## **Ski-Buddy Project Final Iteration Report**

Group Members: Yue Yu, Wei Hu, Tengyuan Ye, Yisi Xu

Code Repo: https://github.com/cis-upenn/22-Ski-Buddy

JIRA: http://jira.cis350.sachabest.com/browse/SB

### User stories

### User stories Completed in the second iteration:

- User story #1 (SB-30): Users see the locations in a small google map when open the trail data view
- User story #2 (SB-34): Users get trails sorted by how close they are to user's location
- User story #3 (SB-35): Users cannot rate trail if not logged in
- User story #4 (SB-41): User can trace path in the google map, see the distance and take snapshot
- User story #5 (SB-38): User's Facebook account is associated with their own Application (Ski-Buddy) account.
- User story #6 (SB-42, SB-44): User can create their own Hangout events, attend other people's Hangout events and cancel their attending to others' Hangout events.
- User story #7 (SB-31): Display a profile page for each friend in friend list
- User story #8 (SB-39): Store each user's current status and display it in User Activity and Profile Activity
- User story #9 (SB-40): Users can refresh their friend list manually to see the changes in distances from their friends
- User story#10 (SB-32): Adjust the appearance of app to make all activities in similar style
- User story#11 (SB-37): Add search place in google map which can be used to search a specific place
- User story#12 (SB-43): Perfecting the taking photos and uploading photos function

Unfinished user stories: N/A

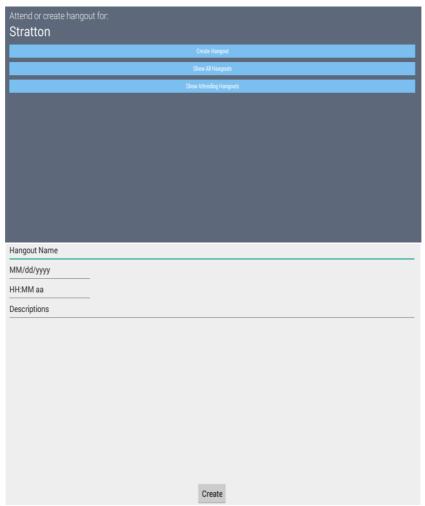
## **Task Assignment:**

### Assignee: Yue Yu

Task 1: Users are able to associate their Facebook account with their own Ski-Buddy account. After
logging into Facebook for the first time, users will be required to register their own Ski-Buddy account in
the Login/Sign Up activity. Thus, username, password and their FBuserID will be all stored in the
accounts table in the accounts table in Parse.



 Task 2: Build the hangout structure including a HangoutMain Activity in which users can choose to create events, attend events (show all events button), and cancel their attendance (show attending hangout button). Implement CreateHangout activity, and store all information (username, mountain, eventname, starttime and description) into Parse event table.



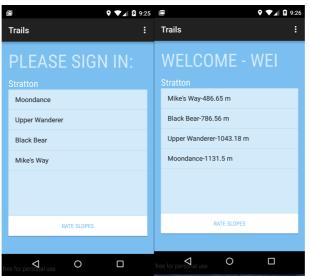
Task 3: Implement ShowHangout and ShowAttend activity. In ShowHangout, all events will be shown in a spinner, user can click one for further information and choose to attend. If attending, a tuple will be inserted into event table. In ShowHangout, current user's attending events will be shown in a spinning, user can click one for further information and choose to attend. If cancelling, the corresponding tuple will be deleted.





### Assignee: Wei Hu

Task1: Move all the data to be under our own parse account. Also we make the change that users can
not rate trail if not logged into the app. Ranking the trails based on how close they are to your current
location, users see trails sorted by distances. The distance is calculated based on the location of the
trail and the last location of the user.



• Task2: Add two more attributes latitude and longitude to the trail table so that users can see the location of trails in a small google map when open the trail detail view. When clicking a trail, in addition to displaying the trail condition, the location is displayed on the google map as well as the other trails in the same ski mountain. When clicking on a marker the distance is shown. The map will be updated in time when the location of the user is changed.



• Task3: Implement the function in MapActivity that user can trace path in the google map. This activity is trigged by select the path tracking button and the movement of the current user is recorded in the map.



