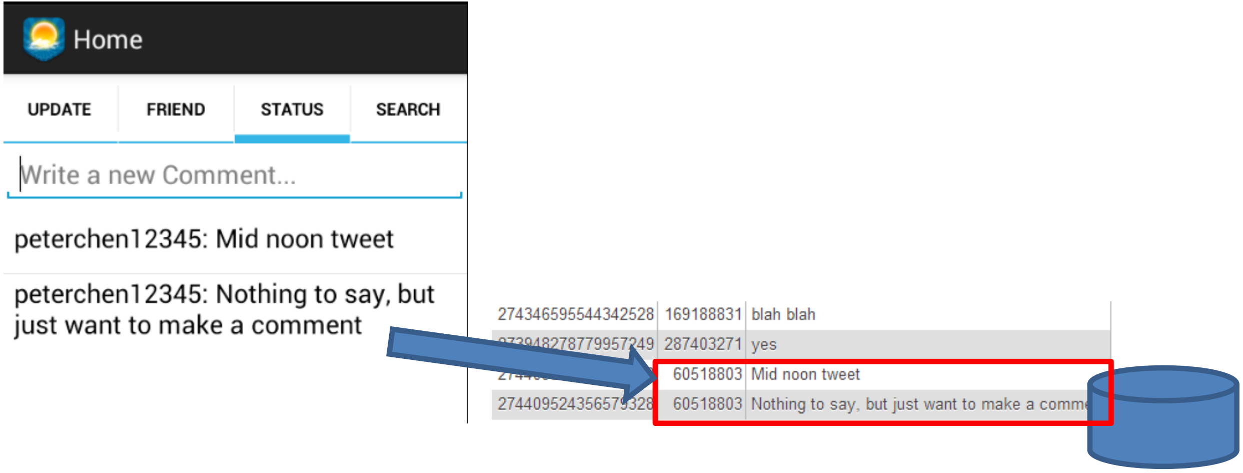
Steve Shen: Robotium test tweet 20! Nov 29

steve: testing on android

Steve Shen: after the demo

Leo Chen: So hungry!!

Each status can also be commented, we use another SQL table to hadle the this.

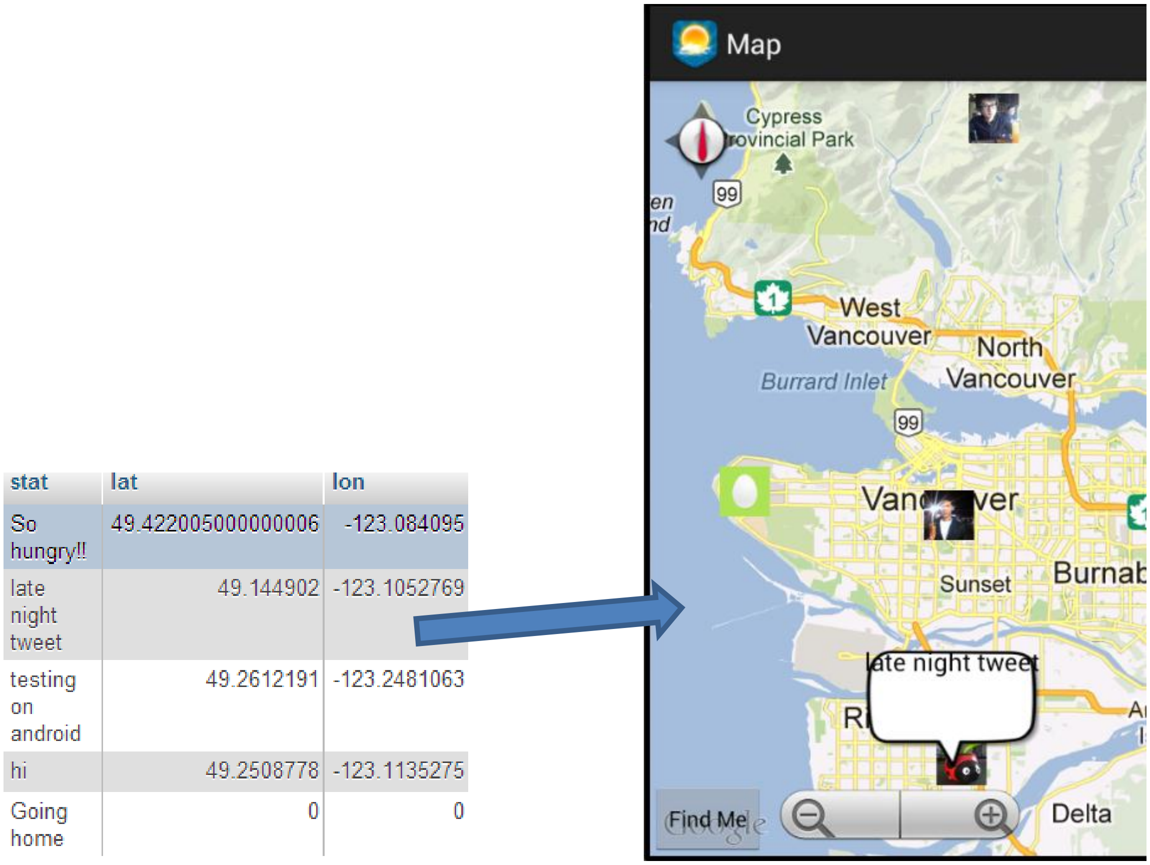


peterchen12345: Mid noon tweet

peterchen12345: Nothing to say, but just want to make a comment

| | | |
|---|---|---|
| 274346595544342528 | 169188831 | blah blah |
| 273948278779957249 | 287403271 | yes |
| 2744[illegible] | 60518803 | Mid noon tweet |
| 274409524356579328 | 60518803 | Nothing to say, but just want to make a comme |

We also use another table to store each user's latest update along with their geolocation. And user can see them on the map.



| stat | lat | lon |
|---|---|---|
| So hungry!! | 49.422005000000006 | -123.084095 |
| late night tweet | 49.144902 | -123.1052769 |
| testing on android | 49.2612191 | -123.2481063 |
| hi | 49.2508778 | -123.1135275 |
| Going home | 0 | 0 |

# 2. Server Side Evolution

In our old design, we rely heavily on web APIs, not our own server. This is not good for meeting the project requirement. Now our server is capable to handle multiple tasks such as user account management, user relationship handling, geo-location storage, status storage, and comments storage. Our server runs on WAMP (Windows, Apache web server, MySQL database and PHP) stack in one of our team member's home. Our server address is "70.79.15.130:3721".