After user click the stop button user can take a snapshot of the current trace and save it to the gallery.

### Assignee: Tengyuan Ye

• Task1: Perfect the function of taking photos and uploading photos. In the last version, the photo is stored at SD card which can not be accessed by the uploading function. Now, every taken photo can



successfully be accessed at white external storage and be uploaded into the parse.

• Task2: Add a searching place function in google map. In the last version, using google map we can only locate my position and my friends' positions, which is inconvenient when we want to find a new place that we want to go. However, in this version, we provide the function of searching place, by which user can search the coffee shop, hotel or any place they want after skiing.





Task3: Adjust the interface the application to make it more uniform. The background color and button
positions in the application looks more friendly.

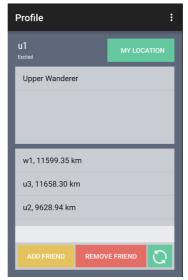
## Assignee: Yisi Xu

Task1: Display a profile page once the user is clicked in other users' friend list. On this profile page, username, user's current status, his favorite trails and this user's friend list will be displayed. Once a trail on profile page is clicked on, a TrailCondtionActivity will be triggered. Similarly, once a user in the friend list on profile page is clicked on, a UserActivity will be triggered.



Profile Page for a certain user

• Task2: A refresh button is added in the lower right corner in User Activity. Once the button is clicked, the distance displayed can be changed to the most up-to-date version. In this way, the users can get the most accurate geographic information of their friends.



Refresh Button Added in UserActivity

Task3: When a user updated his current status, this information will be uploaded to database. Once
this user's profile page is opened, his current status will be retrieved from remote Parse database and
displayed just below his username. If the user is not logged in, once the current status is changed in
setting page, this information will only be displayed in UserActivity but not uploaded to database.

## **Database and Communication with external systems:**

We continue to communicate with Yahoo's weather database through Android's Volley. We continue to user Parse as our external cloud database and file storage system. We used Parse as an external database. (The data is included in the data folder).

### **Table: Mountain**

### Columns:

- city: the city in which the ski mountain is located
- lifts: a JSON array of lift names
- name: the name of the ski mountain
- trailmap: a JPEG image of the trail map
- woeid: the woeid for the location (used for getting weather data)

Table: MountainView

### Columns:

- ImageFile: a JPEG image of the current mountain condition
- MountainName: the name of the ski mountain
- ImageDescription: a short description of the picture taken

## Table: trail

### Columns:

- conditionRating: the number representation of the condition rating
- difficulty: the number representation of the difficulty
- mountain: the name of the ski mountain that this trail is at
- name: the name of the trail
- rating: the users' averaged rating
- numEntries: the number of rating entries

# Table: Lift Columns:

- capacity: the capacity of the lift
- duration: the duration of the lift
- mountain: the name of the ski mountain that this lift is at
- name: the name of the lift
- waitTime: the wait time for this lift
- numEntries: the number of waitTime entries

### Table: accounts

### Columns:

- Lat: the user's latitude
- Lng: the user's longitude
- password: the user's password
- username: the user's username
- favoriteSlopes: a JSON array of the user's favorite slopes
- feeling: a String storing the user's current status/ feeling
- friends: a JSON array of the user's friends' names
- FBUserID: user's Facebook ID

### Table: event

### Columns

- eventName: the event's name
- mountain: mountain chosen
- userName: current logged in user
- startTime: time event starting (Date type)
- description: about the event

### Table attendEvent:

### Columns

- eventName: the event's name (can be duplicated)
- mountain: mountain chosen
- userName: current attending users

## Known Bug: -None

### Additional features:

(Describe any additional features that you would add if you had more time. These can be things that the customer asked for but did not get implemented; or, things that you thought of on your own as you were implementing the product.)

### Others:

If you could go back in time and start this project over again, what would you do differently?

We would check the code more carefully and thoroughly before adding functionality to this app. During the implementation in Iteration 2 and Iteration 3, we spent much time fixing some tiny bugs in this app, which we did not discovered in Iteration 1.

## Mistakes that you made along the way and the implementation that you underestimated?

We underestimated the difficulty of adding hangout function to our app. We thought at the beginning that there was an API for us to work on, while there is actually not. Thus we had to implement this user story on our own.

### **Sharing Code:**

It's okay to release code to the customer and is okay for another group of students to continue working on your project in the future.

## Github Commit Log (during the third iteration):

commit 26a8817fc3be09695f5ba657cbcaac791bcf4b62

Author: yisi <xuyisi922@gmail.com> Date: Thu Dec 3 22:09:09 2015 -0500

Add OnSharedPreferenceChangeListener to HangoutMain Activity

commit 58f59e75165aff58a8b78e84f7317159003a578b

Author: yisi <xuyisi922@gmail.com> Date: Thu Dec 3 21:59:35 2015 -0500

Change ProfileActivity title

commit c18d37650b44fb22852cc276a121958990d27732

Author: Wei Hu <weihu816@gmail.com> Date: Thu Dec 3 21:20:36 2015 -0500

fix a bug that user can not login in trail condition

commit 67d75504dec07cc638d5cf80d3bf7456945a15ac Author: yueyulovetaylor <yueyu@seas.upenn.edu>

Date: Thu Dec 3 19:10:22 2015 -0500

Spinner in show events completed

commit ddd81895b6a97605a9bb5b3f8d5898e696d63b5c Author: yueyulovetaylor <yueyu@seas.upenn.edu>

Date: Thu Dec 3 15:36:31 2015 -0500

Spinner in show events completed

commit f2f53ff7fc34ebe5df8e8343c25b7081bb99c50d Author: yueyulovetaylor <yueyu@seas.upenn.edu>

Date: Thu Dec 3 15:10:13 2015 -0500

Hangout Structure Completed Create Hangout completed

commit 45b8f61d94c39a64150b7953abd43c98543cd118 Author: yueyulovetaylor <yueyu@seas.upenn.edu>

Date: Thu Dec 3 15:05:43 2015 -0500

Hangout Structure Completed Create Hangout completed

commit 9d8d49211169eb81fac0f1396ae8626a080107b6

Author: Wei Hu <weihu816@gmail.com> Date: Thu Dec 3 01:25:04 2015 -0500

Add a toast when snapshot is taken and fix a bug when currentLocation is null in MapActivity

Add a toast when snapshot is taken and fix a bug when currentLocation is null in MapActivity. Add a Gallery button as well.

commit 56a03a4215e10de087f85e316fcfa0e93f290e26

Author: Wei Hu <weihu816@gmail.com> Date: Tue Dec 1 22:43:13 2015 -0500

Upload a marker and finish the tracing function so that user can also take snapshot of the current map

commit 8000287e06f63cbc4743b88bae9627e518c2c44b

Author: yisi <xuyisi922@gmail.com> Date: Tue Dec 1 21:30:49 2015 -0500

Feeling field can be retrieved for each user. If the user is not logged in, the feeling field will be the same as what is specified in Preference setting page.

If the user has logged in, the feeling field is retrieved from database.

commit a6d88946fc3f31e7f09e12554a7c793525c32028

Author: Wei Hu <weihu816@gmail.com> Date: Tue Dec 1 21:22:02 2015 -0500

Add path tracing function in the google map

commit d59a544b58bcc76f798dec288ec36e1557ea5158

Author: Wei Hu <weihu816@gmail.com> Date: Tue Dec 1 20:44:57 2015 -0500

ditto

commit e932bf92a79c0d9c595014279847bf409ae1d3cf

Author: yisi <xuyisi922@gmail.com> Date: Tue Dec 1 20:39:14 2015 -0500

Bug fix: in User Activity and Profile Activity, TrialConditionActivity can always be opened. No view will shown up when there is no favorite slopes.

commit c658c65bb525f9887e5abbcef137fe5367d1d55e

Author: Wei Hu <weihu816@gmail.com> Date: Tue Dec 1 20:27:11 2015 -0500

Add path tracing buttons and modify the shity code

commit 7b9b7c08809cc1f94f01b6b1ee560b6cf6ef1c7e

Author: yisi <xuyisi922@gmail.com> Date: Tue Dec 1 20:23:22 2015 -0500

New View can be opened in Profile Activity: users can check the status of their friends' friends

commit 4f208679e406c1bf3648092de1205220de2f9eb9

Author: Wei Hu <weihu816@gmail.com> Date: Tue Dec 1 19:36:14 2015 -0500

Change the appearance of the search button

commit c0b3fd96b78b6d0d3e982dc284c4d10fd98b2615

Merge: 530a36f 4ad88f8

Author: yueyulovetaylor <yueyu@seas.upenn.edu>

Date: Tue Dec 1 18:57:29 2015 -0500

Merge remote-tracking branch 'origin/master'

commit 530a36f954023bedb43c6b3a4c76694c7fb2ca8c Author: yueyulovetaylor <yueyu@seas.upenn.edu>

Date: Tue Dec 1 18:57:08 2015 -0500

Once FB Logged in, user cannot sign up anymore.

commit 4ad88f825a29d3d8136bab9b85d7c25f1ed48f39

Author: yisi <xuyisi922@gmail.com> Date: Mon Nov 30 23:32:27 2015 -0500

User can upload their current status/feeling onto Parse

commit e26fb005321ac2b9b85196cd2f87bc764cb666fa

Author: yisi <xuyisi922@gmail.com> Date: Mon Nov 30 22:57:45 2015 -0500

Change layout of Profile page: exchange position of SlopeList and FriendList

commit 7a1a9ef70f38104bc77cb2f6fbb7f6a97b4d1c66

Author: yisi <xuyisi922@gmail.com> Date: Mon Nov 30 22:43:43 2015 -0500

Make Refresh button in UserActivity work.

Known Bug: need to wait the retrial of users's friend information

commit fa34746392444b2d4381227ea8ae960214cb761b

Author: yisi <xuyisi922@gmail.com> Date: Mon Nov 30 17:48:00 2015 -0500

Add a refresh button in user activity

commit c6b6940f68e87bba369751c13486eb781ae3b751

Author: yisi <xuyisi922@gmail.com> Date: Mon Nov 30 16:37:04 2015 -0500

Bug fixed: no Profile page will pop up when the user has no friends

commit e1ef71628cfed4cb0ed2810e2950d5e03e138ff6 Author: yueyulovetaylor <yueyu@seas.upenn.edu>

Date: Sun Nov 29 20:54:20 2015 -0500

Facebook Integration stage 3: User information synchronized while facebook login

commit 3a6181df566d72e0f0d0568223e14869e1b5a7e0 Author: yueyulovetaylor <yueyu@seas.upenn.edu>

Date: Sun Nov 29 20:52:08 2015 -0500

Facebook Integration stage 2: Register Synchronized between Login/SignUp activity and MainActivity

commit ead71ea953a58287e55a42508ed8d3ad88ab7040 Author: yueyulovetaylor <yueyu@seas.upenn.edu>

Date: Sun Nov 29 20:35:32 2015 -0500

Facebook Integration stage 2: Register Synchronized between Login/SignUp activity and MainActivity

commit a7095a7ff55fdd197fe984cbcfdea166b3ab0816 Author: yueyulovetaylor <yueyu@seas.upenn.edu>

Date: Sun Nov 29 20:07:23 2015 -0500

Facebook Integration stage 1: Parse information updated, Facebook Account will be saved to accounts in Wei's Parse account.

commit b94c115bcf64696655ca330071186d5ef986a295 Author: yueyulovetaylor <yueyu@seas.upenn.edu>

Date: Sun Nov 29 20:02:10 2015 -0500

Facebook Integration stage 1: Parse information updated, Facebook Account will be saved to accounts in Wei's Parse account.

commit eb4173dd1af0c723bcaa61c651bad86f170c6c71

Author: yisi <xuyisi922@gmail.com> Date: Sun Nov 29 17:55:11 2015 -0500

change profile page layout

commit 8e4cec9ee5a3e498799d8ad602a54efae35f4863

Author: Wei Hu <weihu816@gmail.com> Date: Sun Nov 29 12:26:00 2015 -0500

Display distance on Polylines and distance can be updated when locations change

commit 945d5323d4999cccd2109757930c4df8c3580639

Author: Wei Hu <weihu816@gmail.com> Date: Sun Nov 29 12:00:51 2015 -0500

Finish the slope map function

commit 70284a7598aa6425befb206e1eed1d3f1330a792

Author: Wei Hu <weihu816@gmail.com> Date: Sat Nov 28 16:17:15 2015 -0500

Change the way of map listener works and delete the interface

commit 21e9e3689345a5b6f85346624453e4efe7ac75c1

Merge: 2e7ba93 2d503b0

Author: tengyuanye <ytyuan1993@gmail.com> Date: Sat Nov 28 15:35:20 2015 -0500

Merge branch 'master' of https://github.com/cis-upenn/22-Ski-Buddy

commit 2e7ba9330025bd8eea2db8520aed59899677f4e6

Author: tengyuanye <ytyuan1993@gmail.com> Date: Sat Nov 28 15:35:05 2015 -0500

add search place in google map which can be used to search food or restaurant

commit 2d503b01b2b062b9bee224d56aecae136a8594b9

Author: Wei Hu <weihu816@gmail.com> Date: Sat Nov 28 15:05:17 2015 -0500

Draw lines between markers

commit b290ce32222efda1a9cbfc584c9dda80fa5d8d99

Author: Wei Hu <weihu816@gmail.com> Date: Sat Nov 28 14:26:00 2015 -0500

largely modify SlopeActivity.java file: trails are sorted by distance to the user

commit 0f6b8efba5abcded217be22e4368b36adb082c05

Author: Wei Hu <weihu816@gmail.com> Date: Sat Nov 28 13:07:19 2015 -0500

Modify .gitignore file to ignore some xml files

commit a43d129378d0a7c980505b2146824279272fbe7e

Merge: 655cf63 39940bf

Author: tengyuanye <ytyuan1993@gmail.com> Date: Sat Nov 28 12:50:57 2015 -0500

Merge branch 'master' of https://github.com/cis-upenn/22-Ski-Buddy

# Conflicts:

# ski-buddy/.idea/inspectionProfiles/Project\_Default.xml

commit 655cf63ba334252febdbf8edffb22f064e9c4025 Author: tengyuanye <ytyuan1993@gmail.com>

Date: Sat Nov 28 12:46:04 2015 -0500

change the ui of mountain viewactivity and fix the image upload function

commit 39940bf5c27422500acb31baf9eb482678da5fa7

Author: Wei Hu <weihu816@gmail.com> Date: Sat Nov 28 12:19:10 2015 -0500

User should not be allowed to rate slope if not logged in

commit a52ea528b63eb69e36103fdec4123d702754b238

Author: Wei Hu <weihu816@gmail.com> Date: Sat Nov 28 10:51:42 2015 -0500

Fix bug - program crash when clicking a trail on user's list

commit 6fb3207d8e960dcfadc23f509f0bb696976a0f15

Author: Wei Hu <weihu816@gmail.com> Date: Sat Nov 28 01:34:48 2015 -0500

Now there can be multiple markers for all slopes

commit efd90d030e696a15ad0797c2ab10ccc1c3bb4a16

Author: Wei Hu <weihu816@gmail.com> Date: Sat Nov 28 01:06:25 2015 -0500

add map marker images to the resource folder

commit d539148dd0b16ccb2482f16ffcca61d76c63cdec

Author: Wei Hu <weihu816@gmail.com> Date: Fri Nov 27 22:33:52 2015 -0500

Users can view trail location in the map when displaying the trail data

commit 3101a020befab254b048df9191748a40813b4295

Author: Wei Hu <weihu816@gmail.com> Date: Fri Nov 27 20:20:24 2015 -0500

add a map view in activity\_slope\_data.xml and adjust the layout to be linear layout

commit ea635c5c5fef75134908e4b800cb748645a2afec

Author: Wei Hu <weihu816@gmail.com> Date: Fri Nov 27 19:55:20 2015 -0500

Delete a useless class

commit bdeab8024e252e3ddc0a265a3afb9bd364e5e31d

Author: Wei Hu <weihu816@gmail.com> Date: Fri Nov 27 19:26:14 2015 -0500

move data from old parse and use our own parse account

commit 7a61618a64ecfab68460c414636cf7658e80224f

Author: yisi <xuyisi922@gmail.com> Date: Wed Nov 25 17:36:30 2015 -0500

Open profile page when click on a user in friend list